



# THE MILITARY BALANCE

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# Editor's Introduction

## Modernising military capabilities; familiar security challenges

A surge in high-profile terrorist attacks at the end of 2015 added to the increasing crises, conflicts and sense of uncertainty preoccupying the planning staffs of defence ministries worldwide.

Major attacks by Islamist terrorists took place in France and Mali, and in the air above the Sinai Peninsula, adding to earlier incidents in Kenya, Lebanon, Pakistan, Afghanistan and many other locations. Grinding conflict and relentless instability continued in Syria, Libya, Yemen and the Sahel, not just acting as a recruiting tool for terrorist groups, but also feeding into a narrative used in their sophisticated information operations. These groups were – together with other non-state groups – both driving these conflicts and deriving energy from them. At the same time, this increasingly diverse range of actors was making conflict resolution even harder.

Heightened instability and savage violence added to the factors propelling populations to leave. For instance, it was apparent that in 2015 a large part of Syria's middle class had had enough of war. Events also indicated that terrorist groups, perhaps unsurprisingly, took advantage of this vast population movement. In late year this caused pause for thought in the West, notably in Europe where some countries had opened their doors to refugees. Europe's periphery had been in turmoil for years; in 2015, Europe's ability to secure its borders came under increased scrutiny.

Meanwhile, the continued murder of innocents by the nihilistic adherents of ISIS in Syria and Iraq – together with other groups for whom ISIS became the latest franchise of choice – reinforced the reality that combating terrorism was a global, not just a regional, issue.

But without greater cooperation, and agreement on some form of strategy for combating ISIS and addressing broader instability and state failure, it was unlikely that the group would be dismantled any time soon. Russia deployed combat airpower to Syria in late 2015. Its aircraft might indeed have hit ISIS targets but Moscow's main objective was actually to bolster the Assad administration and help defeat the other rebel groups there. It is likely that to defeat the group militarily in Iraq and Syria, ground forces will be required at some point.

But in any case ISIS, and the groups around the world that have pledged allegiance to it, cannot be eradicated solely by military means. Tackling these groups will require multinational attention and the concerted and long-term application of policies and tools blending political, military, security, information and development capacities, and agreement on ends as well as means: the track record on such cooperation is mixed at best.

Nonetheless, it was noteworthy that the UN Security Council in November 2015 adopted Resolution 2249, which said that ISIS constituted an 'unprecedented' threat to international peace and security, and that UN member states with the capacity should 'take "all necessary measures" to prevent and suppress its terrorist acts on territory under its control in Syria and Iraq'. But it was still difficult to see what this might mean in practical terms. So, too, it was difficult to see what might result from the activation of the EU's mutual assistance clause, Article 42.7, after a request from France. Undoubtedly, the November attacks placed further stress on French armed forces that had experienced another year of continual missions, but the EU's act was firstly political, with France subsequently entering into discussion about what assistance might be required to ensure the decision did not remain symbolic.

This raised a broader issue, over the partnerships that might be required to tackle security crises. Were formal alliances the best course? What degree of bureaucratic decision-making process was tolerable? For instance, NATO's VJTF is intended to create a high-readiness spearhead formation as part of the Alliance's Readiness Action Plan (RAP), but deployment still requires approval through the North Atlantic Council. Indeed, for some of the security threats worrying NATO's East European members, what is perhaps just as important is an improved partnership and better cooperation between NATO and the EU. For many of the issues that preoccupy NATO's East – such as hybrid threats from Russia – the EU possesses many of the capabilities that NATO does not, including a wide range of development, security and justice tools. These include the ability to broadly assess Europe's vulnerabilities, and to produce a 'risk register' of areas including critical national infrastructure to help indicate when hybrid actions might be under way.

However, in Europe, there was an uncomfortable reality that, while the threats and risks to European security had increased, the financial and material means to address them had not. Indeed, while a pledge was made at the 2014 Wales Summit for defence spending to meet a 2% of GDP target within a decade, the facts starkly illustrated the challenge ahead. At end-2015, four NATO European states met this figure, and for the rest, a combined increase of around US\$100bn would be needed to meet that target in 2015. Meanwhile, without the boost to readiness to which the 2% pledge, and the RAP, might lead, other questions arose including how, then, to effectively deter further Russian revanchism. Looking towards the 2016 Warsaw Summit, boosting collective self-defence might remain an aspiration for NATO, though achieving it remains a significant task.

But different models of coalitions and partnerships have, of course, been well tested. Indeed, in the Middle East, states there had also formed another coalition, this time to tackle the Houthi rebellion in Yemen. Led by Saudi Arabia, this coalition broadly consisted of GCC states, although other nations were involved. In that region, a confluence of crises meant that there were greater imperatives than before for practical cooperation among regional states. Facing a near-victory by Houthi forces in Yemen in March 2015, these countries decided to take action themselves. There was a growing maturity about these military operations, as well as a more overt acknowledgement of the risks inherent in them. For states that increasingly see the armed forces as a tool to be used in support of national-security objectives, the lessons identified from deployments – and ensuring that the armed forces learn from them – will be valuable.

Middle Eastern armed forces displayed growing military activism during the Yemen operation, and although a range of precision munitions formed part of regional air forces' load-outs, there was sustained criticism over aerial targeting, which observers attributed to, among other things, a dearth of joint terminal attack controllers. Saudi *Patriot* missiles destroyed incoming *Scuds* fired from Yemen and there was a significant deployment of combat aircraft and land forces. However, Iran remained a principal threat driver for regional states and while there was cooperation during the campaign in Yemen, developing this within the GCC for other concerns, such as coordinating missile-defence assets to counter Iran's ballistic-missile arsenal, remained a slower process.

Further north, Russia's armed forces were also utilising advanced weaponry in Moscow's new Syria campaign. Russia had earlier displayed its modernising armed forces during Moscow's May Victory Day parade. Kh-555 and Kh-101 cruise missiles were among the munitions launched at anti-Assad and ISIS forces by Tu-95MS and Tu-160 strategic bombers in November, while Russian naval vessels in the Caspian Sea launched 3M14 *Kalibr* NK cruise missiles. Other aircraft flying from Russian bases, including Tu-22s, as well as Russia's forward-deployed air power, used a mix of dumb bombs and GPS-guided weapons. The whole operation would, in time, allow analysts an insight into the performance of Russia's air force similar to that for its ground forces after operations in Ukraine; its risks were laid bare by the downing of an Su-24 in November. However, much of Russia's display of military prowess seemed aimed not only at degrading the capability of Assad's enemies, but also at messaging the West and potential customers of Russia's high-tech military products, evidenced by the quality of the broadcast footage and the similarity of some night-time launch shots to those of US *Tomahawk* cruise-missile launches. Indeed, Russia's defence exports notched up a significant success in November, with the contract inked to sell Su-35 combat aircraft to China.

This would constitute yet another capability enhancement for China's air force, which displays its domestic fifth-generation combat-aircraft aspirations in the J-20 and 'J-31' programmes. Twenty years ago, China agreed to licence-

build Russia's Su-27 and, a few years later, J-11 aircraft emerged that closely resembled the Su-27. Whether the Russians have managed to protect certain components of the Su-35 is unclear, as is whether they have instead decided that the sale is more important than the technology at a time when Russia is investing in fifth-generation platforms such as that envisaged to meet the PAK-FA combat-aircraft requirement.

Nonetheless, in a year when China's armed forces displayed yet more advanced military hardware at the September Victory Day parade, the Su-35 announcement will only heighten anxiety among certain regional states. China's 2015 White Paper exemplified Beijing's growing emphasis on the space and cyber domains, but also the maritime arena. In Asia, tensions escalated during 2015 over China's accelerating construction activities on features it occupied in the South China Sea. There was an evident military aspect to these activities. Regional states concerned by this, and which had the means, were looking to bolster their capabilities. The US was doing the same. Washington in 2015 made a point of saying that its 'rebalance' was continuing and that it would deploy its finest maritime capabilities forward in the Asia-Pacific, but China's accelerating capability developments, including anti-access capabilities, would be likely to complicate Washington's plans for regional contingencies.

Aware that its technological edge was being eroded by the increasing diffusion of advanced capabilities, Washington looked to innovate and generate a new edge. As part of the 'Third Offset', the Pentagon created the Defense Information Unit-Experimental, to help it leverage best lessons from Silicon Valley on issues like big data, analytics, autonomy and robotics. Innovative technological developments in the 1970s were, the Pentagon said, more often than not driven by government programmes; much innovation was now being driven by business, and many dual-use capabilities had their origins in the commercial sector.

But these technologies are not being pursued solely with a view to peer competition; rather, they are seen as having utility across the full spectrum of conflict, able as much to leverage big-data analytics to trawl social-media posts by a terrorist group, as to generate more effective and devolved ISR coverage, or produce systems to better enable concepts like prompt global strike. In all this, though, there are continuities. Interoperability will always be central within forces and between allies, and while advanced capabilities might create military effect, they cannot by themselves secure territory and populations. Doing this requires similar investments in security as a whole as well as better policy development and improved planning and coordination within and between nations. It also needs sustained investment in combat training coupled with more specialist skills across government and the civil sector enabling personnel to burnish proficiencies in languages, regional and cultural specialisms and intelligence analysis. The goal is for policymakers to receive the best possible military and security advice for each contingency, to complement and inform any possible use they might consider making of the increasingly capable toolkit that will be at their disposal.

## Chapter One

# Armoured fighting vehicles: renewed relevance; technological progress

The year 2015 saw the hundredth anniversary of the first prototype tank, a vehicle originally designed to provide infantry with fire support and to breach barbed wire and cross trenches. In 1918, two years after British tanks first appeared on the battlefield, the United Kingdom was developing armoured personnel carriers (APCs) to transport accompanying infantry. Subsequent decades saw a steady growth in the roles undertaken by armoured fighting vehicles (AFVs), as well as in the numbers fielded, and they dominated ground combat in some theatres of conflict in the twentieth century.

There have been significant developments in the capabilities and tactics deployed to defeat AFVs, but there have also been considerable advances in the technical sophistication of the vehicles themselves, as well as their firepower, protection and mobility. Indeed, though their continued utility has sometimes been questioned, AFVs remain vital capabilities for military forces, and in an increasingly complex and contested security environment will continue to constitute one of the principal means of delivering military effect on land.

### Armour since 9/11: threat and response

AFVs have played a significant role in military operations over the past decade, including in the 2003 American-led invasion of Iraq, the 2006 war in Lebanon between Israel and Hizbullah, the 2008 conflict between Russia and Georgia, and the war in Afghanistan since 2001. They have also been employed in such theatres as the 2013 French intervention in Mali, the repeated wars between Israel and Hamas, and wars in eastern Ukraine and Syria. AFVs are also employed by many forces deployed on international peacekeeping and peace-support missions, mainly to improve protection.

The First Gulf War in 1990–91, the initial stages of the US-led interventions in Iraq and Afghanistan, and the 2011 international intervention in Libya, showed the vulnerability of AFVs to an opponent with air superiority and precision weapons. The opening stages of 2003's *Operation Iraqi Freedom* showed that well-trained, modern and networked high-tech-

nology armoured forces could comprehensively overmatch less modern armoured forces. However, initial operations in Iraq and Afghanistan were followed by long-running and complex insurgencies and subsequent counter-insurgency campaigns where international forces at first struggled to adapt. Indeed, counter-insurgency activities in Iraq and Afghanistan often saw fighting as intense as that experienced in the Second World War and the Korean War. Infantry was essential, as were the armoured infantry fighting vehicles (AIFVs), APCs or Mine-Resistant Ambush-Protected (MRAP) vehicles in which troops travelled. Along with tanks, they provided useful supporting firepower.

The unanticipated scale and resulting casualties from the improvised explosive devices (IEDs) used by insurgents in Iraq and Afghanistan – when coupled with the unpopularity of the wars – meant that force protection became the top priority for the US and coalition armies (see *The Military Balance 2015*, p. 19). This in turn led to the development and fielding of new equipment, including new heavy protected patrol vehicles – such as the US MRAP – and a wide variety of counter-IED materiel, including specialist armoured vehicles, armoured excavators and, in the final stages of the NATO-led ISAF mission in Afghanistan, full-sized remotely operated armoured vehicles.

Indeed, an action–reaction dynamic developed between insurgents deploying greater firepower and more sophisticated IEDs, on the one hand, and design and technological measures intended to better protect AFVs, on the other. But these increasing requirements for additional protection, electronic jammers, remotely operated external weapons and air conditioning meant that armoured vehicles got heavier. In the US Army, for example:

- The M1 *Abrams* main battle tank (MBT) received upgraded belly armour, reactive tile armour, improved protection for the driver's seat and gunner's hatch, and electronic countermeasures (ECM). As a consequence, the vehicle's weight increased from



62 tonnes to 71–76 tonnes, depending on the variant.

- The weight of the *Bradley* AIFV increased from 25 tonnes to almost 41 tonnes. Despite improved suspension, this additional weight meant that ground clearance was reduced from 46cm to 28cm.
- *Stryker* wheeled APCs received additional armour and ECM, and many were upgraded so that the hull was altered to a 'double-V' configuration, designed to improve protec-

tion against mines and roadside bombs by deflecting the blast wave.

Many of these enhancements are now being retrofitted to the entire *Abrams*, *Bradley* and *Stryker* fleets as part of extensive mid-life update programmes; it is envisaged that all three vehicles will provide the core US AFV capability for the foreseeable future. The US is also to replace the many 1960s-era M113 APCs still in service in support roles with a new Armoured Multi-Purpose Vehicle based on reworked *Bradleys*. Additionally, the ubiquitous un-armoured HMMWV

### Russian AFV modernisation

In 2015, midway through an ambitious rearmament programme, Russia unveiled prototypes of three new armoured vehicle platforms: *Armata*, *Kurganets-25* and *Bumerang*. If accepted for serial production these could form the mainstay of Russian armoured forces in future decades, replacing diverse Soviet-era legacy systems.

Each platform provides the base for multiple variants which, while they share common components and sub-systems, will perform distinct roles in their respective weight and mobility classes. Some commonality also exists across the three platforms' weapon systems. For example, the observed Infantry Fighting Vehicle (IFV) variants of each carry the same *Epoch Almaty* remote turret. This increased level of standardisation offers benefits in terms of production, maintenance and operation.

#### **Armata**

There are reportedly a dozen variants of the heavy tracked *Armata* platform under consideration or development. Many will likely perform non-combat roles, and only the following four variants have yet been observed:

##### T-14 MBT

On its entry into service, *Armata* in its principal T-14 MBT variant will be the first all-new Russian tank for 40 years; hitherto, Moscow has relied primarily on upgraded T-72 variants. Its crewless turret is a revolutionary development for an operational tank, potentially delivering better protection for a crew now situated in a smaller compartment embedded within the front chassis. Not having a crew in the turret might also enable the placement of a larger-calibre gun, with reports that the current 125mm smooth-bore main gun could be later upgraded to 152mm. The prototypes also integrate a hard-kill APS, designed to physically intercept incoming projectiles such as ATGW and RPG rounds.

##### T-15 heavy IFV

*Armata* also forms the basis for the T-15 heavy IFV, with the engine relocated to the front to provide troop-carrying capability and access at the rear. The T-15 is Russia's latest attempt to produce a heavy IFV, after the lighter BMP-series IFVs were found lacking in both armour and firepower during the conflicts in Afghanistan and Chechnya. Providing MBT-level protection complemented by APS, the T-15 uses the *Epoch Almaty* remote turret armed with a 30mm automatic cannon, 7.62mm coaxial machine gun and four *Kornet* ATGM launchers.

##### T-16 ARV

The T-16, also known as BREM-T, is an Armoured Recovery Vehicle (ARV) based on the *Armata* platform. It features improved defensive armament over its predecessors, mounting a 12.7mm remote weapons station.

##### 2S35 SPG

It is believed that the 2S35 *Koalitsiya-SV* Self-Propelled Gun will also be based on *Armata*, although the observed 152mm gun turret intended for the 2S35 has yet to be seen integrated with the *Armata* chassis.

#### **Kurganets-25**

The lighter tracked *Kurganets-25* platform has been observed in both the APC and more heavily armed IFV variants, although others are expected. On service entry, it will gradually replace the ageing BMP-series of vehicles and potentially other tracked series such as the MT-LB.

#### **Bumerang**

The 8x8 wheeled, amphibious *Bumerang*, projected as a BTR-80 series replacement, also appears initially in the APC and IFV roles, with the same weapons stations as the tracked *Kurganets-25* system. In a significant departure from its predecessors, it has a front-mounted engine enabling troop ingress at the rear of the vehicle. This is in contrast to the more exposed, and often criticised, side access on the BTR-60/-70/-80 series.

light utility vehicle, which initially received ad hoc and later systematic armour retrofitting in Iraq and Afghanistan, is to be replaced by the fully armoured Joint Light Tactical Vehicle.

A similar emphasis on AFV protection can be seen in other NATO armies. The latest German *Leopard 2A7* MBT incorporates similar upgrades to those planned for the M1 *Abrams*. Improved protection was fitted to UK *Warrior* AIFVs employed in Afghanistan, which increased the vehicles' base weight from 27 tonnes to 40 tonnes by 2010. Furthermore, *Warrior* is to undergo a mid-life update (the *Warrior* Capability Sustainment Programme), which includes modular armour allowing different configurations for different threat environments, improved digitisation, a new turret and the fitting of the new CT40 weapon system.

Other states with significant armoured fleets are also adding more sophisticated protection. Israel, for instance, has long emphasised protection as a primary requirement for its AFVs and has deployed the *Namer* heavy APC with tank levels of protection based on the *Merkava* MBT chassis. Earlier, it fielded the *Achzarit* heavy APC based on the T-55 hull, and the *Nagmachon* and *Nakpadon* based on the *Centurion Sho't* hull.

However, improved protection for AFVs now takes many forms. While reactive armour has long been employed to counter incoming projectiles, Israel has been among the states pioneering the use of active protection systems (APS). An APS can take the form of 'hard-kill' or 'soft-kill' systems: the former consists of a device designed to physically intercept an incoming projectile; the latter involves the use of systems like ECM or electro-optical interference to try to disrupt or degrade offensive capabilities.

The Israel Defense Forces have responded to Hizbullah's effective use of anti-armour weapons, and anti-armour threats faced in recent Gaza campaigns, by fitting the *Trophy* APS to its already heavily armoured *Merkava* MkIV MBT (see *The Military Balance 2015*, p. 312). On operations, *Trophy* has proved capable of destroying incoming rocket-propelled grenade (RPG) warheads and *Kornet* anti-tank guided weapons (ATGW).

However, Israel is far from the first nation to employ APS on armour. Russia was at the forefront of these developments in the 1970s, with its *Drozd* hard-kill system reportedly tested on some tanks deployed to Afghanistan, and later capabilities like the *Arena* hard-kill and *Shtora* soft-kill systems. Today, Russia is believed to be the first nation to design a vehicle

from the outset with integral APS, as observed on its *Armata* T-14 prototype displayed in 2015.

### Contemporary fleets

Developing new AFVs can be expensive and technologically demanding; after costly wars in Iraq and Afghanistan and the 2008 global financial crisis, the US and many NATO countries have cancelled or delayed new AFV types – including the US Future Combat System and the UK Future Rapid Effects System. Today, it remains difficult to get the requirement right, and to develop an effective platform that offers both value for money and upgrade potential. In future, increasing complexity, as well as tactical and technical ambition, may make this task harder still.

AFVs often now serve for much longer than was predicted when they entered service, and often in very different roles and theatres than at first envisaged – as shown in the Iraq and Afghanistan wars. This means that capability upgrades have increased in importance. Indeed, many countries are continuing to upgrade existing vehicles, even as they move to procure replacements. The British Army, for example, is upgrading its *Challenger 2* MBT fleet and has contracted to purchase the new *Ajax* armoured reconnaissance vehicle. France, meanwhile, has introduced the VBCI wheeled AIFV and has an ambitious programme for new wheeled APCs and combat reconnaissance vehicles. Germany is introducing the *Boxer* wheeled APC and tracked *Puma* AIFV. Both countries have agreed to jointly develop a new MBT to replace the *Leclerc* and *Leopard 2*. Poland has ambitious plans for a wide range of new wheeled and tracked AFVs.

While some of these programmes are driven by fleet requirements, others are motivated by geopolitical priorities. The Ukraine crisis has not only had an effect on European defence spending, it has also influenced some European states' armoured ambitions. Germany has bought back 100 *Leopard 2* tanks from manufacturer KMW, Lithuania is reportedly interested in acquiring *Boxer* APCs and Latvia is purchasing ex-British Army *Scimitar* and *Spartan* armoured reconnaissance vehicles.

Armour is also a key area of capability development in other parts of the world. Even with modest additional AFV purchases and upgrades announced in 2014–15, US and European AFV industries have considerable excess production capacity and have been increasing efforts to export AFVs to Latin

America, the Middle East and Asia. These have met with some success, including the sale of US, French and German AFVs to Egypt and Gulf states. However, the export endeavours of Western AFV manufacturers often have to compete with locally produced systems as well as vigorous Russian and Chinese efforts to export their AFVs.

Both Russian and Chinese AFVs are highly competitively priced. Although often less well protected than their Western counterparts, they have traditionally been lighter, simpler and easier to use. This has made them very attractive globally. For example, the large Indian armoured forces are almost entirely equipped with Russian AFVs, while Pakistan makes great use of Chinese systems. African armed forces also have significant amounts of Russian and Chinese armour. Many African armies consider AFVs heavier than 30 tonnes unsuited for African roads and bridges, and their armoured forces' missions might not require the levels of protection seen in Western systems. That said, the fact that many of these systems are decades old also indicates that Cold War politics, as well as capability requirements, played some part in fleet development.

However, Russia is now displaying prototypes of a new range of AFVs that appear both better protected and heavier than its previous systems. The *Armata* system, in particular, is a radical departure from previous Russian tank designs (see p. 167.).

### Future developments

If it is successfully introduced into service, *Armata* will have considerable impact, not least on NATO

armoured forces. For example, successful fielding of APS has the potential to change current armour/anti-armour dynamics, with systems such as the Israeli *Trophy* displaying the ability to engage incoming ATGW and unguided anti-armour weapons with hard-kill capabilities. Current APS may be countered by simultaneous volleys of ATGW or RPGs fired to overmatch defences, but the overall effectiveness of these weapons will be considerably reduced by modern APS.

Current APS are unable to defeat high-velocity anti-tank projectiles fired from guns – a situation likely to continue for some time. Consequently, armies that have to counter AFVs fitted with APS will find the guns on tanks and the cannons on AIFVs of increasing importance. As such, there is a potential for an action–reaction dynamic emerging in AFV and anti-armour technology and tactics.

AFV fleets in the US, NATO allies and Russia greatly reduced in number after the Cold War. However, as long as NATO perceives Russia's modernising AFV capability as a potential threat – whether or not in Russian service – Western AFV fleets are unlikely to further reduce. This is particularly true of tank fleets. In fact, the so-far relatively modest increases in modern AFV holdings in Europe may continue.

Globally, the modernisation of AFV fleets is likely to continue with a combination of upgrade and replacement. Overall – given emerging technical developments – armoured warfare, armoured forces and AFVs are likely to still constitute key land-force capabilities for the foreseeable future.

# China's ballistic missiles: more systems; improved designs

At its September 2015 military parade commemorating the 70th anniversary of victory in the Second World War, China showed several new or upgraded ballistic-missile systems for the first time. The appearance of weapons including the DF-26 intermediate-range ballistic missile (IRBM) and the DF-5B (US reporting name: CSS-4 Mod. 3) liquid-fuelled intercontinental ballistic missile (ICBM) served as a reminder that Beijing is continuing to make significant strides in ballistic-missile research and development (R&D).

Given the lack of transparency concerning China's strategic weapons, there has been long-standing uncertainty over the nature of its strategic R&D projects, whether it was capable of bringing them all to fruition and what impact these programmes would have on the structure and capability of the country's nuclear forces. The limited deployment of the DF-31A (CSS-10) ICBM and long-running difficulties with the JL-2 (CSS-NX-14) submarine-launched ballistic-missile (SLBM) programme, for example, served to underscore this caution.

In recent years, however, it has become increasingly clear that China continues to make headway in the technical ambition of its strategic systems. The JL-2, successor to China's first SLBM, the JL-1, is on the brink of a first operational deployment on board one of the People's Liberation Army Navy (PLAN) *Jin*-class ballistic-missile submarines, according to the US Office of Naval Intelligence. The US Department of Defense (DoD) also claimed in its 2015 annual assessment of Chinese military capability that the DF-5B ICBM had been deployed with a multiple independently targetable re-entry vehicle (MIRV) capability.

A key system absent from the 2015 parade was the solid-fuelled DF-41 (CSS-X-20) ICBM, which remains in the test and development phase. This is a road-mobile ICBM that will almost certainly be MIRV-capable. Further evidence of progress on this significant project could be gleaned from an August 2014 comment on the website of the Shaanxi provincial government's environmental-monitoring centre, which mentioned a second stage in the expansion of production capacity at a facility associated with the DF-41. Photos of the DF-26 IRBM, with an estimated

range of 3,500 kilometres, emerged on the Chinese internet shortly after that. China is also reported to be continuing to test what could be a MIRV-ed version of the DF-31, known as the DF-31B, which also uses a new transporter-erector-launcher (TEL) vehicle.

## MIRV progress

The development and adoption of MIRV-ed warheads could be part of an effort to ensure a second-strike capability sufficiently damaging to be a credible deterrent. The US DoD assessed in its 2015 report that: 'China will likely continue to invest considerable resources to maintain a limited, but survivable, nuclear force to ensure the PLA [People's Liberation Army] can deliver a damaging responsive nuclear strike.' A further example of this effort is the WU-14 hypersonic glide vehicle, which increases the challenge for China's opponents of defending effectively against a mixed strike possibly comprising ballistic re-entry vehicles and glide bodies.

The WU-14 project also poses an interesting question about future elements of China's overall ICBM programme. Hypersonic glide vehicles – ultra-high-speed warhead carriers – will almost certainly be significantly heavier and larger than the current re-entry vehicles used on ICBMs. In Russia, the development of a hypersonic vehicle, the so-called 'Project 4202', likely served as a trigger for the development of the Strategic Rocket Forces' liquid-fuelled *Sarmat* ICBM. None of the Chinese solid-fuelled ICBMs currently in production or development are capable of carrying such a vehicle. It remains unclear whether China will look to a liquid-fuelled system, such as the DF-5, as the basis for an operational delivery system for the WU-14.

Alongside an improved ballistic-missile arsenal, there are growing indications that Beijing intends to create a more capable air element of its nuclear triad. An article in the official *China Daily* newspaper in July 2015 discussed the air force's need for an advanced long-range bomber. At present, China manufactures the Xian H-6K bomber, an upgraded version of the Russian Tu-16 *Badger*. The H-6K has been fitted with the Russian D-30KP2 turbofan engine, and has a modified airframe and an improved avionics suite. It also

carries the DH-20 land-attack cruise missile, which may be nuclear-capable. The H-6K, however, is an interim solution, and there is widespread speculation that China is working on a new bomber programme.

The scale of China's strategic-weapons R&D currently places it more on a level with the United States and Russia than the United Kingdom and France, although its warhead holdings, assuming a conservative estimate, are not much larger than those latter states. Many of China's missiles appear to be equipped with conventional warheads. Progress in China's missile-development projects, however, including the deployment of MIRVs, will likely result in its warhead stocks increasing. Whether Beijing will adhere to what it views as a minimum credible deterrent remains an open question, although there is little evidence that it has any intention to eventually move towards parity with the US and Russia. Changes in China's strategic deterrent will also have implications for how it stores its warhead stockpile. For decades it has been assumed that warheads and delivery systems were held separately, with warhead storage and maintenance overseen by a unit of the Second Artillery known as Base 22. Such an approach might have been appropriate when the country's primary deterrent force was built on a liquid-fuelled ICBM, but introducing a sea-based nuclear component implies that Beijing will have to consider changes in warhead holdings and management.

### Strategic-weapons sector

China's strategic-weapons industry is undergoing significant change. While R&D capacity might be broadly comparable to that of the US or Russia, the sector has hitherto been dependent on a limited number of key production facilities. These appear smaller in scale than similar facilities in Russia, and they have run a large number of different programmes. This began to change at the beginning of the decade. Existing facilities were expanded, and corporate restructuring led to additional resources being concentrated in the sector.

The sector's two main branches are the nuclear-weapons industry and the missile industry. The scale of both can be assessed broadly by using publicly available materials on Chinese corporate, educational and HR services websites, which contain information on the number of employees, locations and profile of work of each enterprise. It is easier to track developments in the missile industry, as it is more open in its commercial activities but overall, assessment of

firms' precise business focus is complicated because some strategic-weapons companies are attempting to expand their activity in the realm of conventional tactical weapons. Unlike the conventional-weapons sector, though, the strategic-weapons industry is centralised and relatively free from competition, enabling it to concentrate efforts on a limited number of programmes. Meanwhile, conventional-weapons producers expend significant resources developing competing systems. However, corporate entities that compete in tactical-weapons development often work together on strategic systems.

### Key organisations

The Chinese Academy of Engineering Physics (CAEP) is responsible for the design and production of nuclear weapons. With 23,000 employees, according to the CAEP website, it appears to be larger than the two US nuclear-weapons-related national laboratories combined. But like those facilities (the Los Alamos and Lawrence Livermore national laboratories), CAEP is responsible for many research projects that are not directly related to nuclear-weapons programmes. CAEP projects include, for example, tactical-weapons-related laser technology, while others are purely civilian in nature. But there is a bottleneck in China's nuclear-weapons complex: the main warhead final-assembly facility.

This plant, called Factory 903 or the Sichuan Institute of Materials and Technology, is located 40km from the city of Myanyang and employs more than 1,000 staff. It has an aggressive and rigorous recruitment policy designed to employ some of China's best scientists; around one-fifth of its staff hold PhDs, and it boasts at least three members of the Chinese Academy of Engineering.

The China Aerospace Science and Technology Corporation (CASC) and China Aerospace Science and Industry Corporation (CASIC) cooperate at the heart of Chinese strategic-ballistic-missile manufacture, though they are rivals in the tactical-missile sector. Both are highly diversified industrial corporations that garner significant revenue from the commercial sector, and are divided into several so-called 'academies' – specialised subsidiary companies. Together, they produce a variety of space systems and most of China's tactical missiles.

Though many CASC and CASIC industrial units are involved in China's strategic programmes, the few that have strategic projects as their principal task require special focus, specifically the 4th Academy of



CASIC, responsible for the overall design and final production of long-range solid-fuelled missiles, and the handful of research institutes and factories in the 1st and 4th Academies of CASC.

*Chinese Academy of Launch Vehicle Technology (CALT)*

Also known as CASC's 1st Academy, CALT has 28,000 staff and its primary role is the manufacture of space-launch vehicles. CALT used to be responsible for China's liquid-fuelled ballistic-missile programmes and, while Beijing appears to have halted production of liquid-fuelled systems, existing weapons such as the DF-4 and DF-5 still require maintenance and upgrade. This work is carried out by CALT's Factory 211, which is also known as the Beijing Space Machinery Factory. The plant is also responsible for the final assembly of the solid-fuelled JL-2 SLBM and DF-31 ICBM. CALT's involvement in submarine-launched systems dates back to 1986, when it was given development responsibility for the JL-2 – even though it lacked experience in submarine-launched systems (the JL-1 SLBM had been developed by CASIC's 4th Academy).

Work on ICBMs is, for CALT, a task now second only in importance to the production of space-launch systems, and the firm is now responsible for the final assembly of solid-fuelled ICBMs. CALT does not produce engines for solid-fuelled rockets, however; production of these is split between the CASIC 6th Academy and the CASC 4th Academy. CALT's key research facility, the 1st General Design Bureau, remains one of the centres of expertise in ballistic-missile design. Other important contributors, all Beijing-based, include: Research Institute 12, specialising in missile-control systems; Research Institute 14, responsible for strategic-missile re-entry vehicles; and Research Institute 15, which produces ground-launch equipment, including TELs.

Another significant production facility is Factory 519 – located in Changzhi, in Shanxi Province – which is responsible for the production of launch equipment for both space-launch vehicles and ballistic missiles. Indeed, while CALT production and research facilities play an important role in strategic-weapons production programmes, with some also working on projects being implemented by CASIC, its production capabilities now appear to be mostly dedicated to the space programme. For instance, Factory 211's main responsibility is the final assembly of *Long March* rockets, and the facility assembled 122 space-launch vehicles between 1970 and 2012.

*Academy of Aerospace Solid Propulsion Technology*

Also known as CASC's 4th Academy, this concern produces large-diameter rocket motors for solid-fuelled ballistic missiles and space-launch vehicles. Located in Xi'an, it is the major national centre of expertise for solid-fuelled-propulsion development in general and is likely responsible for the first- and second-stage motors of the DF-31 and DF-41 ICBMs and the JL-2 SLBM. In fact, it concentrates on ICBM and SLBM work. Like CALT, the CASC 4th Academy has one key R&D facility – Research Institute 41 – which is responsible for the design of solid-fuelled rocket motors and also conducts independent R&D projects on tactical missiles. Its Research Institute 42 is responsible for the development of new types of solid fuel, while Institute 43 develops and produces composite materials and components used in the construction of solid-rocket motors. The main production facilities, located in Xi'an, are Factory 7414, which is responsible for fabricating metal components for engines, and Factory 7416 (Xi'an Aerospace Chemical Propulsion Plant), which is responsible for the final assembly of rocket engines.

*China Aerospace Science and Industry Corporation (CASIC)*

Like CASC, CASIC is a diversified organisation that is similarly subdivided into specialised academies and research organisations. CASIC's 4th Academy is the main centre of expertise for the development of solid-fuelled missiles and is responsible for the overall design and final assembly of solid-fuelled IRBMs. The 4th Academy developed the JL-1 SLBM and the DF-21, China's first mobile solid-fuel medium-range ballistic missile (MRBM), and is likely responsible for the new DF-26 IRBM. Indeed, its production facilities are perhaps the main determinant for the pace of growth in China's IRBM inventory.

The concern was merged with CASIC's 9th Academy in 2011; the latter was responsible for the DF-11 (CSS-7) short-range missile system. The merger tripled the size of the 4th Academy. The new corporation was still known as the 4th Academy, but it changed its name to the 'CASIC Sanjiang Group' and moved to Wuhan. The company has the capability to design, assemble and produce a number of critical subsystems for solid-fuelled ballistic missiles, including some types of re-entry vehicle.

Medium-diameter solid-fuelled rocket motors used on ballistic missiles are the responsibility of CASIC's 6th Academy, headquartered in the Inner

Table 1 **China's Ballistic Missiles: Designations**

US designation	PLA service designation	Export designation	Missile type	Reported maximum range (km)	Fuel	Deployment
CSS-1 mod 1	DF-2	-	MRBM	1,050	Liquid	Transportable
CSS-1 mod 2	DF-2A	-	MRBM	1,250	Liquid	Transportable
CSS-2 mod 1	DF-3	-	IRBM	3,000	Liquid	Transportable
CSS-2 mod 2	DF-3A	-	IRBM	3,000	Liquid	Transportable
CSS-3	DF-4	-	ICBM	5,500	Liquid	Transportable
CSS-4 mod 1	DF-5	-	ICBM	12,000	Liquid	Silo
CSS-4 mod 2	DF-5A	-	ICBM	13,000	Liquid	Silo
CSS-4 mod 3	DF-5B	-	ICBM	13,000	Liquid	Silo
CSS-5 mod 1	DF-21	-	MRBM	1,750	Solid	Road-mobile
CSS-5 mod 2	DF-21A	-	MRBM	1,750	Solid	Road-mobile
CSS-5 mod 4	DF-21C	-	MRBM	1,750	Solid	Road-mobile
CSS-5 mod 5	DF-21D	-	MRBM	1,500	Solid	Road-mobile
CSS-6 mod 1	DF-15	M-9	SRBM	600	Solid	Road-mobile
CSS-6 mod 2	DF-15A	-	SRBM	850	Solid	Road-mobile
CSS-6 mod 3	DF-15B	-	SRBM	725	Solid	Road-mobile
CSS-7 mod 1	DF-11	M-11	SRBM	300	Solid	Road-mobile
CSS-7 mod 2	DF-11A	-	SRBM	600	Solid	Road-mobile
CSS-8	-	M-7	SRBM	150	Solid/Liquid	Road-mobile
CSS-9 mod 1	-	B-611	SRBM	150	Solid	Road-mobile
CSS-9 mod-X-2	-	B-611M	SRBM	260	Solid	Road-mobile
CSS-10 mod 1	DF-31	-	ICBM	7,000	Solid	Road-mobile
CSS-10 mod 2	DF-31A	-	ICBM	11,000	Solid	Road-mobile
CSS-11 mod 1	DF-16	-	MRBM	1,000	Solid	Road-mobile
CSS-X-12?	-	-	n.k.	n.k.	n.k.	n.k.
CSS-X-13?	-	-	n.k.	n.k.	n.k.	n.k.
CSS-14 mod-X-1	-	P-12	SRBM	150	Solid	Road-mobile
CSS-14 mod-X-2	-	BP-12A	SRBM	280	Solid	Road-mobile
CSS-X-15	-	M-20	SRBM	280	Solid	Road-mobile
CSS-X-16	-	SY400	SRBM	200	Solid	Road-mobile
CSS-X-17?	-	-	n.k.	n.k.	n.k.	n.k.
CSS-X-18?	-	-	n.k.	n.k.	n.k.	n.k.
CSS-X-19?	-	-	n.k.	n.k.	n.k.	n.k.
CSS-X-20	DF-41	-	ICBM	15,000	Solid	Road-mobile
*	DF-26	-	IRBM	3,500+	Solid	Road-mobile

\*No CSS designation has been publicly associated with the new DF-26 IRBM

(Numbers -12, -13, -17, -18, -19 have not been associated with a known system in open-source press.)

Mongolia Autonomous Region, which has a significant role in the production of short-range missiles and some types of IRBM. Meanwhile, the Beijing-based 4th General Design Bureau carries out the overall design of solid-fuelled MRBMs and IRBMs, as well as space-launch vehicles and, possibly, anti-satellite (ASAT) vehicles based on them. The 9th Design Bureau, inherited from the original 9th Academy, remains dedicated mainly to tactical surface-to-surface missiles, but has other R&D projects, including, interestingly, solid-state laser weapons, according to the company's HR materials. The Beijing Research Institute of Control and

Electronic Technology (Research Institute 17) is responsible for the development of ballistic-missile guidance and control systems.

However, the 4th Academy's final production facilities are a main bottleneck in the growth of China's MRBM/IRBM capabilities. The main production facility is Factory 307, or the Nanjing Chenguang Group. This is one of the oldest enterprises in the Chinese defence industry, founded in 1865 as an ordnance factory. It is also a final-assembly plant for Chinese solid-fuelled ballistic missiles such as the DF-21, as well as the new DF-26. CASIC also contributes considerably to CASC solid-fuel missile production.

More broadly, even when the production facilities at the expanded Factory 307 (stemming from the merger of the 4th and 9th Academies) are combined with those of Factory 211 from CASC's 1st Academy, these remain smaller in size than the equivalent production facilities in Russia. The main Russian producer of solid-fuelled ballistic missiles, the Votkinsk factory, has more than 10,000 employees, according to the Russian media. In 2013, China's Factory 307 and Factory 211 had around 8,400 staff combined. In addition, unlike Votkinsk, a substantial proportion of the two Chinese facilities' workforces are dedicated to non-strategic missile projects. For instance, Factory 211 is mostly focused on assembling space-launch vehicles, while Factory 307 is likely devoting a significant share of production capacity to DF-21-based non-nuclear weapon systems, such as anti-ship ballistic missiles and ASAT systems.

One explanation for this apparent imbalance between resources allocated to R&D and production may be that China has pursued a two-stage strategy with regard to the development of its strategic nuclear forces. A goal of the first stage of this process would be to reduce the technical gap between Beijing, Washington and Moscow by focusing on R&D, with limited serial production. The second stage would be to shift the emphasis from R&D to production. Arguably, the reorganisation of the CASIC 4th and 9th Academies, in December 2011, marked the beginning of the second stage, although the process of expanding production facilities is likely to be complex and take some years. Increased production capacity, however, does not necessarily mean that China's strategic arsenal will grow in size significantly. It may, however, mean that new systems are introduced into the PLA's inventory more rapidly than the older variants that they supersede.

Table 2 **Global Strategic-Weapons Delivery Systems and Warheads (as at Nov 2015)**

	Delivery Systems									Operational Warheads		
	Land-based msl Inchr					Submarine-based msl Inchr		Aircraft		Strategic	Sub-strategic	Total
	ICBM	IRBM	MRBM	SRBM	LACM	SLBM	SLCM	Bbr ac	Strike ac			
<b>China</b>	62	16	80	0	0 (54)	0 (48)	0	50	*	Up to 250	*	Up to 250
<b>France</b>	0	0	0	0	0	64	0	0	43	280	*	280
<b>India</b>	0	*	12	42	0	0 (12)	0	0	*	Up to 120	*	Up to 120
<b>Israel</b>	0	24	0	0	0	0	*	0	50	80	0	80
<b>North Korea</b>	0 (6)	*	0	*	*	*	0	*	*	Up to 20	0	Up to 20
<b>Pakistan</b>	0	0	30	30	*	0	0	0	*	Up to 130	*	Up to 130
<b>Russia</b>	332	*	0	0	*	192	*	76	*	1,648	2,000	3,648
<b>United Kingdom</b>	0	0	0	0	0	64	0	0	0	120	*	120
<b>United States</b>	450	0	0	0	0	336	0	90	*	1,538	500	2,038

**China:** The operational status of China's *Jin*-class SSBNs is unclear. In addition, China has never formally declared which, if any, of its tactical aircraft are nuclear-capable.

**France:** The ASMP-A cruise missile is envisaged as having a sub-strategic role.

**India:** Has a number of nuclear-capable tactical aircraft, but no squadron is entirely dedicated to the nuclear mission.

**Israel:** Has never formally confirmed its nuclear capability, but is widely believed to have a nuclear triad.

**North Korea:** Widely believed to possess a small number of nuclear warheads; current mechanisms for delivery remain unclear.

**Pakistan:** Has added battlefield nuclear weapons to its arsenal with the fielding of *Nasr/Hatf-9*.

**Russia:** Now recapitalising its nuclear triad. A number of Russia's tactical aircraft, anti-ship, air- and ballistic-missile-defence weapons are dual-capable, although the exact size of its sub-strategic arsenal remains unclear.

**UK:** May have a sub-strategic capability with the present *Trident* missile, and plans to replace the *Vanguard*-class SSBNs.

**US:** The air force is looking to sustain its nuclear mission with a new bomber and a new cruise missile, and it is also exploring a successor ICBM to the present *Minuteman III*.

\* = numbers not known

() = operational status/nuclear role uncertain

# Deterrence in cyberspace

How to deter the actions of others in cyberspace, and indeed whether it is possible to do so, is a question of increasing importance for defence and security policymakers. The issue has become more pressing because of increasing awareness of the vulnerabilities, as well as the benefits, that stem from the degree to which information and communications technologies have become integral to all aspects of modern existence.

In particular, concern has grown about the potential disabling effect of attacks on areas of critical national infrastructure, such as financial systems, banking networks and power and transport infrastructure, not to mention the implications for military capabilities that are increasingly cyber dependent, such as code-reliant systems, or command, control and communications links. Indeed, the more networked a society becomes, the more vulnerable it is to damaging cyber attacks; the United States, in particular, seems powerless to prevent attacks on key government or private-sector networks. Furthermore, while most cyber exploits recorded to date have involved data theft, the number of attacks originating in the cyber domain that have caused real-world damage has grown. It may only be a matter of time before a cyber attack results in fatalities.

## Cold War analogies?

Until recently, states have shown little interest in considering whether, in this increasingly contested environment, the kind of thinking about deterrence that developed in relation to nuclear confrontation during the Cold War might have any relevance. In many respects, the parallels are far from obvious. Cold War deterrence concepts were designed to reduce the risks associated with the deployment of very specific types of weaponry with the potential to wipe out humanity. Such weaponry was, initially, in the hands of just two states and involved capabilities that were relatively easy to identify and monitor, and which over time became broadly comparable in scope.

In contrast, cyber capabilities are all but ubiquitous and impossible to monitor in advance of deploy-

ment. Moreover, demonstrating a nuclear deterrent capability could be accomplished by detonating a device, but demonstrating capability in cyberspace is not so straightforward. An action intended as a signal risks being interpreted as an actual attack, liable to an escalatory response. Alternatively, the use of a cyber weapon for signalling purposes could prove self-defeating if it enables a potential adversary to develop countermeasures against it. The nature of the cyber domain also makes attribution of an attack to a high level of confidence difficult.

A further argument against the utility of deterrence in the cyber domain is that, in contrast to land, sea, air and space domains, it is dependent for its existence on a global network of fibre-optic cables, servers and computers that could, in theory at least, be dismantled. However, in principle, there is no reason why concepts of deterrence should not be applied to the cyber domain, even if the methods might differ markedly from those of nuclear deterrence.

While the cyber domain is an artificial construct, the electromagnetic spectrum upon which it depends is a natural phenomenon. So just as the sea, air and space only became domains of conflict once specific capabilities were developed to project force within them, so too the cyber domain depends on the development of specific tools and capabilities to realise the potential of the electromagnetic spectrum. Like the sea or air, the electromagnetic spectrum has no natural geographical boundaries. However, just as is true for the sea and air, it is possible to impose man-made boundaries such as exclusive maritime economic zones or national airspace. Indeed, the principle that national sovereignty applies within the cyber domain has been accepted by the United Nations. The only substantial difference between the cyber domain and others is that the electromagnetic spectrum is susceptible to disruption through means such as the electromagnetic pulse that would be generated by a nuclear detonation in the earth's atmosphere, or the effects of other directed-energy weapons or natural phenomena such as solar flares.

## Making deterrence work in cyberspace

The purpose of deterrence is to dissuade potential adversaries from taking certain actions by causing them to question the risk–benefit calculus of such choices. In the nuclear context, this involved the conviction that any use of nuclear weapons would result in retaliation so severe as to negate any benefit from a first strike.

Proportionality, reciprocity and coercive credibility are all key ingredients of a successful deterrence strategy. However, all these present problems in a realm in which even the pre-eminent actor both within the cyber domain and in terms of cross-domain response capabilities, the United States, cannot defend itself against cyber attacks. Neither of the two conventional forms of deterrence – by denial and by punishment – have so far proven effective in preventing such attacks against the US by antagonists who appear to have calculated that such actions incur no cost, or at least none high enough to deter them. But a third form of deterrence, by entanglement, may have proven more effective in constraining behaviour, insofar as no actor has yet shown a disposition to undertake activities that would inflict lasting damage on a medium on which all are to varying degrees dependent.

A further complicating factor is the anonymity of the cyber domain, which makes the attribution of an attack difficult – although arguably not impossible. An attack that cannot be ascribed also highlights a central problem in terms of signalling: if the actor seeking to coerce an adversary does not make clear their identity, the effect of their action might be impaired. This can be a particular issue in cases in which a non-state actor operates on behalf of a state without prior consultation.

## Legal aspects

In recognition of the growing importance of the cyber domain, at the 2013 meeting of the United Nations Group of Governmental Experts (UN/GGE) on Developments in the Field of Information and Telecommunications in the Context of International Security, convened under the First Committee, it was agreed that existing international law applied within the cyber domain, as did traditional concepts of state sovereignty. The US and other key Western states took the position that international law included international humanitarian law – the law of armed conflict (LOAC). This was in line with existing US doctrines but was resisted by states such as Russia

and China who argued that new legislation specific to the cyber domain should be incorporated within an international treaty. In practice, the issue is less one of whether LOAC applies in the cyber domain but rather how it should apply.

Opponents of the US position point to a continuing lack of agreed definitions for core cyber warfare issues, including:

- What constitutes an armed attack or the use of force in the cyber domain and what represents a legitimate response;
- What constitutes a cyber weapon in a domain where most systems and capabilities are dual- or multi-use;
- How proportionality and distinction – the requirement to minimise the impact of any military act on non-combatants – can be applied in an inherently dual-use domain;
- How to deal with issues of state neutrality in the case of a cyber attack routed via a third country.

## State responses

US doctrine is currently based on equivalence of effect. As such, Washington has reserved the right to respond kinetically to a cyber attack that crosses a threshold equating to an armed attack. This declaratory policy is doubtless designed to have a deterrent effect, not least since there remains studied ambiguity over what level of cyber attack would, in fact, equate to an armed attack, and indeed what form a response might take. Washington has engaged in other signalling, such as in 2013 publicly listing 16 sectors of critical national infrastructure. Faced with a serious attack that had its origins in the cyber domain, particularly a lethal attack – an eventuality that has not yet arisen but is probably coming closer – the US is unlikely to be disposed to wait for attribution to be established to a forensic level before retaliating.

On the nation-state level, there is a clear hierarchy of cyber capabilities. The US, Russia and China occupy particular strategic relevance due to their status as cyber, space and nuclear powers, with all that that implies in terms of the escalatory potential of acts beginning in the cyber domain. Agreement concerning the cyber domain between these key states seems a more realistic prospect than anything negotiated by a larger number of states with vastly disparate capabilities, and such an agreement has the potential to be globally normative.



However, most malign or hostile cyber activities, whether conducted by states, their proxies or non-state actors, have to date taken place at a margin well below that at which LOAC would apply. At this level, deterrence can take many forms depending upon the actor that is to be deterred and the nature of the threat. At a state level, options for deterrence against an adversary guilty of intellectual-property theft might include economic or legal sanctions. And in terms of criminality, more effective law enforcement – including international partnerships – can help reduce the space within which criminals operate.

For states concerned to protect critical national infrastructure, the challenge is to coordinate and oversee the activities of a wide range of largely private-sector entities operating systems offering differing levels of security. And there remains a prevalence of legacy systems engineered for efficiency and convenience rather than security. There are those who argue that the only way to deal with the accumulation of malign activity to which the cyber domain is vulnerable is to fundamentally re-engineer the whole architecture. But, absent such an initiative, there are in fact many ways in which systems can be upgraded and modernised to a higher level of security offering some deterrent effect. These include: migration from the use of the IPv4 to the IPv6 Internet Protocol (by no means a silver bullet since this deals with some security threats but enables others); the application of the Network Ingress Filtering protocol, which would reduce the potential for Distributed Denial of Service (DDoS) attacks (the cyber equivalent of a swarm attack); and Domain-Based Message Authentication, Reporting and Conformance (DMARC) that would help mitigate the threat of phishing (the despatch of emails with infected attachments).

To improve effectiveness, cyber deterrence strategies could be combined with other ways in which behaviour or capability might be constrained. These include measures analogous to those seen in non-proliferation or confidence-building agree-

ments, or a form of export-control regime that might include greater regulation or improved traceability of advanced materials or component technologies. However, the ubiquity of modern technology would make verification difficult.

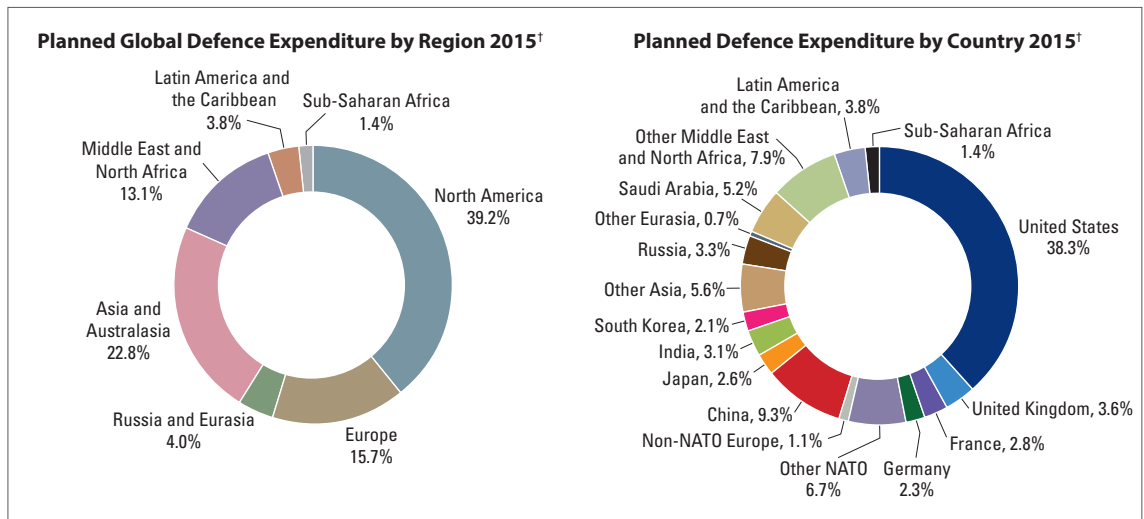
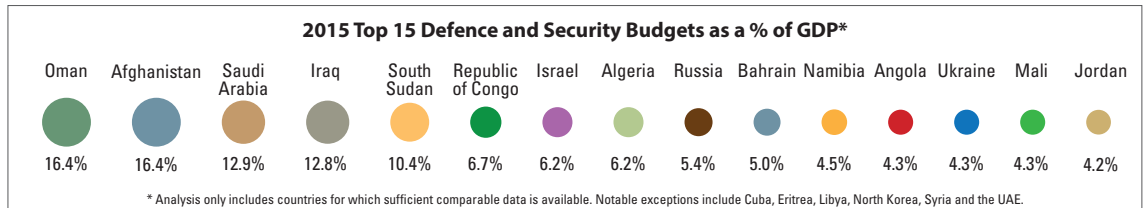
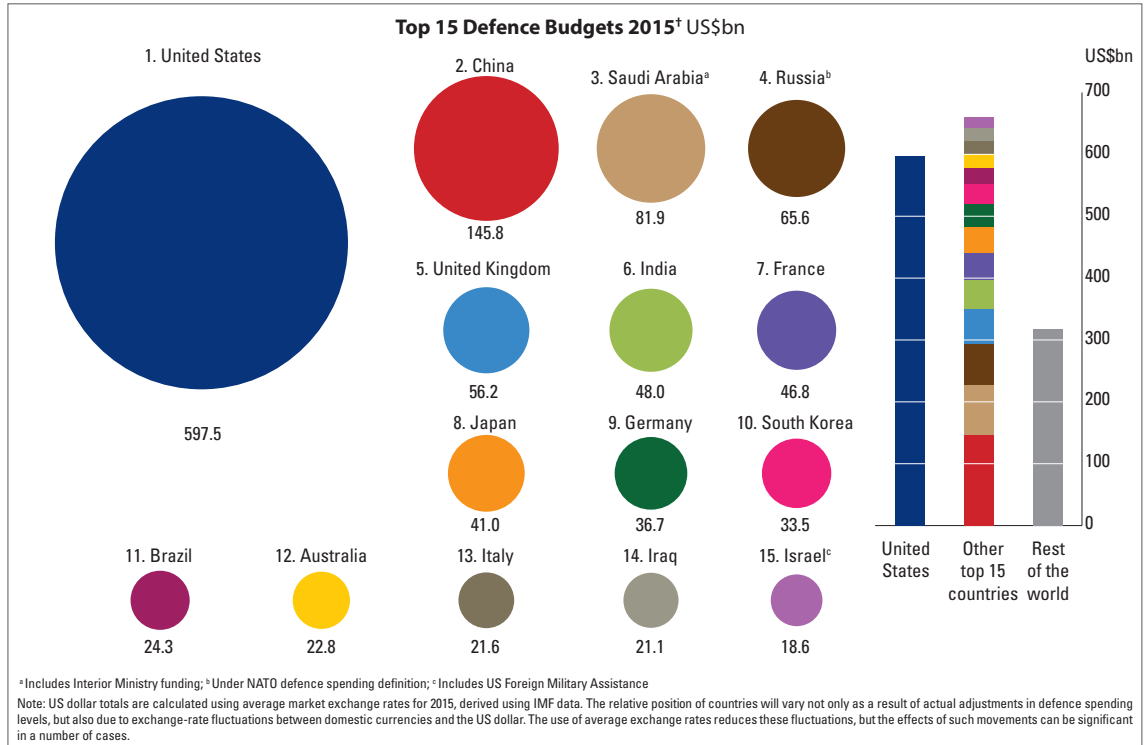
Meanwhile, norms of behaviour might emerge from agreements relating to deterring or combating cyber actions below the LOAC level, such as the September 2015 US–China agreement that ‘neither country’s government will conduct or knowingly support cyber-enabled theft of intellectual property’ and that they will make ‘common effort to further identify and promote appropriate norms of behaviour in cyberspace’. Further, the establishment of a hotline as part of that agreement that can be used ‘for the escalation of issues that might arise in the course of responding to [malicious cyber activity]’ also establishes a mechanism that can be used to de-escalate potential crises that might have their origins in the cyber domain.

But human behaviour is as important as technology, if not more so. While the US as a whole has not been able to protect itself against multiple cyber attacks, the US Department of Defense has latterly had a much better record of defending its own networks thanks to an intensive programme of personnel training and the introduction of rigorous processes for handling communications.

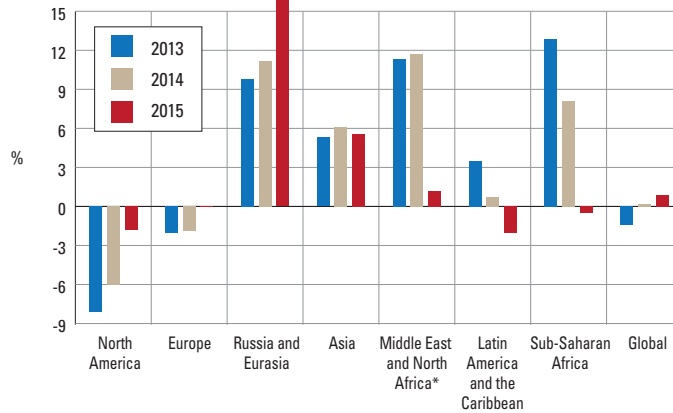
Cyber deterrence is a multifaceted problem many orders of magnitude more complex than that needed to manage nuclear threats. It is, however, far from impossible provided there is a clear focus on the specific threat to be deterred and an understanding that effective deterrence in one area may not have wider application; there may not be a ‘one-size-fits-all’ approach, and cyber deterrence may simply be less visible than nuclear deterrence. Significantly, that the kind of major disruptions that could occur within the cyber domain have by and large not yet done so suggests that, in some respects at least, a degree of deterrence may already be at work.

# Chapter Two

## Comparative defence statistics



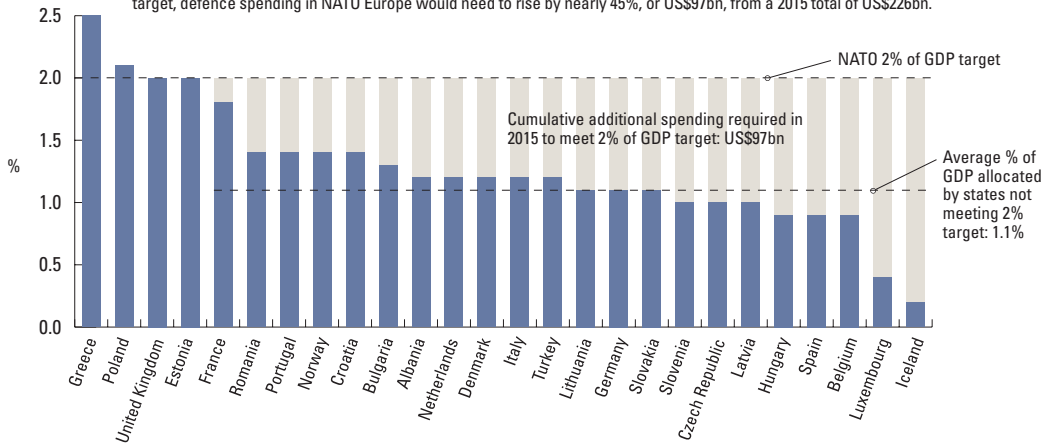
### Real Global Defence Spending Changes by Region 2011–15



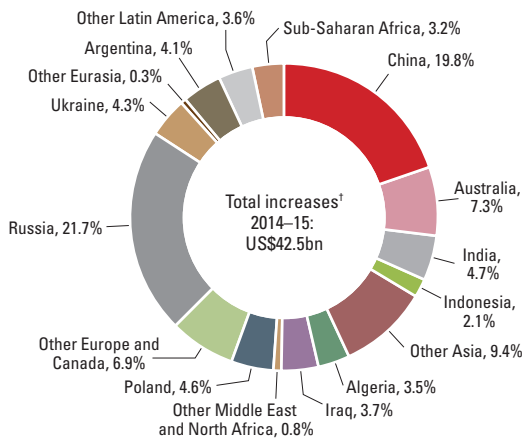
\*Excludes spending outlays in conflict-affected states such as Libya, Syria and Yemen due to insufficient data.

### NATO European Defence Spending in 2015 – Meeting the 2% of GDP Target

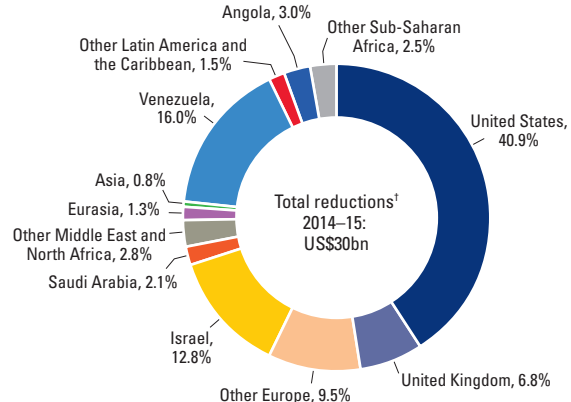
In 2015, only four of the 26 European members of NATO met the 2% of GDP defence spending target mandated by the Alliance: Greece, Poland, the United Kingdom and Estonia. For the remaining 22 states, the average percentage of GDP allocated to defence was just 1.1%. As shown in the figure below, if all NATO European countries were to meet the target, defence spending in NATO Europe would need to rise by nearly 45%, or US\$97bn, from a 2015 total of US\$226bn.



### Composition of Real Defence Spending Increases 2014–15<sup>†</sup>



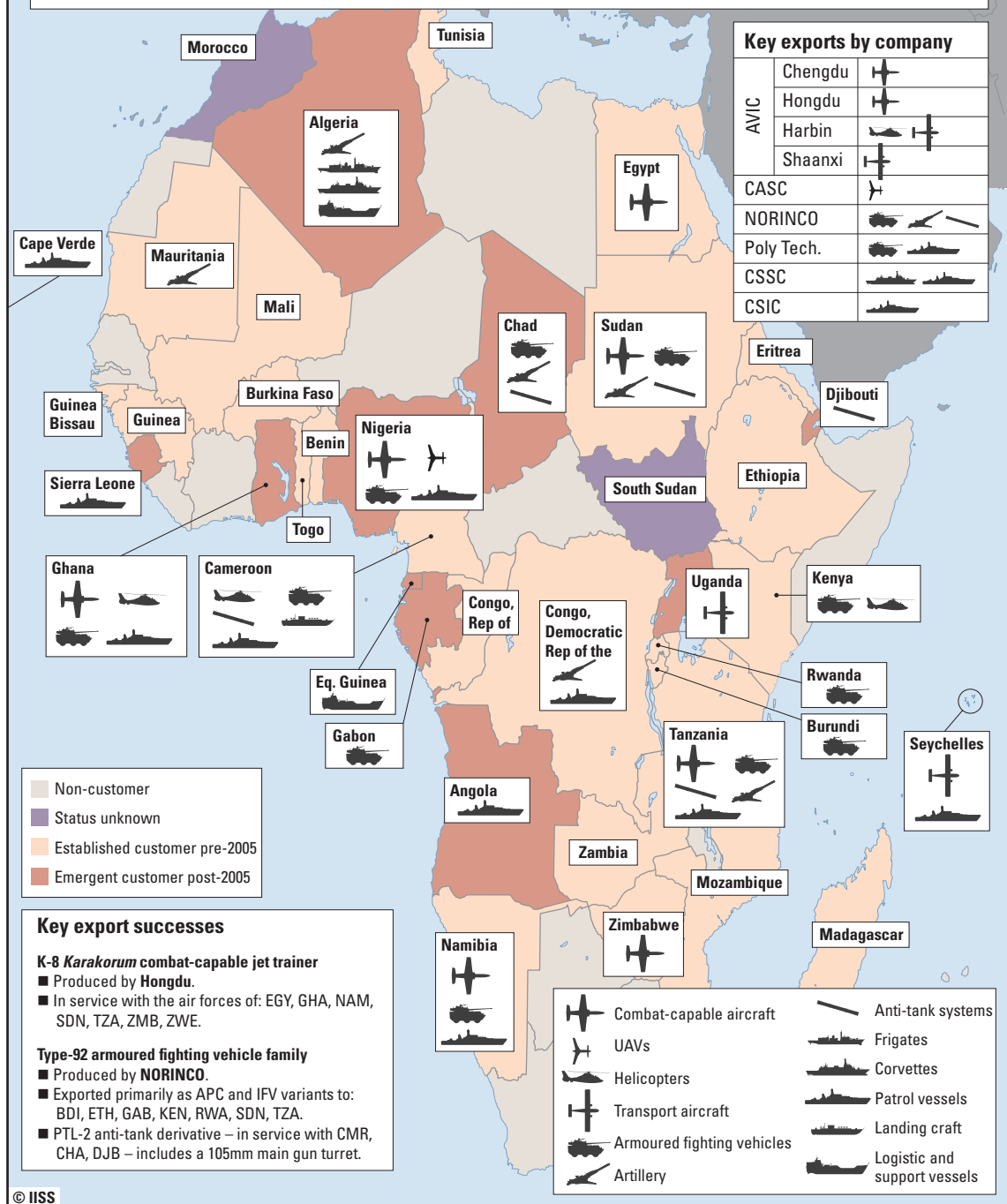
### Composition of Real Defence Spending Reductions 2014–15<sup>†</sup>



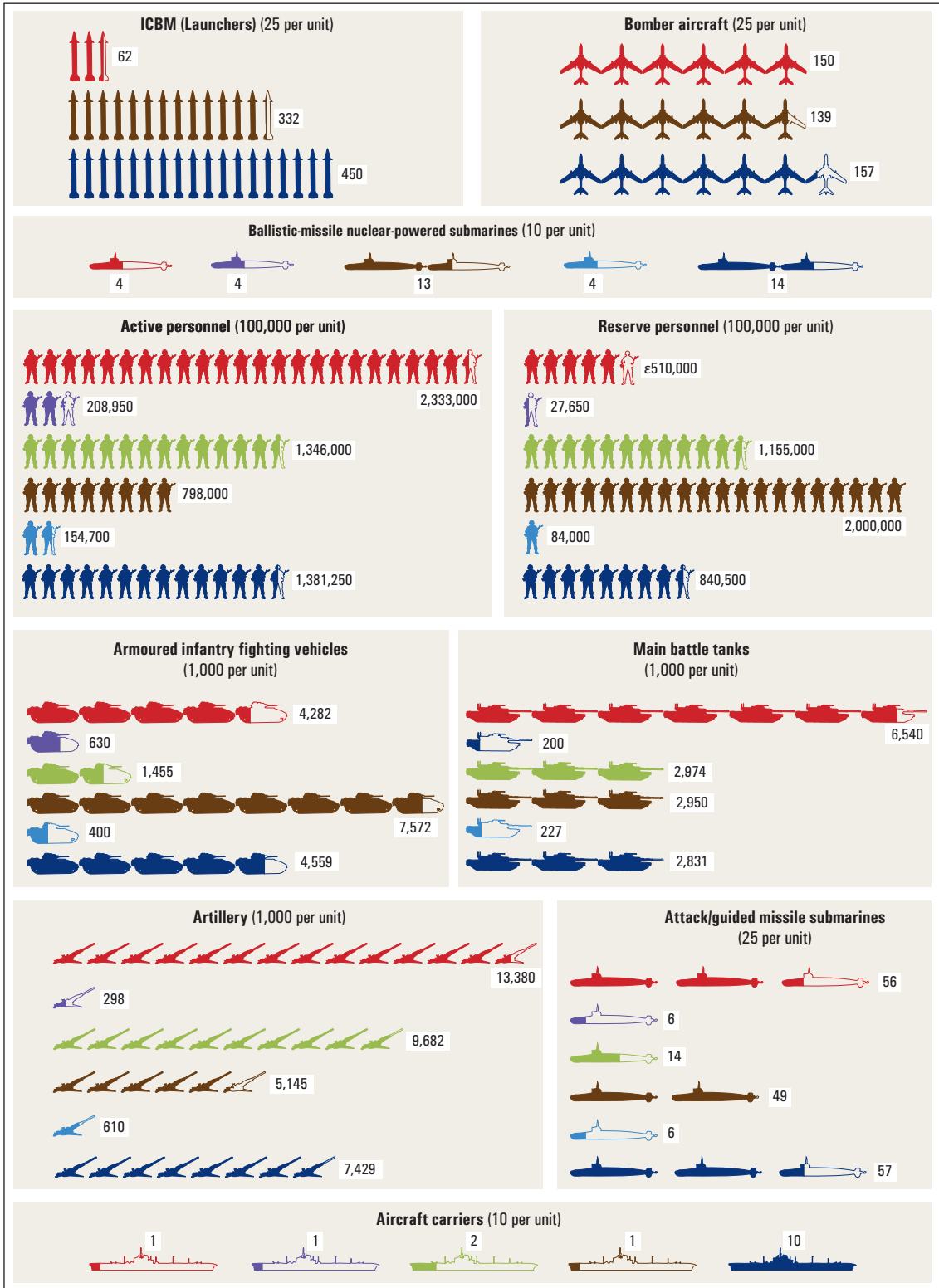
<sup>†</sup>At constant 2010 prices and exchange rates

**China's defence exports to Africa: observed new deliveries by type, 2005-15**

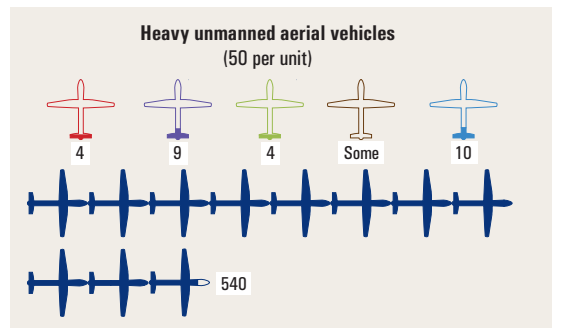
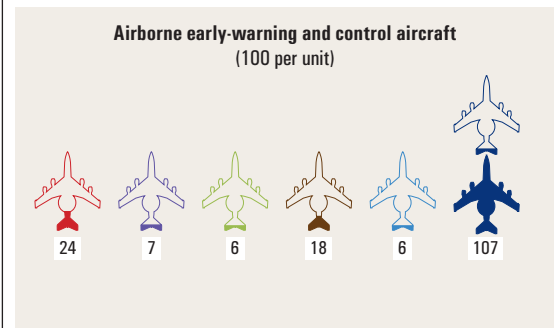
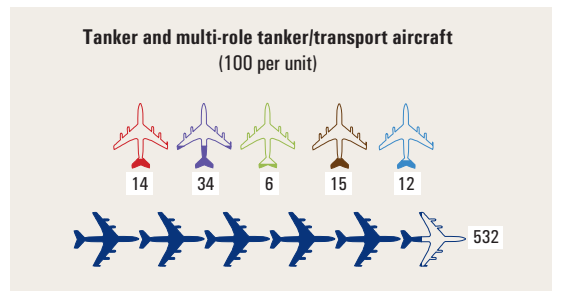
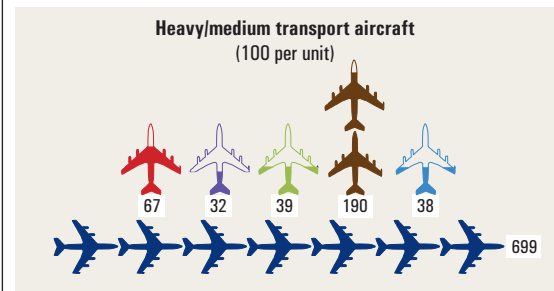
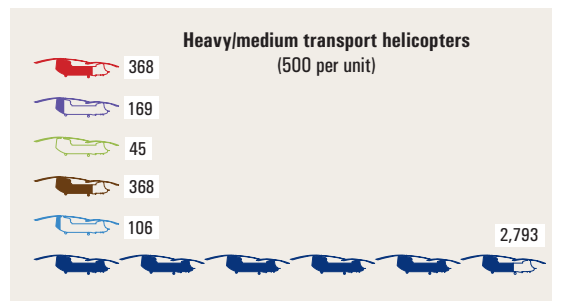
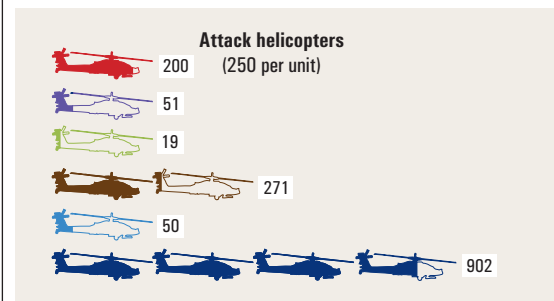
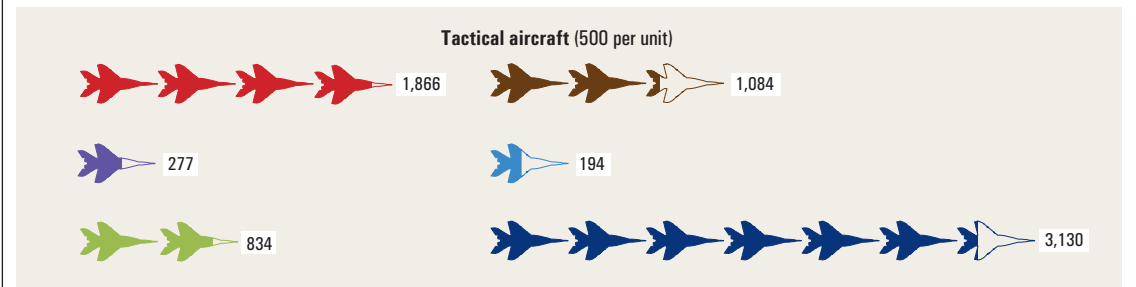
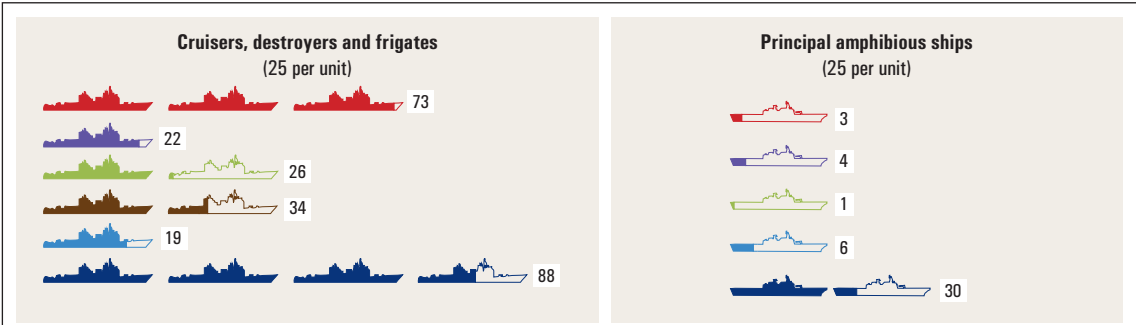
China has been making significant inroads into the African defence market, reflecting the broader growth in Beijing's influence and investment in the continent. Since 2005, exports of new Chinese military equipment have increased, with new customers emerging alongside more established markets. A legacy of now-obsolete Chinese copies of Soviet-era systems is also gradually giving way to more modern and capable indigenous Chinese equipment – some designed specifically for export. Although the level of technology provided may not be wholly indicative of the full capabilities of China's defence industry – nor be equivalent to Western capabilities – these exports reflect the threat levels and robust operating environments of the continent.



Key defence statistics







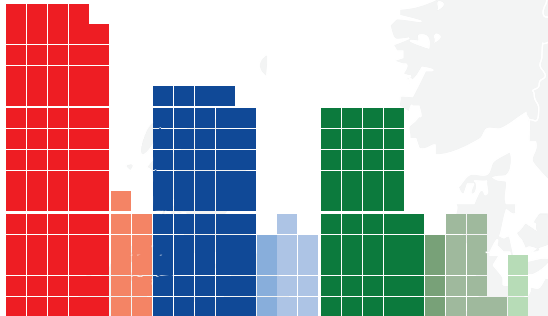
### Western Europe: the dramatic decline in combat battalion numbers, 1990–2015

Between 1990 and 2015, a range of factors – including economic challenges, changing threat perceptions and the end of conscription – contributed to a dramatic decline in the number of active combat battalions in service with the major Western European powers and United States European Command (EUCOM). In the states assessed here, numbers fell from a total of 649 in 1990 to 185 in 2015. Presently, France, Germany, Italy, the United Kingdom and EUCOM together have a smaller number of regular combat battalions than West Germany alone in 1990.

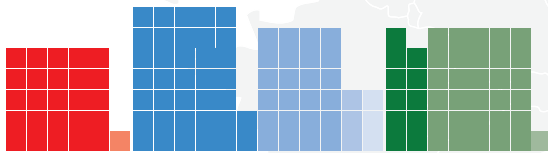
- ARMOURED    ARMOURED RECCE    LIGHT RECCE    ARMOURED INF    MECHANISED INF    LIGHT INF    AIRBORNE INF
- MARINE INF    SELF-PROPELLED ARTY    FIELD ARTY    MULTIPLE-ROCKET LAUNCHER    SURFACE-TO-SURFACE MSL

**1990**

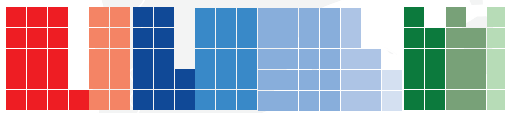
**WEST GERMANY (215)**



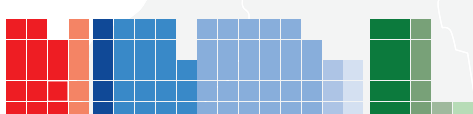
**ITALY (135)**



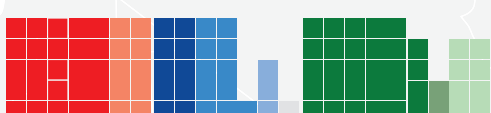
**FRANCE (106)**



**UK (94)**



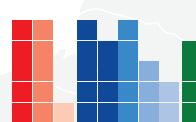
**US EUCOM (99)**



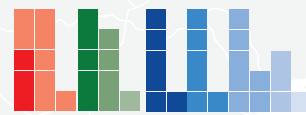
**2015**

□ = 1 battalion

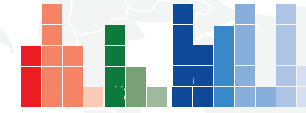
**GERMANY (34)**



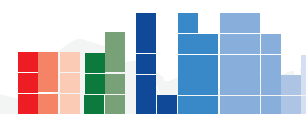
**ITALY (44)**



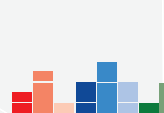
**FRANCE (43)**



**UK (50)**



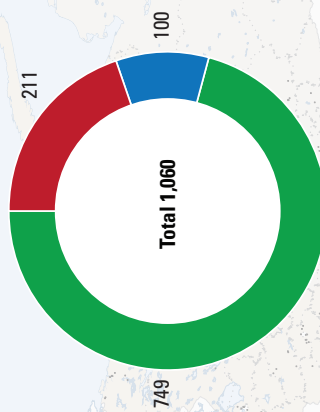
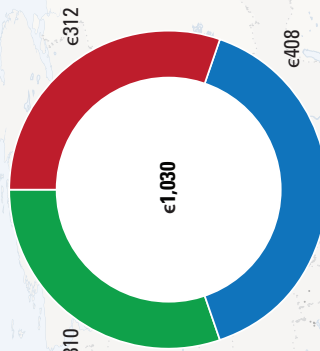
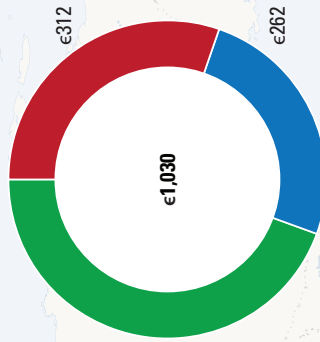
**US EUCOM (14)**



## Tactical combat aircraft: Russia's planned and projected fleet in 2020

The Russian Aerospace Forces have benefited considerably from the 2011–20 State Armament Programme (GPV), but not all of the GPV's targets will be met. Development and delivery delays mean that the air force will operate a greater number of legacy combat aircraft in 2020 than originally planned. Most significant seemed the reduction in purchases of the Sukhoi T-50 fifth-generation aircraft; this decreased from 55 to 12 aircraft by 2020, with additional aircraft to be ordered as part of the 2016–25 GPV. Also yet to be announced as of the fourth quarter of 2015 was the expected order for an additional batch of Su-35S multi-role combat aircraft. Russia is also modernising its air-launched weapons to complement its aviation ambitions.

- Selected legacy**
  - Su-27 Flanker
  - Mig-29 Fulcrum
  - Su-24M Fencer
- Selected new build**
  - Sukhoi T-50
  - Su-35S
  - Su-34
  - Su-30SM
  - Su-30M2
- Selected upgraded**
  - Su-27SM2/SM3
  - MIG-31BM
  - Su-25SM2/SM3

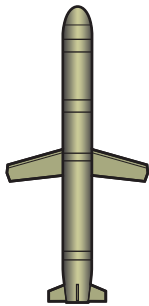


### Selected major air-launched weapons projects

- Vyyemel R-77-1 (AA-12B Alder)**  
Intended to provide an active radar-guided medium-range missile for aircraft including the Su-35S, MiG-31BM, MiG-35 and Sukhoi T-50. Believed to have entered production no later than 2015.
- R-37M (AA-13 Axhead)**  
Successor to the R-33 (AA-9 Amos) long-range air-to-air missile for the MiG-31 Foxhound. Also being offered as a possible weapon for the Su-35S. Low-rate production under way.
- Kh-38**  
Family of short-range air-to-surface weapons intended to replace the Kh-25 (AS-10 Karen) and Kh-29 (AS-14 Kedge). Trials of some variants have been concluded.
- Kh-31AM/PM**  
Upgraded and extended-range variant of the Kh-31 (AS-17 Krypton) anti-radiation and anti-ship missiles. Intended for Su-34 and Su-35S, amongst others.
- Kh-58UShK**  
Redesign of the Kh-58 (AS-11 Kilter) anti-radiation missile with a modified airframe to allow for internal carriage on the Sukhoi T-50.

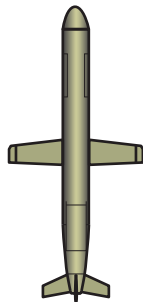
### Numbers of naval platforms capable of firing land-attack cruise missiles: 1989–2015

Following widespread use by the United States of the *Tomahawk* land-attack cruise missile (LACM), a number of other states have sought to acquire a precision strike capability from sea. Russia's recently developed 3M14 *Kalibr* LACM (a variant of its 3M54 ASHM) saw operational use for the first time in October 2015 when four ships of the Caspian Flotilla attacked targets in Syria. Although Russia plans to equip more of its ships with *Kalibr*, the US will continue to operate by far the most platforms with a LACM capability. Some states are developing their own LACMs or planning to acquire existing versions. France will deploy its *Missile de Croisière Naval* on its *Barracuda*-class submarines when they enter service in 2017 and India is testing a submarine-launched version of its *Brahmos* missile, which is currently fitted onto several surface vessels.\*



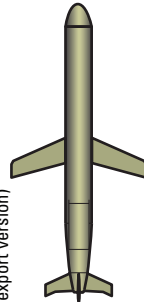
**BGMGM-109 Tomahawk**

Manufacturer: Raytheon  
 Platforms: Surface and submarine launched  
 Initial operational capability: 1984  
 Range: 1,600km (TLAM-E Blok IV)  
 Guidance: INS, TERCOM/DSMAC and GPS (TLAM-E Blok IV)  
 Propulsion: Williams International F415 cruise turbofan engine (TLAM-E Blok IV)  
 Operators: US, UK



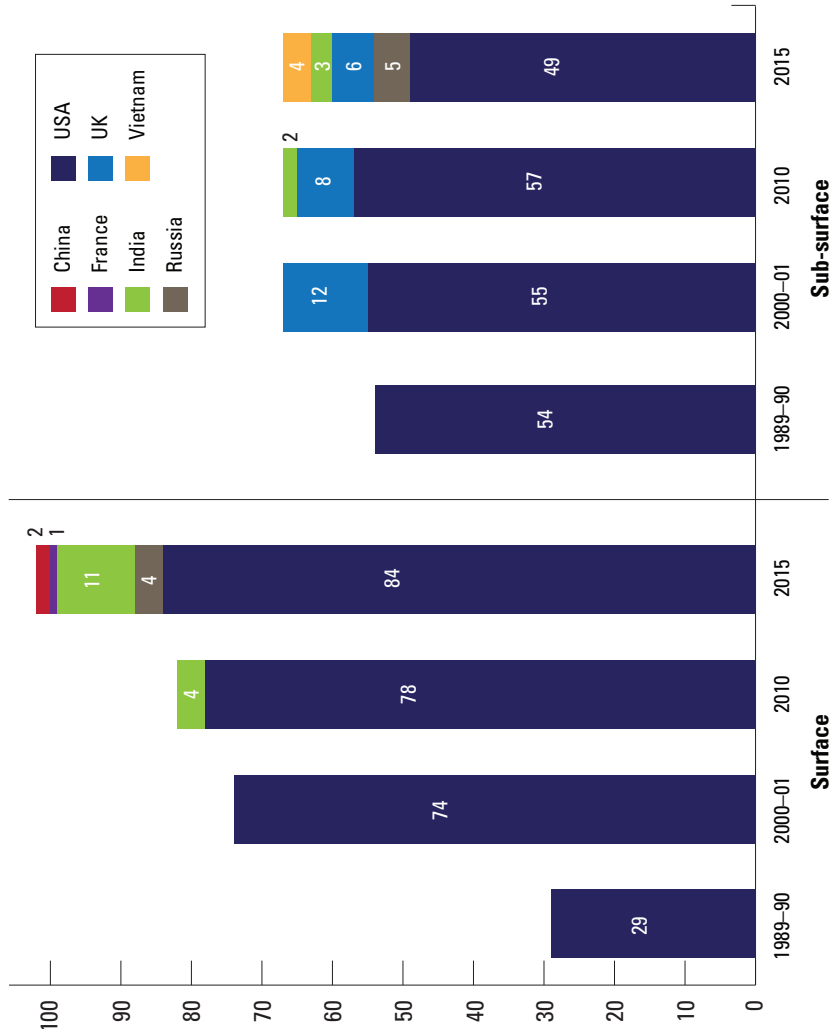
**3M-14 Kalibr (SS-N-30 / 3M14E Klub)**

Manufacturer: Novator Experimental Design Bureau  
 Platforms: Surface, submarine and air-launched variants  
 Initial operational capability: 2013/14  
 Range: 2,000km+ (3M14) / 300km (3M14E)  
 Guidance: GPS/GLONASS, INS and terminal guidance  
 Propulsion: 36MT turbofan engine  
 Operators: Russia, India and Vietnam (both operate the export version)



**Missle de Croisière Naval (MdCN)**

Manufacturer: MBDA  
 Platforms: Surface and submarine launched  
 Initial operational capability: 2015  
 Range: 1,000km  
 Guidance: INS, GPS and terrain reference  
 Propulsion: Microturbo TR 50 turbofan  
 Operator: France



\*Some other countries are reported to be operating LACMs but insufficient evidence currently exists to reach conclusive judgements. \*Numbers as at Nov 2015

## Chapter Three

# North America

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### UNITED STATES

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An increasingly complex international security situation meant there was little space for radically new strategy initiatives in 2015. Indeed, the 2012 Defense Strategic Guidance and 2014 Quadrennial Defense Review (QDR) were still relatively recent, and as the Obama administration winds down, its main defence priorities are unlikely to change. It will be content to avoid a budgetary showdown with Congress and to find some way to sustain its preferred military plan, ideally with enough funds to avoid the need for a significant change of direction.

However, the strategic picture for US defence has markedly changed from that which greeted President Barack Obama back in 2008. The fundamentals will remain the same, dictated by the rise of China and attendant economic and security concerns, as well as concerns over the potential impact on security of an increasingly globalised and urbanised world. However, his successor will face a complex security environment that is likely to be further buffeted by the actions of an energised Russia willing and able to act in pursuit of its interests in a way unanticipated two years before; an unstable Middle East; and a set of European allies increasingly worried by the effect of all the above.

#### Future challenges

Recent changes in the strategic environment will likely shape the choices that presidential candidates begin to develop for 2017 and beyond, including the rise of the Islamic State of Iraq and al-Sham (ISIS) and the difficulty in reversing its gains in Iraq and Syria (resulting in part from limitations on the means employed). The administration stresses that the principal US strategy is to help regional partners develop their capacities to take on ISIS. However, there has been only moderate progress in the training of Iraq's security forces, and while a range of programmes were implemented, including by the CIA, the 'train-and-equip' programme in Syria eventually proved a failure.

Furthermore, Russian military action in Ukraine, and then in Syria, has increased the likelihood that

Moscow will continue actions inimical to US policy concerns. The chairman of the Joint Chiefs of Staff, Marine Corps General Joseph Dunford, described Russia as a nation that could pose an existential threat to the United States during his July 2015 confirmation hearings. Further, he acknowledged that: 'This QDR did not fully anticipate growing Russian aggression, the emergence of the ISIL [ISIS] threat, and the increase in cyber intrusions.'

The crises in Ukraine, Iraq and Syria have also highlighted the divergence between the conventional wisdom in Washington that complex ground operations are a thing of the past, and the actual and likely demands on US ground forces, including humanitarian and security challenges such as Ebola. Meanwhile, continued instability in Afghanistan very likely derailed the administration's desire to remove all operational US combat forces from the country before the end of its second term: it was announced in mid-October that Washington would retain 9,800 troops in Afghanistan for most of 2016 and, at the same time, Obama announced that 'instead of going down to a normal embassy presence in Kabul by the end of 2016, we will maintain 5,500 troops at a small number of bases, including at Bagram, Jalalabad in the east, and Kandahar in the south'. The objectives remained the same, conducting counter-terrorist operations and training Afghan security forces, but the continued weakness of these forces meant a longer mission.

Meanwhile, the future of the 'rebalance' to the Asia-Pacific is a subject to be tackled by a post-Obama administration. Notwithstanding renewed focus on the Middle East, Ukraine and Africa in recent years, it may be revitalised by the Trans-Pacific Partnership. In addition, there will be questions over the US response to China's rise, including its continued assertiveness in the western Pacific and development of its blue-water maritime capabilities.

All these issues will be faced in the context of an increasingly partisan foreign-policy debate intensified with the rise of ISIS, Russian military activity and, most recently, the Iran nuclear deal. Even if there might be some reluctance towards undertaking extended foreign deployments, the new president



will be faced with a security situation so unstable that such contingencies – or at least continued overseas military engagement – probably cannot be ruled out.

### Strategy developments

While there were no radical departures in direction this year, strategy documents in 2015 reflected this increasingly multifaceted environment. The National Security Strategy (NSS), published in February 2015, highlighted threats from ‘more diffuse networks of al-Qaeda, ISIL [ISIS] and affiliated groups’, fragile states, poor governance and cyber attacks; and that the US was leading activities in many areas including ‘global efforts to impose costs to counter Russian aggression’. Moreover, it stated that the US armed forces ‘will be smaller’ but ‘must remain dominant in every domain’.

Meanwhile, the National Military Strategy (NMS), published in June, again stressed the complexity of the current security environment, saying that the ‘US military does not have the luxury of focusing on one challenge to the exclusion of others. It must provide a full range of military options for addressing both revisionist states and violent extremist organizations.’ Earlier, the Department of Defense (DoD) Cyber Strategy, released in April, noted that the Director of National Intelligence had named cyber as the primary strategic threat to the US, ‘placing it ahead of terrorism for the first time’ since 9/11. Potential adversaries have, it said, ‘invested significantly in cyber as it provides them with a viable plausible deniability to target the US homeland and damage US interests’.

While the NSS and NMS met with criticism in some quarters for portraying complex challenges but lacking firm detail on strategies required to tackle them, they did starkly illustrate the security environment in which US forces will have to operate. They also illustrated how the advantages previously enjoyed by the US are being eroded. State actors, the NMS said, ‘increasingly have the capability to counter regional freedom of movement and threaten our homeland’. Furthermore, the NMS stated that ‘emerging technologies are impacting the calculus of deterrence and conflict management by increasing uncertainty and compressing our decision space’.

The latest way in which the DoD intends to address this reduction in the US technological edge is the so-called ‘third offset’ strategy. Earlier offset strategies that provided Western forces with decisive technological advantages over their rivals were

pursued in the 1950s and 1970s. During the 1950s, US nuclear capability was expanded to offset the numerical advantages enjoyed by Soviet conventional forces. In the 1970s – after the Soviet Union built up its nuclear forces in response – the development of the ‘air–land battle’ and the related long-range precision-strike concepts again allowed the US to develop a military edge through technological superiority. The latest variant of this idea is that emerging technologies such as robotics and directed-energy weapons will produce a similar military advantage in future. The DoD is putting considerable effort into novel and potentially disruptive technologies: the DARPA *Wait, What?* technology forum in September 2015 illustrated the breadth of the DoD’s technology concerns, and also the degree to which it was looking to benefit from innovative ideas from places outside the traditional defence sector.

This strategic situation makes the funding and procurement questions that will face the armed forces and politicians more pressing. It will also require decisions on force design, not least the relative place of technology in the services amid future operating environments that are only likely to become more complex, while adversaries will be smarter and themselves more technically adept and better armed. Future battlefields will be found as much in the dense urban and populated environments of earlier conflicts as in situations offering clinical ‘stand-off’ strike options – and even if these capabilities exist, it is moot whether they will be able to decide the outcome of conflict. This makes developments that enable the armed services to remain adaptable and flexible all the more important.

### US Army

The regular army has now effectively completed the round of deactivations and reassignments announced in 2013, with the exception of one or two outstanding battalion moves. Eleven of the existing brigade combat teams (BCTs), one combat aviation brigade, one artillery brigade, two engineer brigades and the last two active ‘maneuver enhancement’ brigades were all deactivated between 2014 and 2015, and their subordinate units largely redistributed. President Obama’s FY16 presidential budget, however, outlined a further round of deactivations and reassignments, the details of which were later to be confirmed by the army. Under these proposals, two more active BCTs (3rd BCT/3rd Infantry Division and 4th BCT/25th Infantry Division) are

to be transformed into battalion-sized manoeuvre battle groups. Likewise, the 12th Combat Aviation Brigade in Germany, while not disbanding entirely, will lose most of its organic assets and become a headquarters for rotational aviation deployments from the continental US. A third BCT, the Hawaii-based 2nd/25th Infantry Division, will give up its *Stryker* armoured vehicles, instead becoming an infantry formation. These *Strykers* will then be used to replace the heavy armour in the National Guard's 81st BCT, in Washington state; this heavy armour will be used to expand pre-positioned holdings in Europe that have been re-established.

Reform and reduction of the regular army's manoeuvre and combat-support formations have proceeded relatively smoothly, but planned changes in the National Guard and Army Aviation have proven politically more challenging and advanced more slowly. As a result, while almost all of the regular-army BCTs have now moved to a three-combat-battalion structure, few of the 18 National Guard brigades have done the same, nor have the majority activated a brigade engineer battalion. Likewise, only one aviation battalion has completed its re-equipment with the AH-64 *Apache* helicopter/RQ-7 *Shadow* unmanned aerial vehicle (UAV) combination intended to replace the retiring OH-58D *Kiowa Warrior* reconnaissance helicopter.

In 2015, two of the army's key vehicle programmes experienced a combination of progress and frustration. In August, Oshkosh Defense's design was selected to fulfil the Joint Light Tactical Vehicle programme requirement, intended to deliver a replacement for the ubiquitous HMMWV. In September, however, the contract was placed on hold following a complaint lodged by Lockheed Martin. A new Army Combat Vehicle Modernization Strategy calls for mobile protected firepower support for light infantry, improvements to *Stryker* mobility and lethality, upgrades to the *Abrams* tank and *Bradley* armoured vehicles, and replacement of the obsolete M113 personnel carrier with the Armoured Multi-Purpose Vehicle. The strategy also calls for a Future Fighting Vehicle (FFV) to replace the ageing *Bradley*, but acknowledges that current funding levels will not permit a start until the next decade. Initial development contracts for the FFV – the descendant of the cancelled Future Combat System and Ground Combat Vehicle programmes – were awarded to BAE Systems and General Dynamics.

The army is also emphasising Joint Future Vertical Lift; simplification, protection and improvement of its communications network; long-range precision fires; and offensive and defensive cyber-electromagnetic capabilities.

## US Navy

In March 2015, the US Navy, US Marine Corps and US Coast Guard released a new maritime strategy, reflecting concern over the ongoing development and fielding of anti-access/area-denial capabilities, particularly by China. The strategy introduced a new functional ambition – 'all domain access' – acknowledging the increasingly contested nature of, in particular, space, cyberspace and the electromagnetic spectrum. Proposed responses to this challenge included exploiting technological advances in cyber and directed-energy weapons.

The affordability and suitability of the navy's long-term shipbuilding and equipment programmes remained a source of debate during 2015, as did the issue of returning to a sustainable readiness level. A growing concern has been how to fund the *Ohio* Replacement Program of new-generation ballistic-missile submarines without derailing the rest of the shipbuilding programme. In March, the navy submitted an adjusted force goal of 308 ships, up from the previous 306, adding one amphibious and one amphibious-support ship to the fleet. Meanwhile, delivery of the first *Zumwalt*-class multi-mission destroyer was delayed by several months to the first half of 2016, and there was speculation that the third-of-class may be cancelled.

In December 2014, the outgoing defence secretary, Chuck Hagel, announced that modified Littoral Combat Ship (LCS) designs would fulfil the navy's future small surface ship combatant requirement, following growing misgivings about the robustness of the original LCS design and programme. Hulls 33–52 would be completed to the enhanced design, with the possibility of incorporating or retrofitting some of the improvements to earlier ships; these will be classed as frigates. The last of the *Oliver Hazard Perry*-class frigates, which the LCS replaces, were decommissioned in September.

There were also continuing concerns over the new *Gerald R. Ford*-class aircraft-carrier programme, including cost increases and delays to the in-service date due to additional testing. The navy confirmed that it was conducting an alternative carrier study, but it is uncertain whether this will see any significant

change – in June, the navy awarded a contract for the second *Ford*-class carrier, USS *John F. Kennedy*, which will cost over US\$12 billion. In the second half of 2015, major carrier hull swaps helped facilitate the return to the congressionally mandated 11-carrier force. Meanwhile, in August, the USS *Dwight D. Eisenhower* emerged from a longer-than-planned deep maintenance period that had exacerbated carrier-deployment pressures.

USNS *Lewis B. Puller*, the first Afloat Forward Staging Base (AFSB) amphibious platform (subsequently re-designated Expeditionary Mobile Base) was delivered in June. The plan is that these AFSB platforms will help naval power projection and presence in lower-threat environments. In naval-aviation terms, 2015 was notable for the F-35B version of the Joint Strike Fighter finally reaching the initial operational capability (IOC) milestone – some five years later than originally planned – with one Marine Corps squadron now ‘operational’ with the type and a second Marine Corps squadron due to enter service in 2016. The first of the navy’s F-35C units are due to reach IOC in 2018. The navy also retired the last of its EA-6B *Prowler* aircraft in July 2015, with the last squadron operating the type converting to the EA-18G *Growler* in the electronic-warfare role.

## US Air Force

The US Air Force (USAF) in 2015 faced an uncomfortable period of attempting to support the acquisition of key future systems while sustaining an ageing fleet, against the backdrop of continued budget uncertainty. A more demanding security environment, worsening relations with Russia and force-modernisation programmes in both Moscow and Beijing also posed challenges for the USAF.

The USAF faced the need to replace the capabilities provided by a number of ageing aircraft that are increasingly expensive to maintain, including the E-8A/B Joint Surveillance Target Attack Radar System, the E-3 Airborne Warning and Control System and the EC-130 electronic-warfare aircraft. The air force also plans to replace its T-38 *Talon* jet trainer, beginning in 2024, with up to 350 advanced aircraft to be acquired under the USAF’s T-X programme. Meanwhile, there was renewed focus on the service’s air-superiority task amid concern over the limited number of F-22 *Raptor* squadrons available and the ageing F-15C *Eagle* combat-aircraft fleet. In the space arena, Congress required a successor to the Russian-sourced RD-180 engine used on the *Atlas-V* space-launch vehicle to be in place by 2019, a short timescale that could prove difficult to meet.

### Long Range Strike Bomber: decision

On 27 October 2015, Northrop Grumman was selected to meet the United States Air Force (USAF) Long Range Strike Bomber (LRS-B) requirement. This was the key decision point in a programme intended to provide an initial operational capability by 2025, when the first of up to 100 aircraft will enter the inventory. The LRS-B will replace the Boeing B-52 and Rockwell B-1 in the conventional- and nuclear-strike roles.

The LRS-B pitted the big three US defence aerospace prime contractors against one another: Northrop Grumman was chosen in preference to a Boeing–Lockheed Martin team. While the Department of Defense said considerations over the defence-industrial base did not influence the source selection process, the decision to opt for Northrop Grumman supported sustaining a third prime contractor for military aircraft. With the F-35 Joint Strike Fighter, Lockheed Martin has a strong order book into the mid-2030s, if the programme of record is sustained. Meanwhile, although Boeing’s production of the F-15 and F/A-18E/F combat aircraft will likely come to an end in the next few years, the KC-46A tanker programme provides the manufacturer with military work.

The programme, worth an estimated US\$80 billion, is intended to form a core element of the USAF’s ability to operate in highly contested airspace against a peer or near-peer competitor. However, though it remains almost completely classified, the LRS-B requirement is reported to be more conservative than the previous Next-Generation Bomber (NGB) project. The NGB was shelved by then-defence secretary Robert Gates in 2009 amid concern as to whether it could be delivered within the timescale required – a notional in-service date of 2018 was mooted – and at a unit price that was, even for the Pentagon, affordable enough to allow for the purchase of the number required.

Considerable risk-reduction work had already been undertaken by the rival bids prior to the LRS-B decision. This was intended partly to provide confidence regarding the maturity of the design and also that the aim of fielding the selected design in the mid-2020s was achievable. The assumption is that both bids were based on tailless flying-wing designs, perhaps with a narrower-chord outer wing than the B-2 Stealth Bomber, to provide increased endurance.

Core USAF equipment projects continued to include the next-generation Long Range Strike Bomber, the KC-46A *Pegasus* tanker and the F-35 Joint Strike Fighter. After a prolonged delay, the anticipated IOC for the air force's F-35A variant was announced as August 2016. The KC-46A tanker was also hit by delays, with the programme running nearly 12 months behind schedule. The first test flight was conducted on 25 September 2015, and delivery of 18 aircraft by August 2017 is planned.

The air force also spent 2015 attempting to address a number of uninhabited-system-related concerns. A shortfall in the target number of UAV operators – reportedly 180 were trained during the year from a target of 300 – meant the USAF had to reconsider its overall operational need. As a consequence, the planned number of operational UAV 'orbits' (a persistent mission package requiring several UAVs) that the air force was meant to be able to field was reduced from 65 to 60, utilising five MQ-1 *Predator* and 55 MQ-9 *Reaper* orbits. In response to greater potential challenges in the nature of the unmanned-system operating environment, the service launched the Enhanced Utility of Unmanned Air Vehicles in Contested and Denied Environments study. Led by the Air Force Scientific Advisory Board, it was due to be concluded in December 2015, though little, if any, of this work was anticipated to be declassified.

The study reflected the increasing appreciation that USAF UAV operations have been carried out almost exclusively in permissive air environments, and that this situation cannot be assumed for the future. The ability to continue to operate in a GPS-degraded or -denied environment was also considered. The terms of reference noted: 'Future operations may require employing UAVs in contested environments or anti-access/area-denial environments having highly capable integrated air defenses, where survivability of typical UAVs greatly limits their utility.' Focused in the near term on the RQ-4 *Global Hawk* and the MQ-9 *Reaper*, the study looked at a number of possible ways of providing upgrades to these systems to enable deployment in a contested environment. This could include introducing defensive aids such as electronic countermeasures.

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## DEFENCE ECONOMICS

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### Budgetary uncertainty returns

In 2015, major political differences again re-surfaced between Democrats and Republicans over the FY2016

National Defense Authorization Act, after the nearly two-year hiatus that followed the Bipartisan Budget Act of 2013, which amended upwards the statutory budget caps for FY14 and FY15 introduced by the Budget Control Act of 2011 (BCA 2011, see *The Military Balance 2015*, p. 33). The president's FY16 budget for the DoD, released in February 2015, requested US\$534.3bn in base-budget allocations and a further US\$50.9bn in Overseas Contingency Operations spending (or OCO, which supports war-related outlays). This made for a total FY16 departmental budget request of US\$585.2bn, some 4% higher than the FY15 enacted level of US\$560.3bn.

After months of scrutiny in congressional committees, both the Republican-controlled House of Representatives and Senate eventually passed – in late September and early October respectively – a bill approving some US\$612bn in defence allocations instead (including US\$89.2bn for OCO), legislation which the White House subsequently opted to veto. The principal Democrat objection – in both houses and in the White House – centred on US\$38bn in additional funding the Republicans had channelled via the OCO account, above the US\$50.9bn contained in the president's original budget request. Whereas this 'back-door' mechanism had been used in previous years to get around the base-budget spending caps mandated by the BCA 2011, on this occasion Democrats were unwilling to support the practice, arguing that it disproportionately favoured the defence economy at the expense of non-defence areas such as healthcare, education, homeland security and the veterans administration. Instead, they sought to negotiate an overall, government-wide budget deal that ended BCA caps and which increased defence and non-defence fiscal expenditures equally.

As no resolution to the impasse had been found immediately before the start of FY2016 on 1 October 2015, Congress passed a stop-gap 'Continuing Resolution' in late September that permitted FY2015 government funding levels to continue until 11 December 2015. This repeated the practice adopted in 2014, and avoided a repeat of the politically damaging 2013 federal-government shutdown, as well as allowing more time for broader budgetary negotiations to be undertaken. Overall, this meant that, until December 2015 at least, the DoD base budget would remain at FY15 levels (US\$496.1bn), while OCO allocations – which are exempt from BCA spending caps – would rise to US\$74.7bn, some US\$23.8bn higher than the president's budget request.



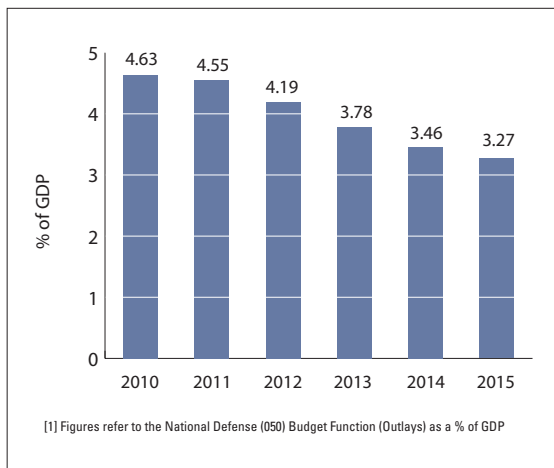


Figure 1 **US Defence Expenditure** as % of GDP<sup>1</sup>

Underlying this broader budgetary politics is a debate over the proper size and cost of the US armed forces. Although total defence spending still approaches US\$600bn a year, or some US\$100bn more than the inflation-adjusted Cold War average, defence spending as a proportion of GDP is still on a downward trajectory, possibly falling below 3% of GDP by FY2018. The size of USAF aircraft inventories and the navy fleet is being criticised, while improvement in the federal fiscal outlook is leading some to argue that the US need not excessively constrain its defence strategy or budget based on dire deficit conditions. Moreover, the influential and bipartisan 2014 independent report on the QDR suggested reversing all the cuts of the BCA 2011 and returning to armed forces at least as large as during the Clinton administration. Such a move would imply that the annual Pentagon budget should rise by US\$50–100bn relative to current levels — possibly in the range of US\$650bn or more on average (assuming a gradual, ongoing reduction in typical overseas contingency costs, which are now down to around US\$50bn annually).

### Service budgets and spending priorities

A second line of debate around the Pentagon budget will continue to pit ground forces against high-technology modernisation, reflected most recently in ideas such as ‘Air–Sea Battle’ and the ‘third offset’ concept.

This debate over internal Pentagon budgetary priorities is heating up within the armed services. In their farewell comments and welcoming words, outgoing Army Chief of Staff General Ray Odierno

and incoming chief General Mark Milley challenged the view that army budgets could be the main bill-payers for future expansions of other military capabilities and new technologies. Collectively, they suggested that army cuts had already gone too far, with the service soon headed for an end-strength of 450,000 active-duty soldiers, or about 10% less than Clinton-administration levels and 20% less than late Bush-/early Obama-administration levels — with the possibility of cuts down to 420,000, if not 380,000 (two numbers that have been floated in recent years in discussions over how to handle sequestration-level budgets, should that become necessary). Odierno in fact argued in August 2015 that 490,000 was the right number — higher than official policy envisions. The army’s overall budget is the only service budget that has decreased, and a debate has emerged over whether reductions in army manpower and modernisation to fund high-technology air and naval equipment (such as F-35s and ships) have gone too far.

Meanwhile, there are other practical concerns about areas where the existing budget needs to rise. The navy is struggling to reverse decades of cuts to the size of its fleet and generate the forces it thinks are needed for the Asia-Pacific ‘rebalance’; existing air-force plans require the purchase of some 1,700 F-35 combat aircraft, as well as development of the LRS-B and refurbishment of the nuclear ICBM force. New burdens and growing vulnerabilities in areas such as cyber and space assets also continue to demand attention.

### Reform measures

Some of the challenges of fitting all or most of the above defence needs within a reasonably sized defence budget could be mitigated by reforms to existing Pentagon practices. But such measures require congressional approval — and Congress is proving increasingly uncooperative with administration proposals. Requests for another round of base closures that, once completed, might save US\$2–5bn a year have been denied. Modest changes to military healthcare packages that would have military families, or at least retirees, pay a modestly higher share of their premiums (closer to the average in the civilian economy than is now the case) have been rejected as well.

Meanwhile, although congressional attention to defence-acquisition reform has been intense and serious in 2015, few see such measures, even if successfully completed, as game changers. They are important for ensuring high-quality equipment,

Table 3 US National Defense Budget Function and Other Selected Budgets 1996, 2007–16

FY	National Defense Budget Function		Department of Defense		Atomic Energy Defense Activities	Department of Homeland Security	Department of Veterans Affairs	Total Federal Government Outlays	Total Federal Budget Surplus/Deficit
	BA	Outlay	BA	Outlay	BA	BA	BA		
1996	266.2	265.7	254.5	253.2	11.7	n.a.	38.7	1,560	-107
2007	625.8	551.3	603.0	528.6	17.2	39.7	79.5	2,729	-161
2008	696.2	616.1	674.7	594.7	16.6	50.6	88.4	2,983	-459
2009	697.6	661.0	667.6	636.8	23.0	46.0	96.9	3,518	-1,413
2010	721.2	693.5	695.6	666.7	18.2	45.4	124.3	3,457	-1,294
2011	717.0	705.6	691.5	678.1	18.5	41.6	122.8	3,603	-1,300
2012	681.4	677.9	655.4	650.9	18.3	45.9	124.0	3,537	-1,087
2013	610.2	633.4	585.2	607.8	17.5	61.9	135.9	3,455	-680
2014	622.3	603.5	595.7	577.9	18.4	44.1	165.7	3,506	-485
2015 est	596.8	597.5	569.3	567.7	19.2	44.0	160.2	3,759	-583
2016 est	620.9	615.5	592.3	586.5	20.5	48.0	165.4	3,999	-474

**Notes**

FY = Fiscal Year (01 October–30 September)

<sup>1</sup> The National Defense Budget Function subsumes funding for the DoD, the Department of Energy Atomic Energy Defense Activities and some smaller support agencies (including Federal Emergency Management and Selective Service System). It does not include funding for

International Security Assistance (under International Affairs), the Veterans Administration, the US Coast Guard (Department of Homeland Security), nor for the National Aeronautics and Space Administration (NASA). Funding for civil projects administered by the DoD is excluded from the figures cited here.

<sup>2</sup> Early in each calendar year, the US govern-

ment presents its defence budget to Congress for the next fiscal year, which begins on 01 October. The government also presents its Future Years Defense Program (FYDP), which covers the next fiscal year plus the following five. Until approved by Congress, the budget is called the Budget Request; after approval, it becomes the Budget Authority (BA).

acquired on reasonable time horizons and with fewer cost overruns. But their effects are likely to be incremental and specific to certain sectors of defence procurement. Other reform perennials include strategic sourcing, by which the Pentagon would pool purchases of commonly needed supplies to save money, and performance-based logistics for equipment maintenance, by which private contractors would be paid for the number of hours they keep key equipment operational rather than for the number of repairs they carry out. These latter ideas are already being implemented, but progress is, perhaps inevitably, slow.

Despite the overall similarities in the force posture and modernisation agendas of the Bush and Obama administrations, the continued broad influence of a two-war construct for sizing combat forces, the general consensus in favour of the Asia-Pacific rebalance and the need to firm up US commitment to NATO and Persian Gulf allies, strong differences remain over the broader fiscal environment that supports these objectives. And although debates over future weapons, forces and budgets take place within a fairly narrow band, equivalent to perhaps 10% of existing US defence spending, that amounts to substantial sums of real money, given that the base from which it is calculated today totals nearly US\$600bn.

## CANADA

In the aftermath of a long deployment to Afghanistan, the task of reorienting Canada's defence posture and reconciling plans and resources remains a work in progress, and there will likely be changes after the Liberal victory in the October election. Plans to recapitalise maritime capability are proceeding slowly, but questions remain over future combat air platforms. Meanwhile, the armed forces have taken on new tasks and overseas commitments.

Years of procurement difficulties and funding issues continue to produce intense political debate. In April 2015, the Conservative government announced plans to speed up, from 2017, the rate at which the defence budget would grow, from 2% to 3% annually, supposedly injecting a cumulative C\$11.8bn (US\$11bn) by 2026. There was also a provision of C\$360 million (US\$285m) for 2015/16 to cover military operations against ISIS. But critics argued that all this did not go far or fast enough to achieve the NATO minimum defence-spending target of 2% of GDP, that it would take years to make up for the cuts imposed as a result of the government's deficit-reduction programme, and that it still left defence-procurement aspirations underfunded.

Nonetheless, progress was made on the long-term National Shipbuilding Procurement Strategy.



A contract was signed in January 2015 for the long-discussed *Harry DeWolf*-class of Arctic/offshore-patrol ships for the navy, but for six ships rather than up to eight as originally planned. Construction of the first ship was due to begin in September. The vessels will significantly boost Canada's ability to operate, and particularly sustain, operations in the High North. But the first ship will not be ready until 2018 – five years later than originally envisaged. The opening of a planned naval facility at Nanisivik, at the entrance to the Northwest Passage, has also been delayed until 2018, and the facility itself downgraded.

The most critical element of the shipbuilding procurement strategy is the Canadian Surface Combatant programme, intended to build up to 15 ships to replace the core of the navy's surface fleet – *Iroquois*-class destroyers and *Halifax*-class frigates. It was announced in May 2015 that a shortlist would be drawn up of bidders to design the vessels and integrate their combat systems. Designs based on the Franco-Italian FREMM frigate and the British Type-26 were expected to be among the contenders.

In the meantime, though, the navy is facing increasing challenges to its operational effectiveness. In particular, the enforced withdrawal of both the navy's auxiliary replenishment tankers, HMCS *Protecteur* and HMCS *Preserver*, due essentially to old age, left the government seeking an interim supply ship based on a commercial design to help fill the gap until the first *Queenston*-class Joint Support Ship is commissioned in 2021. The navy also negotiated an agreement with the Chilean Navy for 40 days of access to the replenishment ship *Almirante Montt*. A similar deal was being discussed with the Spanish Navy. The destroyers HMCS *Iroquois* and HMCS *Algonquin* were paid off after more than 40 years of service each, leaving just HMCS *Athabaskan* in service from an original class of four. Meanwhile, the navy is also reported to be examining a service-life-extension programme for the four boats comprising its *Victoria*-class submarine force, currently projected to reach the end of their service lives from the mid-2020s.

Overseas deployments also continued. Under *Operation Impact*, Canada continued to maintain a small but significant contribution to the US-led coalition

campaign against ISIS. In April 2015, it became the first Western ally of the US to extend airstrikes from Iraq into Syria, following a vote in parliament. The air mission consisted of six CF-18 *Hornet* combat aircraft, two CP-140 *Aurora* surveillance aircraft and one CC-150 *Polaris* air-to-air refuelling aircraft. In early June 2015, it reached the milestone of 1,000 sorties and more than 100 airstrikes. Canada has also deployed up to 69 special-forces personnel to northern Iraq to support training of Kurdish Peshmerga.

Meanwhile, in September 2015, 200 soldiers from 1st Bn The Royal Canadian Regiment arrived in western Ukraine to begin *Operation Unifier*. Designed to help train Ukrainian army units, this commitment is planned to run until the end of March 2017. Canada has also been maintaining personnel in Central and Eastern Europe as part of its contribution to NATO's reassurance response for allies in the region, including from July 2015 some 220 army personnel deployed in Poland. Four of the CF-18 *Hornets* returned in April 2015 from a deployment to Lithuania as part of the enhanced NATO Baltic Air Policing mission. These remain Canada's principal, though ageing, combat air assets. A plan to extend their service life to 2025 was reported to have been costed at C\$400m (US\$317m), as uncertainty still surrounds Canada's intentions with regard to purchasing the F-35 Joint Strike Fighter. This will not have been eased by the defeat of incumbent prime minister Stephen Harper in the October election and his replacement by Justin Trudeau, leader of the Liberal Party. During the campaign, the Liberals indicated they wished to halt the plan to buy F-35s and re-open the fighter bid, saying that 'the primary mission of our fighter aircraft should remain the defence of North America, not stealth first-strike capability' and that the procurement budget for the *Hornet* replacement would be reduced. The election platform also said that current planned increases to defence spending would continue, and that 'by purchasing more affordable alternatives to the F-35s, we will be able to invest in strengthening our Navy, while also meeting the commitments that were made as part of the National Shipbuilding and Procurement Strategy'. However, at time of writing precise detail remained unclear.

## Canada CAN

Canadian Dollar \$		2014	2015	2016
GDP	CS\$	1.97tr	1.98tr	
	US\$	1.79tr	1.57tr	
<i>per capita</i>	US\$	50,304	43,935	
Growth	%	2.4	1.0	
Inflation	%	1.9	1.0	
Def bdgt	CS\$	17.4bn	17.7bn	
	US\$	15.8bn	14bn	
US\$1= CS\$		1.11	1.26	

Population 35,099,836

Age	0 – 14	15 – 19	20 – 24	25 – 29	30 – 64	65 plus
Male	7.9%	3.0%	3.5%	3.4%	24.1%	7.7%
Female	7.5%	2.9%	3.3%	3.2%	23.8%	9.6%

## Capabilities

Following the victory of the Liberal Party in the October election, the new government had by November yet to make a public pronouncement on defence policy. It has been based on three pillars: national defence, supporting the defence of North America and contributing to international operations within an alliance or partnership framework. Retaining the lessons from recent deployments will preoccupy defence planners in the near term. The new government confirmed its intention to withdraw Canadian combat aircraft from the coalition effort against ISIS in Iraq and Syria, though training personnel would stay. In 2008, the previous administration set out a 20-year blueprint, the Canada First Defence Strategy, but there have been persistent criticisms that the resources available have failed to match the programme's ambitions. Spending cutbacks in recent years have particularly affected procurement schedules of major programmes, sustainment, readiness and maintenance of forces, with the navy especially affected by the gap in tanker support. National capabilities in the future will be strongly driven by choices on the design and numbers of the future Canadian surface combatant, the Arctic offshore-patrol ships and the eventual replacements for the air force's fleet of CF-18 *Hornet* combat aircraft. The new government had, in its election material, raised the likelihood that Canada would finally abandon its participation in the F-35 Joint Strike Fighter programme, and instead seek alternative options. (See pp. 33–34.)

**ACTIVE 66,000** (Army 34,800 Navy 11,300 Air Force 19,900) Paramilitary 4,500

**RESERVE 30,850** (Army 23,450, Navy 5,450, Air 1,950)

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

SATELLITES • SPACE SURVEILLANCE 1 *Sapphire*

## Army 34,800

### FORCES BY ROLE

#### COMMAND

1 (1st div) Task Force HQ

#### MANOEUVRE

##### Mechanised

1 (1st) mech bde gp (1 armd regt, 2 mech inf bn, 1 lt inf bn, 1 arty regt, 1 cbt engr regt)  
2 (2nd & 5th) mech bde gp (1 armd recce regt, 2 mech inf bn, 1 lt inf bn, 1 arty regt, 1 cbt engr regt)

#### COMBAT SUPPORT

1 AD regt  
1 engr/cbt spt regt  
3 int coy  
3 MP pl

#### COMBAT SERVICE SUPPORT

3 log bn  
3 med bn

#### EQUIPMENT BY TYPE

MBT 120: 40 *Leopard 2A6M*; 80 *Leopard 2A4*; (61 *Leopard 1C2* in store)

RECCE 194 *LAV-25 Coyote*

APC 1,212

APC (T) 332: 64 *Bv-206*; 235 *M113*; 33 *M577*

APC (W) 810: 635 *LAV-III Kodiak* (incl 33 *RWS*); 175 *LAV Bison* (incl 10 *EW*, 32 *amb*, 32 *repair*, 64 *recovery*)

PPV 70: 60 *RG-31 Nyala*; 5 *Cougar*; 5 *Buffalo*

ARTY 287

TOWED 163 **105mm** 126: 98 *C3 (M101)*; 28 *LG1 MkII*;  
**155mm** 37 *M777*

MOR **81mm** 100

SP **81mm** 24 *LAV Bison*

AT

MSL

SP 33 *LAV-TOW*

MANPATS *Eryx* (to be withdrawn 2016); *TOW-2A/ITAS*

RCL **84mm** 1,075 *M2/M3 Carl Gustav*

AD • SAM • MANPAD *Starburst*

ARV 2 *BPz-3 Büffel*

UAV • ISR • Light *Skylark*

## Reserve Organisations 23,450

### Canadian Rangers 5,000 Reservists

Provide a limited military presence in Canada's northern, coastal and isolated areas. Sovereignty, public-safety and surveillance roles.

#### FORCES BY ROLE

##### MANOEUVRE

##### Other

5 (patrol) ranger gp (179 patrols)

### Army Reserves 18,450 Reservists

Most units have only coy-sized establishments.

#### FORCES BY ROLE

##### COMMAND

10 bde gp HQ

##### MANOEUVRE

##### Reconnaissance

18 armd recce regt

**Light**

51 inf regt

**COMBAT SUPPORT**

16 fd arty regt

3 indep fd arty bty

10 cbt engr regt

1 EW sqn

5 int coy

10 sigs regt

**COMBAT SERVICE SUPPORT**

10 log bn

14 med coy

4 med det

4 MP coy

**Royal Canadian Navy 11,300****EQUIPMENT BY TYPE****SUBMARINES • SSK 4:**4 *Victoria* (ex-UK *Upholder*) with 6 single 533mm TT with Mk48 *Sea Arrow* HWT (3 currently operational)**PRINCIPAL SURFACE COMBATANTS 13****DESTROYERS • DDHM** 1 mod *Iroquois* with 1 Mk41 29-cell VLS with SM-2MR SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 *Phalanx* CIWS, 1 76mm gun (capacity 2 SH-3 (CH-124) *Sea King* ASW hel)**FRIGATES • FFGHM** 12 *Halifax* with 2 quad Inchr with RGM-84 Block II *Harpoon* AShM, 2 octuple Mk48 VLS with RIM-7P *Sea Sparrow* SAM/RIM-162 ESSM SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 *Phalanx* CIWS, 1 57mm gun (capacity 1 SH-3 (CH-124) *Sea King* ASW hel) (rolling modernisation programme until 2017)**MINE WARFARE • MINE COUNTERMEASURES •**MCO 12 *Kingston***LOGISTICS AND SUPPORT 24**AORH (1 *Protecteur* awaiting decommissioning)AGOR 1 *Quest*AX 9: AXL 8 *Orca*; AXS 1 *Oriole*YDT 6 (2 *Granby* MCM spt; 4 *Sechelt* diving tender/spt)

YTB 6

YTL 2

**Reserves 5,430 reservists****FORCES BY ROLE****MANOEUVRE****Other**

24 navy div (tasked with crewing 10 of the 12 MCOs, harbour defence &amp; naval control of shipping)

**Royal Canadian Air Force (RCAF) 19,900 (plus 2,350 Primary Reservists integrated within total Air Force structure)****FORCES BY ROLE****FIGHTER/GROUND ATTACK**4 sqn with F/A-18A/B *Hornet* (CF-18AM/BM)**ANTI-SUBMARINE WARFARE**2 sqn with SH-3 *Sea King* (CH-124)**MARITIME PATROL**2 sqn with P-3 *Orion* (CP-140 *Aurora*)**SEARCH & RESCUE/TRANSPORT**4 sqn with AW101 *Merlin* (CH-149 *Cormorant*); C-130E/H/H-30/J-30 (CC-130) *Hercules*1 sqn with DHC-5 (CC-115) *Buffalo***TANKER/TRANSPORT**

1 sqn with A310/A310 MRTT (CC-150/CC-150T)

1 sqn with KC-130H

**TRANSPORT**1 sqn with C-17A (CC-177) *Globemaster*

1 sqn with CL-600 (CC-144B)

1 (utl) sqn with DHC-6 (CC-138) *Twin Otter***TRAINING**1 sqn with F/A-18A/B *Hornet* (CF-18AM/BM)1 sqn with P-3 *Orion* (CP-140 *Aurora*)1 sqn with SH-3 *Sea King* (CH-124)**TRANSPORT HELICOPTER**5 sqn with Bell 412 (CH-146 *Griffon*)3 (cbt spt) sqn with Bell 412 (CH-146 *Griffon*)1 (Spec Ops) sqn with Bell 412 (CH-146 *Griffon* –

OPCON Canadian Special Operations Command)

1 sqn with CH-47F (CH-147F) *Chinook***EQUIPMENT BY TYPE****AIRCRAFT** 95 combat capableFGA 77: 59 F/A-18A (CF-18AM) *Hornet*; 18 F/A-18B (CF-18BM) *Hornet*ASW 18 P-3 *Orion* (CP-140M *Aurora*)

TKR/TPT 7: 2 A310 MRTT (CC-150T); 5 KC-130H

TPT 59: **Heavy** 5 C-17A (CC-177) *Globemaster*; **Medium** 35: 10 C-130E (CC-130) *Hercules*; 6 C-130H (CC-130) *Hercules*; 2 C-130H-30 (CC-130) *Hercules*; 17 C-130J-30 (CC-130) *Hercules*; **Light** 10: 6 DHC-5 (CC-115) *Buffalo*; 4 DHC-6 (CC-138) *Twin Otter*; **PAX** 9: 3 A310 (CC-150 *Polaris*); 6 CL-600 (CC-144B/C)

TRG 4 DHC-8 (CT-142)

**HELICOPTERS**ASW 32: 26 SH-3 (CH-124) *Sea King*; 6 CH-148 *Cyclone* (FOC 2018)MRH 68 Bell 412 (CH-146 *Griffon*)TPT 29: **Heavy** 15 CH-47F (CH-147F) *Chinook*; **Medium** 14 AW101 *Merlin* (CH-149 *Cormorant*)**RADARS 53**

AD RADAR • NORTH WARNING SYSTEM 47: 11 Long Range; 36 Short Range

STRATEGIC 6: 4 Coastal; 2 Transportable

**MSL**ASM AGM-65 *Maverick*AAM • IR AIM-9L *Sidewinder* SARH AIM-7M *Sparrow*

ARH AIM-120C AMRAAM

**BOMBS**Laser-Guided: GBU-10/GBU-12/GBU-16 *Paveway* II;GBU-24 *Paveway* III**NATO Flight Training Canada****EQUIPMENT BY TYPE****AIRCRAFT**TRG 45: 26 T-6A *Texan* II (CT-156 *Harvard* II); 19 *Hawk* 115 (CT-155) (advanced wpns/tactics trg)**Contracted Flying Services – Southport****EQUIPMENT BY TYPE****AIRCRAFT**TPT • **Light** 7 Beech C90B *King Air*

TRG 11 G-120A

**HELICOPTERS**

MRH 9 Bell 412 (CH-146)  
TPT • Light 7 Bell 206 *Jet Ranger* (CH-139)

## Canadian Special Operations Forces Command 1,500

**FORCES BY ROLE****SPECIAL FORCES**

1 SF regt (Canadian Special Operations Regiment)  
1 SF unit (JTF 2)

**MANOEUVRE****Aviation**

1 sqn, with Bell 412 (CH-146 *Griffon* – from the RCAF)

**COMBAT SERVICE SUPPORT**

1 CBRN unit (Canadian Joint Incidence Response Unit – CJIRU)

**EQUIPMENT BY TYPE**

RECCE 4 LAV *Bison* NBC  
HEL • MRH 10 Bell 412 (CH-146 *Griffon*)

## Canadian Forces Joint Operational Support Group

**FORCES BY ROLE****COMBAT SUPPORT**

1 engr spt coy  
1 (joint) sigs regt

**COMBAT SERVICE SUPPORT**

1 (spt) log unit  
1 (movement) log unit  
1 med bn  
1 (close protection) MP coy

## Paramilitary 4,500

**Canadian Coast Guard 4,500**

Incl Department of Fisheries and Oceans; all platforms are designated as non-combatant.

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 68**

PSOH 1 *Leonard J Cowley*  
PSO 1 *Sir Wilfred Grenfell* (with hel landing platform)  
PCO 13: 2 *Cape Roger*; 1 *Gordon Reid*; 9 *Hero*; 1 *Tanu*  
PCC 3: 1 *Arrow Post*; 1 *Harp*; 1 *Louisbourg*  
PB 50: 3 *Post*; 1 *Quebecois*; 1 *Vakta*; 3 Type-100; 10 Type-300A; 31 Type-300B; 1 *Simmonds* (on loan from RCMP)

**AMPHIBIOUS • LANDING CRAFT • LCAC 4 Type-400****LOGISTICS AND SUPPORT 101**

ABU 6  
AG 6  
AGB 15  
AGOR 65 (coastal and offshore fishery vessels)  
AGOS 9

**HELICOPTERS • TPT 23: Medium 1 S-61; Light 22: 3 Bell 206L *Long Ranger*; 4 Bell 212; 1 Bell 429; 14 Bo-105**

**Royal Canadian Mounted Police**

In addition to the below, the RCMP also operates more than 370 small boats under 10 tonnes.

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS • PB 5: 2 *Inkster*; 3 *Nadon***

**Cyber**

Canada published its Cyber Security Strategy in October 2010 and in 2013 published an Action Plan regarding implementation of the strategy. Public Safety Canada is the government lead on cyber security. The Communications Security Establishment Canada, the Canadian Security Intelligence Service and the Royal Canadian Mounted Police are tasked with investigating incidents relevant to their mandates. Meanwhile, the armed forces are 'working to develop a policy and legal framework for military aspects of cyber security'. The Canadian Forces Network Operation Centre is the 'national operational cyber defence unit' permanently assigned to support Canadian Forces operations, but future force development issues relating to military cyber come under the office of the Director General Cyber, of Brigadier-General rank, which also incorporates the Canadian Forces Cyber Task Force, a body that among other tasks examines future cyber capabilities. Cyber-related exercises include *Determined Dragon*, which in 2015 included 'integrating cyber and space domains into operations'.

**DEPLOYMENT****ALBANIA**

OSCE • Albania 3

**BOSNIA-HERZEGOVINA**

OSCE • Bosnia and Herzegovina 1

**CYPRUS**

UN • UNFICYP (*Operation Snowgoose*) 1

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO (*Operation Crocodile*) 7

**EGYPT**

MFO (*Operation Calumet*) 70

**GERMANY**

NATO (ACO) 287

**HAITI**

UN • MINUSTAH (*Operation Hamlet*) 5

**IRAQ**

*Operation Impact* 70 (trg team)

**KUWAIT**

*Operation Impact* 530; 6 F/A-18A *Hornet* (CF-18AM); 2 P-3 *Orion* (CP-140M); 1 A310 MRTT (C-150T)

**MIDDLE EAST**

UN • UNTSO (*Operation Jade*) 4 obs

**NORTH SEA**

NATO • SNMG 1: 1 FFGHM

**SERBIA**

NATO • KFOR • *Joint Enterprise (Operation Kobold)* 5  
OSCE • Kosovo 4

**SOUTH SUDAN**UN • UNMISS (*Operation Soprano*) 5; 5 obs**UKRAINE***Operation Unifier* 200

OSCE • Ukraine 18

**UNITED STATES**US CENTCOM (*Operation Foundation*) 17

US NORTHCOM/NORAD/NATO (ACT) 300

**FOREIGN FORCES**United Kingdom 280; 2 trg unit; 1 hel flt with SA341 *Gazelle*

United States 130

**United States US**

United States Dollar \$		2014	2015	2016
GDP	US\$	17.3tr	18tr	
<i>per capita</i>	US\$	54,370	55,904	
Growth	%	2.4	2.6	
Inflation	%	1.6	0.1	
Def bdtg [a]	US\$	603bn	598bn	616bn
Def exp [b]	US\$	654bn		

[a] National Defense Budget Function (50) Outlays. Includes DoD funding, as well as funds for nuclear-weapons-related activities undertaken by the Department of Energy.

[b] NATO definition.

Population 318,892,103

Age	0 – 14	15 – 19	20 – 24	25 – 29	30 – 64	65 plus
Male	9.9%	3.4%	3.7%	3.5%	22.5%	6.4%
Female	9.5%	3.2%	3.5%	3.4%	23.1%	8.1%

**Capabilities**

The US remains the world's most capable military power. Its forces are well trained and uniquely designed for power projection and intervention on a global scale across the full spectrum of operations. It is actively developing its defensive and offensive cyber capabilities and retains a nuclear triad with a substantial arsenal of warheads. The Pentagon continues to develop the plans for its 'rebalance' to the Asia-Pacific. The armed forces are preoccupied with retaining and institutionalising capabilities and skills learnt in the Iraq and Afghan theatres whilst also dealing with budget cuts, force downsizing and the modernisation of much-used equipment. Added to this are concerns about continuing global instability in the form of transnational, hybrid and regional insurgencies; the rise of China; increasing Russian assertiveness; and the success of ISIS in Iraq and Syria. There are particular concerns about the readiness of naval and ground forces, and the ability to surge capability if required. A new National Military Strategy unveiled in July 2015 declared that global disorder had significantly increased since the previous strategy of 2011, and that the risk of US involvement in major interstate war remained low but was growing. In the face of mounting concern that the US military technological edge

is being eroded, there is increased focus on innovative approaches to retain that advantage. Negotiation between the administration and the US Congress appeared to promise a more stable and sustained defence-budget outlook in the immediate future than has been the case in recent years. (See pp. 27–33.)

**ACTIVE 1,381,250** (Army 509,450 Navy 326,800 Air Force 319,950 US Marine Corps 185,050 US Coast Guard 40,000)

**CIVILIAN 14,850** (US Special Operations Command 6,550 US Coast Guard 8,300)

**RESERVE 840,500** (Army 532,750 Navy 96,850 Air Force 165,150 Marine Corps Reserve 38,250 US Coast Guard 7,500)

**ORGANISATIONS BY SERVICE****US Strategic Command**

HQ at Offutt AFB (NE). Five missions: US nuclear deterrent; missile defence; global strike; info ops; ISR

**US Navy****EQUIPMENT BY TYPE**

**SUBMARINES • STRATEGIC • SSBN** 14 *Ohio* (mod) SSBN with up to 24 UGM-133A *Trident* D-5 strategic SLBM, 4 single 533mm TT with Mk48 *Sea Arrow* HWT

**US Air Force • Global Strike Command****FORCES BY ROLE****MISSILE**

9 sqn with LGM-30G *Minuteman* III

**BOMBER**

6 sqn (incl 1 AFRC) with B-52H *Stratofortress* (+1

AFRC sqn personnel only)

2 sqn with B-2A *Spirit* (+1 ANG sqn personnel only)

**EQUIPMENT BY TYPE**

**BBR** 90: 20 B-2A *Spirit*; 70 B-52H *Stratofortress*

**MSL • STRATEGIC**

**ICBM** 450 LGM-30G *Minuteman* III (capacity 1–3

MIRV Mk12/Mk12A per missile)

**LACM Strategic** AGM-86B

**Strategic Defenses – Early Warning**

North American Aerospace Defense Command (NORAD) – a combined US–CAN org.

**EQUIPMENT BY TYPE**

**SATELLITES** (see Space)

**RADAR**

**NORTH WARNING SYSTEM** 50: 14 AN/FPS-117 (range 200nm); 36 AN/FPS-124 (range 80nm)

**SOLID STATE PHASED ARRAY RADAR SYSTEM**

**(SSPARS)** 5: 2 AN/FPS-123 Early Warning Radar

located at Cape Cod AFS (MA) and Clear AFS (AK); 3

AN/FPS-132 Upgraded Early Warning Radar located at

Beale AFB (CA), Thule (GL) and Fylingdales Moor (UK)

**SPACETRACK SYSTEM** 10: 1 AN/FPS-85 Spacetrack

Radar at Eglin AFB (FL); 6 contributing radars at Cavalier

AFS (ND), Clear (AK), Thule (GL), Fylingdales Moor



(UK), Beale AFB (CA) and Cape Cod (MA); 3 Spacetrack Optical Trackers located at Socorro (NM), Maui (HI), Diego Garcia (BIOT)

**PERIMETER ACQUISITION RADAR ATTACK CHARACTERISATION SYSTEM (PARCS)** 1 AN/FPQ-16 at Cavalier AFS (ND)

**DETECTION AND TRACKING RADARS** 5 located at Kwajalein Atoll, Ascension Island, Australia, Kaena Point (HI), MIT Lincoln Laboratory (MA)

**GROUND BASED ELECTRO OPTICAL DEEP SPACE SURVEILLANCE SYSTEM (GEODSS)** Socorro (NM), Maui (HI), Diego Garcia (BIOT)

#### STRATEGIC DEFENCES – MISSILE DEFENCES

**SEA-BASED:** *Aegis* engagement cruisers and destroyers

**LAND-BASED:** 26 ground-based interceptors at Fort Greely (AK); 4 ground-based interceptors at Vandenburg AFB (CA)

## Space

### EQUIPMENT BY TYPE

#### SATELLITES 122

**COMMUNICATIONS** 38: 3 AEHF; 6 DSCS-III; 2 *Milstar-I*; 3 *Milstar-II*; 4 MUOS; 1 PAN-1 (P360); 5 SDS-III; 7 UFO; 7 WGS SV2

**NAVIGATION/POSITIONING/TIMING** 31: 2 NAVSTAR Block II/IIA; 10 NAVSTAR Block IIF; 19 NAVSTAR Block IIR/IIRM

#### METEOROLOGY/OCEANOGRAPHY 6 DMSP-5

**ISR** 13: 3 *FIA Radar*; 5 *Evolved Enhanced/Improved Crystal* (visible and infrared imagery); 2 *Lacrosse (Onyx* radar imaging satellite); 1 ORS-1; 1 *TacSat-4*; 1 *TacSat-6*

**ELINT/SIGINT** 25: 2 *Mentor* (advanced *Orion*); 3 Advanced *Mentor*; 3 *Mercury*; 1 NRO L-67; 1 *Trumpet*; 3 Improved *Trumpet*; 12 SBWASS (Space Based Wide Area Surveillance System; Naval Ocean Surveillance System)

**SPACE SURVEILLANCE** 3: 2 GSSAP; 1 SBSS (Space Based Surveillance System)

**EARLY WARNING** 6: 4 DSP; 2 SBIRS *Geo-1*

**US Army** 490,000; 9,450 active ARNG; 10,000 active AR (total 509,450)

### FORCES BY ROLE

Sqn are generally bn sized and tp are generally coy sized

#### COMMAND

3 (I, III & XVIII AB) corps HQ

#### SPECIAL FORCES

(see USSOCOM)

#### MANOEUVRE

##### Reconnaissance

2 (2nd & 3rd CR) cav regt (1 armd recce sqn, 3 mech sqn, 1 arty sqn, 1 AT tp, 1 cbt engr sqn, 1 CSS sqn)

##### Armoured

1 (1st) armd div (2 (2nd & 3rd ABCT) armd bde (1 armd recce sqn, 3 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn); 1 (1st SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (hy cbt avn) hel bde; 1 log bde)

1 (1st) cav div (3 (1st–3rd ABCT) armd bde (1 armd recce sqn, 3 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn); 1 (hy cbt avn) hel bde; 1 log bde)

1 (1st) inf div (1 (1st ABCT) armd bde (1 armd recce sqn, 2 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn); 1 (2nd ABCT) armd bde (1 armd recce sqn, 3 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

#### Mechanised

1 (2nd) inf div (1 (1st SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 AT coy, 1 cbt engr coy, 1 int coy, 1 sigs coy, 1 CSS bn); 1 (2nd SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 AT coy, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

1 (4th) inf div (1 (3rd ABCT) armd bde (1 armd recce sqn, 3 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn); 1 (1st SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 AT coy, 1 cbt engr bn, 1 CSS bn); 1 (2nd IBCT) lt inf bde (1 recce sqn, 3 inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (hvy cbt avn) hel bde; 1 log bde)

1 (25th) inf div (1 (1st SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 AT coy, 1 cbt engr bn, 1 CSS bn); 1 (2nd SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 AT coy, 1 cbt engr bn, 1 CSS bn); 1 (3rd IBCT) inf bde (1 recce sqn, 2 inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (4th AB BCT) AB bde (1 recce bn, 2 para bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

#### Light

1 (3rd) inf div (1 (1st ABCT) armd bde (1 armd recce sqn, 3 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn); 1 (2nd IBCT) lt inf bde; (1 recce sqn, 3 inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (3rd IBCT) lt inf bde (1 recce sqn, 2 inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

1 (10th Mtn) inf div (3 (1st–3rd IBCT) lt inf bde (1 recce sqn, 3 inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

#### Air Manoeuvre

1 (82nd) AB div (3 (1st–3rd AB BCT) AB bde (1 recce bn, 3 para bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

1 (101st) air aslt div (3 (1st–3rd AB BCT) AB bde (1 recce bn, 3 para bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn); 1 (cbt avn) hel bde; 1 log bde)

1 (173rd AB BCT) AB bde (1 recce bn, 2 para bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn)

#### Aviation

1 indep (hy cbt avn) hel bde

1 indep (cbt avn) hel bde

#### Other

1 (11th ACR) trg armd cav regt (OPFOR) (2 armd cav sqn, 1 CSS bn)

#### COMBAT SUPPORT

7 arty bde

4 engr bde

2 EOD gp (2 EOD bn)

5 AD bde

10 int bde

2 int gp

4 MP bde

1 NBC bde



3 (strat) sigs bde

4 (tac) sigs bde

## COMBAT SERVICE SUPPORT

1 log bde

3 med bde

1 tpt bde

## Reserve Organisations

**Army National Guard** 350,200 reservists (incl 9,500 active)

Normally dual funded by DoD and states. Civil-emergency responses can be mobilised by state governors. Federal government can mobilise ARNG for major domestic emergencies and for overseas operations.

### FORCES BY ROLE

#### COMMAND

8 div HQ

#### SPECIAL FORCES

(see USSOCOM)

#### MANOEUVRE

##### Reconnaissance

2 armd recce sqn

7 (BfSB) surv bde

##### Armoured

1 (ABCT) armd bde (1 armd recce sqn, 3 armd/armd inf bn, 1 SP arty bn, 1 cbt engr bn, 1 CSS bn)

6 (ABCT) armd bde (1 armd recce sqn, 2 armd/armd inf bn, 1 SP arty bn, 1 cbt spt bn, 1 CSS bn)

2 armd/armd inf bn

##### Mechanised

1 (SBCT) mech bde (1 armd recce sqn, 3 mech inf bn, 1 arty bn, 1 AT coy, 1 engr coy, 1 int coy, 1 sigs coy, 1 CSS bn)

##### Light

5 (IBCT) lt inf bde (1 recce sqn, 2 inf bn, 1 arty bn, 1 cbt engr bn, 1 CSS bn)

15 (IBCT) lt inf bde (1 recce sqn, 2 inf bn, 1 arty bn, 1 cbt spt bn, 1 CSS bn)

11 lt inf bn

##### Aviation

2 (hy cbt avn) hel bde

6 (National Guard cbt avn) hel bde

5 (theatre avn) hel bde

#### COMBAT SUPPORT

8 arty bde

2 AD bde

7 engr bde

1 EOD regt

1 int bde

3 MP bde

1 NBC bde

2 (tac) sigs bde

16 (Mnv Enh) cbt spt bde

#### COMBAT SERVICE SUPPORT

10 log bde

17 (regional) log spt gp

**Army Reserve** 202,000 reservists (incl 10,000 active)

Reserve under full command of US Army. Does not have state-emergency liability of Army National Guard.

### FORCES BY ROLE

#### SPECIAL FORCES

(see USSOCOM)

#### MANOEUVRE

##### Aviation

1 (theatre avn) hel bde

#### COMBAT SUPPORT

4 engr bde

4 MP bde

2 NBC bde

2 sigs bde

3 (Mnv Enh) cbt spt bde

#### COMBAT SERVICE SUPPORT

9 log bde

11 med bde

**Army Standby Reserve** 700 reservists

Trained individuals for mobilisation

### EQUIPMENT BY TYPE

**MBT** 2,384: 791 M1A1SA *Abrams*; 1,593 M1A2SEPv2 *Abrams* (€3,500 more in store)

**RECCE** 1,900: 334 M7A3/SA *BFIST*; 545 M1127 *Stryker RV*; 134 M1128 *Stryker MGS*; 188 M1131 *Stryker FSV*; 234 M1135 *Stryker NBCRV*; 465 M1200 *Armored Knight*

**AIFV** 4,559 M2A2/A3 *Bradley/M3A2/A3 Bradley* (€2,000 more in store)

**APC** 16,377

**APC (T)** €5,000 M113A2/A3 (€8,000 more in store)

**APC (W)** 2,792: 1,972 M1126 *Stryker ICV*; 348 M1130 *Stryker CV*; 168 M1132 *Stryker ESV*; 304 M1133 *Stryker MEV*

**PPV** 8,585: 2,633 *MaxxPro Dash*; 301 *MaxxPro LWB (Amb)*; 5,651 *M-ATV*

**ARTY** 5,923

**SP 155mm** 969 M109A6/A7 (€500 more in store)

**TOWED** 1,242: **105mm** 821 M119A2/3; **155mm** 421 M777A1/A2

**MRL 227mm** 1,205: 375 M142 *HIMARS*; 830 M270/M270A1 *MLRS* (all ATACMS-capable)

**MOR** 2,507: **81mm** 990 M252; **120mm** 1,517: 1,076 M120/M121; 441 M1129 *Stryker MC*

#### AT • MSL

**SP** 1,512: 1,379 *HMMWV TOW*; 133 M1134 *Stryker ATGM*

**MANPATS** *Javelin*

#### AMPHIBIOUS 126

**LCU** 45: 11 LCU-1600 (capacity either 2 MBT or 350 troops); 34 LCU-2000

**LC** 81: 8 *Frank Besson* (capacity 15 *Abrams* MBT); 73 LCM-8 (capacity either 1 MBT or 200 troops)

#### AIRCRAFT

**ISR** 52: 11 RC-12D *Guardrail*; 6 RC-12H *Guardrail*; 9 RC-12K *Guardrail*; 13 RC-2N *Guardrail*; 4 RC-12P *Guardrail*; 9 RC-12X *Guardrail*

**ELINT** 9: 7 *Dash-7 ARL-M* (COMINT/ELINT); 2 *Dash-7 ARL-C* (COMINT)

**TPT** 157: **Light** 152: 113 *Beech A200 King Air* (C-12 *Huron*); 28 *Cessna 560 Citation* (UC-35A/B/C); 11 SA-227 *Metro* (C-26B/E); **PAX** 5: 1 *Gulfstream III* (C-20E); 1 *Gulfstream IV* (C-20F); 3 *Gulfstream V* (C-37A)

**TRG** 4 T-6D *Texan II*

**HELICOPTERS**

**ATK** 730: 600 AH-64D *Apache*; 130 AH-64E *Apache*  
**MRH** 200 OH-58D *Kiowa Warrior*  
**ISR** 44 OH-58A *Kiowa*  
**SAR** 173: 18 HH-60L *Black Hawk*; 155 HH-60M *Black Hawk* (medevac)  
**TPT** 2,899: **Heavy** 400: 75 CH-47D *Chinook*; 325 CH-47F *Chinook*; **Medium** 2,094: 802 UH-60A *Black Hawk*; 747 UH-60L *Black Hawk*; 545 UH-60M *Black Hawk*; **Light** 405: 340 UH-72A *Lakota*; 65 UH-1H/V *Iroquois*  
**TRG** 154 TH-67 *Creek*

**UAV** 346

**CISR** • **Heavy** 90 MQ-1C *Gray Eagle*  
**ISR** 256: **Heavy** 20 RQ-5A *Hunter*; **Medium** 236 RQ-7B *Shadow*

**AD** • **SAM** 1,207+

**SP** 727: 703 M1097 *Avenger*; 24 THAAD  
**TOWED** 480 MIM-104 *Patriot/PAC-2/PAC-3*  
**MANPAD** FIM-92 *Stinger*

**RADAR** • **LAND** 251: 98 AN/TPQ-36 *Firefinder* (arty); 56 AN/TPQ-37 *Firefinder* (arty); 60 AN/TRQ-32 *Teammate* (COMINT); 32 AN/TSQ-138 *Trailblazer* (COMINT); 5 AN/TSQ-138A *Trailblazer***AEV** 250 M9 ACE

**ARV** 1,108+: 1,096 M88A1/2 (€1,000 more in store); 12 *Pandur*; some M578

**VLB** 60: 20 REBS; 40 *Wolverine* HAB

**MW** *Aardvark* JSFU Mk4; *Hydrema* 910 MCV-2; M58/M59 MICLIC; M139; *Rhino*

**US Navy** 323,600; 3,200 active reservists (total 326,800)

Comprises 2 Fleet Areas, Atlantic and Pacific. 5 Fleets: 3rd – Pacific; 4th – Caribbean, Central and South America; 5th – Indian Ocean, Persian Gulf, Red Sea; 6th – Mediterranean; 7th – W. Pacific; plus Military Sealift Command (MSC); Naval Reserve Force (NRF). For Naval Special Warfare Command, see US Special Operations Command.

**EQUIPMENT BY TYPE****SUBMARINES** 71

**STRATEGIC** • **SSBN** 14 *Ohio* (mod) opcon USSTRATCOM with up to 24 UGM-133A *Trident* D-5 strategic SLBM, 4 single 533mm TT with Mk48 *Sea Arrow* HWT

**TACTICAL** 57**SSGN** 45:

- 4 *Ohio* (mod) with total of 154 *Tomahawk* LACM, 4 single 533mm TT with Mk48 *Sea Arrow* HWT
- 7 *Los Angeles* with 1 12-cell VLS with *Tomahawk* LACM; 4 single 533mm TT with Mk48 *Sea Arrow* HWT/UGM-84 *Harpoon* ASHM
- 22 *Los Angeles* (Imp) with 1 12-cell VLS with *Tomahawk* LACM, 4 single 533mm TT with Mk48 *Sea Arrow* HWT/UGM-84 *Harpoon* ASHM
- 10 *Virginia* Flight I/II with 1 12-cell VLS with *Tomahawk* LACM, 4 single 533mm TT with Mk48 ADCAP mod 6 HWT
- 2 *Virginia* Flight III with 2 6-cell VLS with *Tomahawk* LACM, 4 single 533mm TT with Mk48 ADCAP mod 6 HWT

**SSN** 12:

- 9 *Los Angeles* with 4 single 533mm TT with Mk48 *Sea Arrow* HWT/UGM-84 *Harpoon* ASHM
- 3 *Seawolf* with 8 single 660mm TT with up to 45 *Tomahawk* LACM/UGM-84C *Harpoon* ASHM, Mk48 *Sea Arrow* HWT

**PRINCIPAL SURFACE COMBATANTS** 98

**AIRCRAFT CARRIERS** • **CVN** 10 *Nimitz* with 2–3 octuple Mk29 Inchr with RIM-7M/P *Sea Sparrow* SAM, 2 Mk49 GMLS with RIM-116 SAM, 2 *Phalanx* Mk15 CIWS (typical capacity 55 F/A-18 *Hornet* FGA ac; 4 EA-18G *Growler* EW ac; 4 E-2C/D *Hawkeye* AEW ac; 6 H-60 *Seahawk* hel)

**CRUISERS** • **CGHM** 22 *Ticonderoga* (*Aegis* Baseline 5/6/8/9) with *Aegis* C2, 2 quad Inchr with RGM-84 *Harpoon* ASHM, 2 61-cell Mk41 VLS with SM-2ER SAM/*Tomahawk* LACM, 2 triple 324mm ASTT with Mk46 LWT, 2 *Phalanx* Block 1B CIWS, 2 127mm gun (capacity 2 SH-60B *Seahawk* ASW hel); (extensive upgrade programme scheduled from 2006–20 to include sensors and fire-control systems; major weapons upgrade to include *Evolved Sea Sparrow* (ESSM), SM-3/SM-2 capability and 2 Mk45 Mod 2 127mm gun)

**DESTROYERS** 62

**DDGHM** 34 *Arleigh Burke* Flight IIA (*Aegis* Baseline 6/7) with *Aegis* C2, 1 29-cell Mk41 VLS with ASROC ASW/SM-2ER SAM/*Tomahawk* (TLAM) LACM, 1 61-cell Mk41 VLS with ASROC ASW/SM-2 ER SAM/*Tomahawk* LACM, 2 triple 324mm ASTT with Mk46 LWT, 2 *Phalanx* Block 1B CIWS, 1 127mm gun (capacity 2 SH-60B *Seahawk* ASW hel) (additional ships in build)

**DDGM** 28 *Arleigh Burke* Flight I/II (*Aegis* Baseline 5/9) with *Aegis* C2, 2 quad Inchr with RGM-84 *Harpoon* ASHM, 1 32-cell Mk41 VLS with ASROC ASW/SM-2ER SAM/*Tomahawk* LACM, 1 64-cell Mk41 VLS with ASROC ASW/SM-2 ER SAM/*Tomahawk* LACM, 2 Mk49 GMLS with RIM-116 RAM SAM, 2 triple 324mm ASTT with Mk46 LWT, 2 *Phalanx* Block 1B CIWS, 1 127mm gun, 1 hel landing platform

**FRIGATES** • **FFHM** 4:

- 2 *Freedom* with 1 21-cell Mk99 Inchr with RIM-116 SAM, 1 57mm gun (capacity 2 MH-60R/S *Seahawk* hel or 1 MH-60 with 3 MQ-8 *Firescout* UAV)
- 2 *Independence* with 1 11-cell SeaRAM Inchr with RIM-116 SAM, 1 57mm gun (capacity 1 MH-60R/S *Seahawk* hel and 3 MQ-8 *Firescout* UAV)

**PATROL AND COASTAL COMBATANTS** 57

**PCF** 13 *Cyclone*

**PBF** 2 Mk VI

**PBR** 42

**MINE WARFARE** • **MINE COUNTERMEASURES** 11

**MCO** 11 *Avenger* with 1 SLQ-48 MCM system; 1 SQQ-32(V)3 Sonar (mine hunting)

**COMMAND SHIPS** • **LCC** 2 *Blue Ridge* with 2 *Phalanx* Mk15 CIWS (capacity 3 LCPL; 2 LCPV; 700 troops; 1 med hel) (of which 1 vessel partially crewed by Military Sealift Command personnel)

**AMPHIBIOUS**

**PRINCIPAL AMPHIBIOUS SHIPS** 30

**LHD** 8 *Wasp* with 2 octuple Mk29 GMLS with RIM-7M/RIM-7P *Sea Sparrow* SAM, 2 Mk49 GMLS with RIM-116 RAM SAM, 2 *Phalanx* Mk15 CIWS (capacity: 6 AV-8B *Harrier* II FGA; 4 CH-53E *Sea Stallion* hel; 12 CH-46E *Sea Knight* hel; 4 AH-1W/Z hel; 3 UH-1Y hel; 3 LCAC(L); 60 tanks; 1,687 troops)

**LHA** 1 *America* with 2 octuple Mk29 GMLS with RIM-162D ESSM SAM; 2 Mk49 GMLS with RIM-116 RAM SAM, 2 *Phalanx* Mk15 CIWS (capacity 6 F-35B *Lightning* II FGA ac; 12 MV-22B *Osprey* tpt ac; 4 CH-53E *Sea Stallion* hel; 7 AH-1Z *Viper*/UH-1Y *Iroquois* hel; 2 MH-60 hel)

**LPD** 9 *San Antonio* with 2 21-cell Mk49 GMLS with RIM-116 SAM (capacity 2 CH-53E *Sea Stallion* hel or 4 CH-46 *Sea Knight* or 2 MV-22 *Osprey*; 2 LCAC(L); 14 AAV; 720 troops)

**LSD** 12:

4 *Harpers Ferry* with 2 Mk 49 GMLS with RIM-116 SAM, 2 *Phalanx* Mk15 CIWS, 1 hel landing platform (capacity 2 LCAC(L); 40 tanks; 500 troops)

8 *Whidbey Island* with 2 Mk49 GMLS with RIM-116 SAM, 2 *Phalanx* Mk15 CIWS, 1 hel landing platform (capacity 4 LCAC(L); 40 tanks; 500 troops)

**LANDING CRAFT** 245

**LCU** 32 LCU-1600 (capacity either 2 M1 *Abrams* MBT or 350 troops)

**LCP** 108: 75 LCPL; 33 Utility Boat

**LCM** 25: 10 LCM-6; 15 LCM-8

**LCAC** 80 LCAC(L) (capacity either 1 MBT or 60 troops (undergoing upgrade programme))

**LOGISTICS AND SUPPORT** 71

**AFDL** 1 *Dynamic*

**AGE** 4: 1 MARSS; 1 *Sea Fighter*; 1 *Sea Jet*; 1 *Stiletto* (all for testing)

**AGOR** 6 (all leased out): 1 *Melville*; 1 *Ocean*; 3 *Thomas G Thompson*; 1 *Kilo Moana*

**APB** 3

**ARD** 3

**AX** 1 *Prevail*

**AXS** 1 *Constitution*

**SSA** 2 (for testing)

**SSAN** 1 (for propulsion plant training)

**UUV** 1 *Cutthroat* (for testing)

**YDT** 2

**YFRT** 2 *Athena* (at Naval Surface Warfare Center)

**YP** 25 (based at Naval Academy)

**YTB** 17

**YTT** 2 *Cape*

**SF** 6 DDS opcon USSOCOM

**Naval Reserve Forces** 100,050 (incl 3,200 active)

**Selected Reserve** 57,300

**Individual Ready Reserve** 42,750

**Naval Inactive Fleet**

Under a minimum of 60–90 days notice for reactivation; still on naval vessel register.

**EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS** 1

**AIRCRAFT CARRIERS** • CV 1 *Kitty Hawk*

**AMPHIBIOUS** 12

2 **LHA**

5 **LPD**

5 **LKA**

**LOGISTICS AND SUPPORT** • ATF 1 *Mohawk*

**Military Sealift Command (MSC)****Combat Logistics Force****EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT** 30

**AO** 15 *Henry J. Kaiser*

**AOE** 3 *Supply*

**AKEH** 12 *Lewis and Clark*

**Maritime Prepositioning Program****EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT** 25

**AG** 2: 1 *V Adm K.R. Wheeler*; 1 *Fast Tempo*

**AK** 4: 2 *LTC John U.D. Page*; 1 *Maj Bernard F. Fisher*; 1 *CPT David I. Lyon*

**AKEH** 2 *Lewis and Clark*

**AKR** 12: 2 *Bob Hope*; 2 *Montford Point*; 1 *Stockham*; 7 *Watson*

**AKRH** 5 *2nd Lt John P. Bobo*

**Strategic Sealift Force**

(At a minimum of 4 days readiness)

**EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT** 30

**AOT** 5: 1 *Champion*; 4 (long-term chartered, of which 1 *MT SLNC Pax*; 1 *Peary*, 2 *State*)

**AK** 5: 3 *Sgt Matej Kocak*; 2 (long-term chartered, of which 1 *Mohegan*; 1 *Sea Eagle*)

**AKR** 12: 5 *Bob Hope*; 2 *Gordon*; 2 *Shughart*; 1 *1st Lt Harry L Martin*; 1 *LCpl Roy M Wheat*; 1 *Watson*

**AP** 8: 2 *Guam*; 5 *Spearhead*; 1 *Westpac Express*

**Special Mission Ships****EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT** 24

**AGM** 3: 1 *Howard O. Lorenzen*; 1 *Invincible* (commercial operator); 1 *Sea-based X-band Radar*

**AGOS** 5: 1 *Impeccable* (commercial operator); 4 *Victorious*

**AGS** 7: 6 *Pathfinder*; 1 *Waters*

**AS** 9 (long-term chartered, of which 1 *C-Champion*, 1 *C-Commando*, 1 *Malama*, 1 *Dolores Chouest*, 1 *Dominator*, 4 *Arrowhead*)

**Service Support Ships****EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT** 15

**ARS** 4 *Safeguard*

**AFSB** 2: 1 *Lewis B Puller*; 1 *Ponce* (modified *Austin*-class LPD) with 1 AN/SEQ-3 LaWS laser

**AH** 2 *Mercy*, with 1 hel landing platform

**ARC** 1 *Zeus*

**AS** 2 *Emory S Land*

**ATF** 4 *Powhatan*

**US Maritime Administration (MARAD)****National Defense Reserve Fleet****EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT 34**

- AOT 4
- ACS 2 *Keystone State*
- AG 3
- AGOS 3
- AGS 3
- AK 15: 5; 10 (breakbulk)
- AP 4

**Ready Reserve Force**

Ships at readiness up to a maximum of 30 days

**EQUIPMENT BY TYPE****LOGISTICS AND SUPPORT 46**

- ACS 6 *Keystone State*
- AK 4: 2 *Wright* (breakbulk); 2 *Cape May* (heavy lift)
- AKR 35: 1 *Adm WMM Callaghan*; 8 *Algol*; 26 *Cape Island*
- AOT 1 *Petersburg*

**Augmentation Force****EQUIPMENT BY TYPE****COMBAT SERVICE SUPPORT**

- 1 (active) log bn (Navy Cargo Handling)
- 6 (reserve) log bn (Navy Cargo Handling)

**Naval Aviation 98,600**

10 air wg. Average air wing comprises 8 sqns: 4 with F/A-18; 1 with MH-60R; 1 with EA-18G; 1 with E-2C/D; 1 with MH-60S

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

- 7 sqn with F/A-18C *Hornet*
- 18 sqn with F/A-18E *Super Hornet*
- 10 sqn with F/A-18F *Super Hornet*

**ANTI-SUBMARINE WARFARE**

- 11 sqn with MH-60R *Seahawk*
- 1 ASW/CSAR sqn with HH-60H *Seahawk*; SH-60F *Seahawk*
- 3 ASW/ISR sqn with MH-60R *Seahawk*; MQ-8B *Fire Scout*

**ELINT**

- 1 sqn with EP-3E *Aries II*

**ELINT/ELECTRONIC WARFARE**

- 11 sqn with EA-18G *Growler*
- 2 sqn (forming) with EA-18G *Growler*

**MARITIME PATROL**

- 6 sqn with P-3C *Orion*
- 4 sqn with P-8A *Poseidon*
- 2 sqn (forming) with P-8A *Poseidon*

**AIRBORNE EARLY WARNING & CONTROL**

- 8 sqn with E-2C *Hawkeye*
- 2 sqn with E-2D *Hawkeye*

**COMMAND & CONTROL**

- 2 sqn with E-6B *Mercury*

**MINE COUNTERMEASURES**

- 2 sqn with MH-53E *Sea Dragon*

**TRANSPORT**

- 2 sqn with C-2A *Greyhound*

**TRAINING**

- 1 (FRS) sqn with EA-18G *Growler*
- 1 (FRS) sqn with C-2A *Greyhound*; E-2C/D *Hawkeye*; TE-2C *Hawkeye*
- 1 sqn with E-6B *Mercury*
- 2 (FRS) sqn with F/A-18A/A+/B/C/D *Hornet*; F/A-18E/F *Super Hornet*
- 1 (FRS) sqn with F-35C *Lightning II*
- 1 (FRS) sqn with MH-53 *Sea Dragon*
- 2 (FRS) sqn with MH-60S *Knight Hawk*; HH-60H/SH-60F *Seahawk*
- 1 (FRS) sqn with MH-60R *Seahawk*
- 1 (FRS) sqn with MH-60R *Seahawk*
- 1 sqn with P-3C *Orion*
- 1 (FRS) sqn with P-3C *Orion*; P-8A *Poseidon*
- 6 sqn with T-6A/B *Texan II*
- 1 sqn with T-44A/C *Pegasus*
- 5 sqn with T-45A/C *Goshawk*
- 1 sqn with TC-12B *Huron*
- 3 hel sqn with TH-57B/C *Sea Ranger*
- 1 (FRS) UAV sqn with MQ-8B *Fire Scout*; MQ-8C *Fire Scout*

**TRANSPORT HELICOPTER**

- 14 sqn with MH-60S *Knight Hawk*
- 1 tpt hel/ISR sqn with MH-60S *Knight Hawk*; MQ-8B *Fire Scout*

**ISR UAV**

- 1 sqn (forming) with MQ-4C *Triton*

**EQUIPMENT BY TYPE****AIRCRAFT 1,123 combat capable**

- FGA 904: 16 F-35C *Lightning II*; 10 F/A-18A/A+ *Hornet*; 9 F/A-18B *Hornet*; 268 F/A-18C *Hornet*; 41 F/A-18D *Hornet*; 288 F/A-18E *Super Hornet*; 272 F/A-18F *Super Hornet*
- ASW 110: 80 P-3C *Orion*; 30 P-8A *Poseidon*
- EW 109 EA-18G *Growler\**
- ELINT 11 EP-3E *Aries II*
- ISR 2: 1 RC-12F *Huron*; 1 RC-12M *Huron*
- AEW&C 76: 57 E-2C *Hawkeye*; 19 E-2D *Hawkeye*
- C2 16 E-6B *Mercury*
- TPT • Light 68: 4 Beech A200 *King Air* (C-12C *Huron*); 20 Beech A200 *King Air* (UC-12F/M *Huron*); 35 C-2A *Greyhound*; 2 DHC-2 *Beaver* (U-6A); 7 SA-227-BC *Metro III* (C-26D)
- TRG 609: 44 T-6A *Texan II*; 232 T-6B *Texan II*; 7 T-38C *Talon*; 55 T-44A/C *Pegasus*; 74 T-45A *Goshawk*; 170 T-45C *Goshawk*; 25 TC-12B *Huron*; 2 TE-2C *Hawkeye*

**HELICOPTERS**

- ASW 237: 217 MH-60R *Seahawk*; 20 SH-60F *Seahawk*
- MRH 271 MH-60S *Knight Hawk* (Multi Mission Support)
- MCM 28 MH-53E *Sea Dragon*
- ISR 3 OH-58C *Kiowa*
- CSAR 11 HH-60H *Seahawk*
- TPT 13: **Heavy** 2 CH-53E *Sea Stallion*; **Medium** 3 UH-60L *Black Hawk*; **Light** 8: 5 UH-72A *Lakota*; 2 UH-1N *Iroquois*; 1 UH-1Y *Iroquois*
- TRG 119: 43 TH-57B *Sea Ranger*; 76 TH-57C *Sea Ranger*

**UAV • ISR 73**

- Heavy** 38: 20 MQ-8B *Fire Scout*; 14 MQ-8C *Fire Scout*; 4 RQ-4A *Global Hawk* (under evaluation and trials)
- Medium** 35 RQ-2B *Pioneer*



**MSL**

**AAM • IR** AIM-9 *Sidewinder*; **IIR** AIM-9X *Sidewinder II*;  
**SARH** AIM-7 *Sparrow*; **ARH** AIM-120B/C AMRAAM  
**ASM** AGM-65A/F *Maverick*; AGM-114B/K/M *Hellfire*;  
 AGM-154A/C JSOW  
**ASHm** AGM-84D *Harpoon*; AGM-119A *Penguin 3*  
**ARM** AGM-88B/C/E HARM  
**LACM** AGM-84E/H/K SLAM/SLAM-ER

**BOMBS**

**Laser-Guided:** GBU-10/12/16 *Paveway II*; GBU-24  
*Paveway III*  
**INS/GPS guided:** GBU-31/32/38 JDAM; Enhanced  
*Paveway II*; GBU-54 Laser JDAM

**Naval Aviation Reserve****FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with F/A-18A+ *Hornet*

**ANTI-SUBMARINE WARFARE**

1 sqn with SH-60B *Seahawk*

**ELECTRONIC WARFARE**

1 sqn with EA-18G *Growler*

**MARITIME PATROL**

2 sqn with P-3C *Orion*

**TRANSPORT**

5 log spt sqn with B-737-700 (C-40A *Clipper*)  
 2 log spt sqn with Gulfstream III/IV (C-20A/D/G);  
 Gulfstream V/G550 (C-37A/C-37B)  
 5 sqn with C-130T *Hercules*

**TRAINING**

2 (aggressor) sqn with F-5F/N *Tiger II*  
 1 (aggressor) sqn with F/A-18A+ *Hornet*

**TRANSPORT HELICOPTER**

2 sqn with HH-60H *Seahawk*

**EQUIPMENT BY TYPE****AIRCRAFT** 69 combat capable

**FTR** 32: 2 F-5F *Tiger II*; 30 F-5N *Tiger II*  
**FGA** 20 F/A-18A+ *Hornet*  
**ASW** 12 P-3C *Orion*  
**EW** 5 EA-18G *Growler\**  
**TPT** 44: **Medium** 19 C-130T *Hercules*; **PAX** 25:  
 14 B-737-700 (C-40A *Clipper*); 3 Gulfstream III  
 (C-20A/D); 4 Gulfstream IV (C-20G); 1 Gulfstream V  
 (C-37A); 3 Gulfstream G550 (C-37B)

**HELICOPTERS**

**ASW** 6 SH-60B *Seahawk*  
**MCM** 8 MH-53E *Sea Stallion*  
**CSAR** 24 HH-60H *Seahawk*

**US Marine Corps 184,100; 950 active reservists (total 185,050)**

3 Marine Expeditionary Forces (MEF), 3 Marine Expeditionary Brigades (MEB), 7 Marine Expeditionary Units (MEU) drawn from 3 div. An MEU usually consists of a battalion landing team (1 SF coy, 1 lt armd recce coy, 1 recce pl, 1 armd pl, 1 amph aslt pl, 1 inf bn, 1 arty bty, 1 cbt engr pl), an aviation combat element (1 medium lift sqn with attached atk hel, FGA ac and AD assets) and a composite log bn, with a combined total of about 2,200 personnel. Composition varies with mission requirements.

**FORCES BY ROLE****SPECIAL FORCES**

(see USSOCOM)

**MANOEUVRE****Reconnaissance**

3 (MEF) recce coy

**Amphibious**

1 (1st) mne div (2 armd recce bn, 1 recce bn, 1 armd bn,  
 3 inf regt (4 inf bn), 1 amph aslt bn, 1 arty regt (4 arty  
 bn), 1 cbt engr bn, 1 EW bn, 1 int bn, 1 sigs bn)  
 1 (2nd) mne div (1 armd recce bn, 1 recce bn, 1 armd bn,  
 1 inf regt (4 inf bn), 2 inf regt (3 inf bn), 1 amph aslt  
 bn, 1 arty regt (2 arty bn), 1 cbt engr bn, 1 EW bn, 1 int  
 bn, 1 sigs bn)  
 1 (3rd) mne div (1 recce bn, 1 inf regt (3 inf bn), 1 arty  
 regt (2 arty bn), 1 cbt spt bn (1 armd recce coy, 1 amph  
 aslt coy, 1 cbt engr coy), 1 EW bn, 1 int bn, 1 sigs bn)

**COMBAT SERVICE SUPPORT**

3 log gp

**EQUIPMENT BY TYPE**

**MBT** 447 M1A1 *Abrams*

**RECCE** 252 LAV-25 (25mm gun, plus 189 variants)

**AAV** 1,311 AAV-7A1 (all roles)

**APC • PPV** 2,467: 38 *Buffalo*; 1,725 *Cougar*; 704 M-ATV

**ARTY** 1,506

**TOWED** 832: **105mm**: 331 M101A1; **155mm** 501 M777A2

**MRL** **227mm** 40 M142 HIMARS

**MOR** 634: **81mm** 585: 50 LAV-M; 535 M252 **120mm** 49  
 EFSS

**AT • MSL**

**SP** 95 LAV-TOW

**MANPATS** *Predator*; TOW

**AD • SAM • MANPAD** FIM-92A *Stinger*

**UAV • Light** 100 BQM-147 *Exdrone*

**RADAR • LAND** 23 AN/TPQ-36 *Firefinder* (arty)

**AEV** 42 M1 ABV

**ARV** 185: 60 AAVRA1; 45 LAV-R; 80 M88A1/2

**VLB** 6 Joint Aslt Bridge

**Marine Corps Aviation 34,700**

3 active Marine Aircraft Wings (MAW) and 1 MCR MAW  
 Flying hours 365 hrs/year on tpt ac; 248 hrs/year on ac;  
 277 hrs/year on hel

**FORCES BY ROLE****FIGHTER**

1 sqn with F/A-18A++ *Hornet*  
 6 sqn with F/A-18C *Hornet*  
 4 sqn with F/A-18D *Hornet*

**FIGHTER/GROUND ATTACK**

6 sqn with AV-8B *Harrier II*  
 1 sqn with F-35B *Lightning II*

**ELECTRONIC WARFARE**

3 sqn with EA-6B *Prowler*

**COMBAT SEARCH & RESCUE/TRANSPORT**

1 sqn with Beech A200/B200 *King Air* (UC-12B/F  
*Huron*); Cessna 560 *Citation Ultra/Encore* (UC-  
 35C/D); DC-9 *Skytrain* (C-9B *Nightingale*); Gulfstream  
 IV (C-20G); HH-1N *Iroquois*

**TANKER**

3 sqn with KC-130J *Hercules*

**TRANSPORT**

- 14 sqn with MV-22B/C *Osprey*
- 2 sqn (forming) with MV-22B/C *Osprey*

**TRAINING**

- 1 sqn with AV-8B *Harrier II*; TAV-8B *Harrier*
- 1 sqn with EA-6B *Prowler*
- 1 sqn with F/A-18B/C/D *Hornet*
- 1 sqn with F-35B *Lightning II*
- 1 sqn with MV-22B *Osprey*
- 1 hel sqn with AH-1W *Cobra*; AH-1Z *Viper*; HH-1N *Iroquois*; UH-1Y *Venom*
- 1 hel sqn with CH-53E *Sea Stallion*

**ATTACK HELICOPTER**

- 6 sqn with AH-1W *Cobra*; UH-1Y *Venom*
- 3 sqn with AH-1Z *Viper*; UH-1Y *Venom*

**TRANSPORT HELICOPTER**

- 8 sqn with CH-53E *Sea Stallion*
- 1 (VIP) sqn with MV-22B *Osprey*; VH-3D *Sea King*; VH-60N *Presidential Hawk*

**ISR UAV**

- 3 sqn with RQ-7B *Shadow*

**AIR DEFENCE**

- 2 bn with M1097 *Avenger*; FIM-92A *Stinger* (can provide additional heavy-calibre support weapons)

**EQUIPMENT BY TYPE****AIRCRAFT** 418 combat capable

- FGA** 418: 39 F-35B *Lightning II*; 1 F-35C *Lightning II*; 41 F/A-18A++ *Hornet*; 7 F/A-18B *Hornet*; 107 F/A-18C *Hornet*; 92 F/A-18D *Hornet*; 115 AV-8B *Harrier II*; 16 TAV-8B *Harrier*
- EW** 27 EA-6B *Prowler*
- TKR** 45 KC-130J *Hercules*
- TPT** 20: **Light** 17: 10 Beech A200/B200 *King Air* (UC-12B/F *Huron*); 7 Cessna 560 *Citation Ultra/Encore* (UC-35C/D); **PAX** 3: 2 DC-9 *Skytrain* (C-9B *Nightingale*); 1 Gulfstream IV (C-20G)
- TRG** 3 T-34C *Turbo Mentor*

**TILTROTOR TPT** • 244 MV-22B/C *Osprey***HELICOPTERS**

- ATK** 156: 112 AH-1W *Cobra*; 44 AH-1Z *Viper*
- SAR** 4 HH-1N *Iroquois*
- TPT** 266: **Heavy** 139 CH-53E *Sea Stallion*; **Medium** 19: 8 VH-60N *Presidential Hawk* (VIP tpt); 11 VH-3D *Sea King* (VIP tpt); **Light** 108 UH-1Y *Venom*

**UAV** • **ISR** • **Medium** 31 RQ-7B *Shadow***AD**

- SAM** • **SP** some M1097 *Avenger*
- MANPAD** some FIM-92A *Stinger*

**MSL**

- AAM** • **IR** AIM-9M *Sidewinder*; **IIR** AIM-9X *Sidewinder II*; **SARH** AIM-7P *Sparrow*; **ARH** AIM-120C *AMRAAM*
- ASM** AGM-65E/F *IR Maverick*; AGM-114 *Hellfire*; AGM-176 *Griffin*; AGM-154A/C *JSOW*
- AShM** AGM-84D *Harpoon*
- ARM** AGM-88 *HARM*
- LACM** AGM-84E/H/K *SLAM/SLAM-ER*

**BOMBS**

- Laser-Guided** GBU-10/12/16 *Paveway II*
- INS/GPS Guided** GBU-31 *JDAM*

**Reserve Organisations****Marine Corps Reserve** 39,200 (incl 950 active)**FORCES BY ROLE****MANOEUVRE****Reconnaissance**

- 2 MEF recce coy

**Amphibious**

- 1 (4th) mne div (1 armd recce bn, 1 recce bn, 2 inf regt (3 inf bn), 1 amph aslt bn, 1 arty regt (3 arty bn), 1 cbt engr bn, 1 int bn, 1 sigs bn)

**COMBAT SERVICE SUPPORT**

- 1 log gp

**Marine Corps Aviation Reserve** 11,600 reservists**FORCES BY ROLE****FIGHTER**

- 1 sqn with F/A-18A++ *Hornet*

**TANKER**

- 2 sqn with KC-130J/T *Hercules*

**TRANSPORT**

- 2 sqn with MV-22B *Osprey*

**TRAINING**

- 1 sqn with F-5F/N *Tiger II*

**ATTACK HELICOPTER**

- 1 sqn with AH-1W *Cobra*; UH-1Y *Venom*

**TRANSPORT HELICOPTER**

- 1 det with CH-53E *Sea Stallion*

**ISR UAV**

- 1 sqn with RQ-7B *Shadow*

**EQUIPMENT BY TYPE****AIRCRAFT** 27 combat capable

- FTR** 12: 1 F-5F *Tiger II*; 11 F-5N *Tiger II*
- FGA** 15 F/A-18A++ *Hornet*
- TKR** 26: 3 KC-130J *Hercules*; 23 KC-130T *Hercules*
- TPT** • **Light** 7: 2 Beech 350 *King Air* (UC-12W *Huron*); 5 Cessna 560 *Citation Ultra/Encore* (UC-35C/D)

**TILTROTOR** • **TPT** 16 MV-22B *Osprey***HELICOPTERS**

- ATK** 16 AH-1W *Cobra*
- TPT** 13: **Heavy** 6 CH-53E *Sea Stallion*; **Light** 7 UH-1Y *Venom*

**UAV** • **ISR** • **Medium** 8 RQ-7B *Shadow***Marine Stand-by Reserve** 700 reservists

Trained individuals available for mobilisation

**US Coast Guard** 40,000 (military); 8,300 (civilian)

9 districts (4 Pacific, 5 Atlantic)

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 163

- PSOH** 25: 1 *Alex Haley*; 13 *Famous*; 6 *Hamilton*; 5 *Legend*
- PCO** 28: 14 *Reliance* (with 1 hel landing platform); 14 *Sentinel*
- PCC** 37 *Island*
- PBI** 73 *Marine Protector*

**LOGISTICS AND SUPPORT** 394

- AB** 13: 1 *Cosmos*; 4 *Pamlico*; 8 *Anvil*
- ABU** 52: 16 *Juniper*; 4 *WLI*; 14 *Keeper*; 18 *WLR*
- AGB** 13: 9 *Bay*; 1 *Mackinaw*; 1 *Healy*; 2 *Polar* (of which one in reserve)



AXS 1 *Eagle*

YAG 187: 174 *Response*; 13 Utility Boat

YP 117

YTM 11

## US Coast Guard Aviation

### EQUIPMENT BY TYPE

#### AIRCRAFT

SAR 20: 11 HC-130H *Hercules*; 9 HC-130J *Hercules*

TPT 24: **Medium** 4 C-27J *Spartan*; **Light** 18 CN-235-200 (HC-144A – MP role); PAX 2 Gulfstream V (C-37A)

#### HELICOPTERS

SAR 154: 52 MH-60T *Jayhawk*; 102 AS366G1 (MH-65C/D) *Dauphin* II

## US Air Force (USAF) 313,000; 4,250 active ANG; 2,700 active AFR (total 319,950)

Flying hours Ftr 160, bbr 260, tkr 308, airlift 343

Almost the entire USAF (plus active force ANG and AFR) is divided into 10 Aerospace Expeditionary Forces (AEF), each on call for 120 days every 20 months. At least 2 of the 10 AEFs are on call at any one time, each with 10,000–15,000 personnel, 90 multi-role Ftr and bbr ac, 31 intra-theatre refuelling aircraft and 13 aircraft for ISR and EW missions.

### Global Strike Command (GSC)

2 active air forces (8th & 20th); 8 wg

#### FORCES BY ROLE

##### MISSILE

9 sqn with LGM-30G *Minuteman* III

##### BOMBER

4 sqn with B-1B *Lancer*

2 sqn with B-2A *Spirit*

5 sqn (incl 1 trg) with B-52H *Stratofortress*

##### TRANSPORT HELICOPTER

3 sqn with UH-1N *Iroquois*

### Air Combat Command (ACC)

2 active air forces (9th & 12th); 12 wg. ACC numbered air forces provide the air component to CENTCOM, SOUTHCOM and NORTHCOM.

#### FORCES BY ROLE

##### FIGHTER

3 sqn with F-22A *Raptor*

##### FIGHTER/GROUND ATTACK

4 sqn with F-15E *Strike Eagle*

5 sqn with F-16C/D *Fighting Falcon*

1 sqn with F-35A *Lightning* II (forming)

##### GROUND ATTACK

3 sqn with A-10C *Thunderbolt* II

##### ELECTRONIC WARFARE

1 sqn with EA-18G *Growler* (personnel only – USN aircraft)

2 sqn with EC-130H *Compass Call*

##### ISR

5 sqn with OC-135/RC-135/WC-135

2 sqn with U-2S

##### AIRBORNE EARLY WARNING & CONTROL

4 sqn with E-3B/C/G *Sentry*

##### COMMAND & CONTROL

1 sqn with E-4B

### COMBAT SEARCH & RESCUE

2 sqn with HC-130J *Combat King* II

2 sqn with HH-60G *Pave Hawk*

### TRAINING

1 sqn with A-10C *Thunderbolt* II

1 sqn with E-3B/C *Sentry*

2 sqn with F-15E *Strike Eagle*

1 sqn with F-22A *Raptor*

1 sqn with RQ-4A *Global Hawk*; TU-2S

2 UAV sqn with MQ-1B *Predator*

3 UAV sqn with MQ-9A *Reaper*

### COMBAT/ISR UAV

4 sqn with MQ-1B *Predator*

1 sqn with MQ-1B *Predator*/MQ-9A *Reaper*

1 sqn with MQ-1B *Predator*/RQ-170 *Sentinel*

2 sqn with MQ-9A *Reaper*

### ISR UAV

2 sqn with EQ-4B/RQ-4B *Global Hawk*

## Pacific Air Forces (PACAF)

Provides the air component of PACOM, and commands air units based in Alaska, Hawaii, Japan and South Korea. 3 active air forces (5th, 7th, & 11th); 8 wg

#### FORCES BY ROLE

##### FIGHTER

2 sqn with F-15C/D *Eagle*

2 sqn with F-22A *Raptor* (+1 sqn personnel only)

##### FIGHTER/GROUND ATTACK

5 sqn with F-16C/D *Fighting Falcon*

##### GROUND ATTACK

1 sqn with A-10C *Thunderbolt* II

##### AIRBORNE EARLY WARNING & CONTROL

2 sqn with E-3B/C *Sentry*

##### COMBAT SEARCH & RESCUE

1 sqn with HH-60G *Pave Hawk*

##### TANKER

1 sqn with KC-135R (+1 sqn personnel only)

##### TRANSPORT

1 sqn with B-737-200 (C-40B); Gulfstream V (C-37A)

2 sqn with C-17A *Globemaster*

1 sqn with C-130H *Hercules*

1 sqn with Beech 1900C (C-12J); UH-1N *Huey*

##### TRAINING

1 (aggressor) sqn with F-16C/D *Fighting Falcon*

## United States Air Forces Europe (USAFE)

Provides the air component to both EUCOM and AFRICOM. 1 active air force (3rd); 5 wg

#### FORCES BY ROLE

##### FIGHTER

1 sqn with F-15C/D *Eagle*

##### FIGHTER/GROUND ATTACK

2 sqn with F-15E *Strike Eagle*

3 sqn with F-16C/D *Fighting Falcon*

##### COMBAT SEARCH & RESCUE

1 sqn with HH-60G *Pave Hawk*

##### TANKER

1 sqn with KC-135R *Stratotanker*

##### TRANSPORT

1 sqn with C-130J-30 *Hercules*

2 sqn with Gulfstream III/IV (C-20B/H); Gulfstream V (C-37A); Learjet 35A (C-21A)

## Air Mobility Command (AMC)

Provides strategic and tactical airlift, air-to-air refuelling and aeromedical evacuation. 1 active air force (18th); 12 wg and 1 gp

### FORCES BY ROLE

#### TANKER

- 4 sqn with KC-10A *Extender*
- 9 sqn with KC-135R/T *Stratotanker* (+2 sqn with personnel only)

#### TRANSPORT

- 1 VIP sqn with B-737-200 (C-40B); B-757-200 (C-32A)
- 1 VIP sqn with Gulfstream III/IV (C-20B/H)
- 1 VIP sqn with VC-25 *Air Force One*
- 2 sqn with C-5M *Super Galaxy*
- 10 sqn with C-17A *Globemaster III*
- 4 sqn with C-130H *Hercules* (+1 sqn personnel only)
- 3 sqn with C-130J-30 *Hercules* (+1 sqn personnel only)
- 1 sqn with Gulfstream V (C-37A)
- 2 sqn with Learjet 35A (C-21A)

## Air Education and Training Command

1 active air force (2nd), 10 active air wg and 1 gp

### FORCES BY ROLE

#### TRAINING

- 1 sqn with C-17A *Globemaster III*
- 1 sqn with C-130H *Hercules*
- 1 sqn with C-130J-30 *Hercules*
- 4 sqn with F-16C/D *Fighting Falcon*
- 3 sqn with F-35A *Lightning II*
- 1 sqn with KC-135R *Stratotanker*
- 5 (flying trg) sqn with T-1A *Jayhawk*
- 10 (flying trg) sqn with T-6A *Texan II*
- 10 (flying trg) sqn with T-38C *Talon*
- 1 UAV sqn with MQ-1B *Predator*

### EQUIPMENT BY TYPE

**AIRCRAFT** 1,442 combat capable

**BBR** 139: 61 B-1B *Lancer* (2 more in test); 20 B-2A *Spirit* (1 more in test); 58 B-52H *Stratofortress* (2 more in test)

**FTR** 275: 106 F-15C *Eagle*; 10 F-15D *Eagle*; 159 F-22A *Raptor*

**FGA** 868: 211 F-15E *Strike Eagle*; 466 F-16C *Fighting Falcon*; 116 F-16D *Fighting Falcon*; 75 F-35A *Lightning II*

**ATK** 160 A-10C *Thunderbolt II*

**EW** 14 EC-130H *Compass Call*

**ISR** 41: 2 E-9A; 4 E-11A; 2 OC-135B *Open Skies*; 26 U-2S; 5 TU-2S; 2 WC-135 *Constant Phoenix*

**ELINT** 22: 8 RC-135V *Rivet Joint*; 9 RC-135W *Rivet Joint*; 3 RC-135S *Cobra Ball*; 2 RC-135U *Combat Sent*

**AEW&C** 31: 24 E-3B/C *Sentry*; 7 E-3G *Sentry*

**C2** 4 E-4B

**TKR** 160: 130 KC-135R *Stratotanker*; 30 KC-135T *Stratotanker*

**TKR/TPT** 59 KC-10A *Extender*

**CSAR** 22 HC-130J/N/P *Combat King/Combat King II*

**TPT** 358: **Heavy** 206: 5 C-5B/C *Galaxy* (being converted to C-5M); 31 C-5M *Super Galaxy*; 170 C-17A *Globemaster III*; **Medium** 107 C-130H/J/J-30 *Hercules*; **Light** 21: 4 Beech 1900C (C-12J); 17 Learjet 35A (C-21A); **PAX** 24: 2 B-737-700 (C-40B); 4 B-757-200 (C-32A); 5 Gulfstream III (C-20B); 2 Gulfstream IV (C-20H); 9 Gulfstream V (C-37A); 2 VC-25A *Air Force One*

**TRG** 1,128: 178 T-1A *Jayhawk*; 444 T-6A *Texan II*; 506 T-38A *Talon*

### HELICOPTERS

**CSAR** 67 HH-60G *Pave Hawk*

**TPT** • **Light** 62 UH-1N *Huey*

**UAV** 339+

**CISR** • **Heavy** 304: 110 MQ-1B *Predator*; 194 MQ-9A *Reaper*

**ISR** • **Heavy** 35+: 3 EQ-4B; 31 RQ-4B *Global Hawk*; 1+ RQ-170 *Sentinel*

**AD** • **SAM** • **MANPAD** FIM-92 *Stinger*

### MSL

**AAM** • **IR** AIM-9 *Sidewinder*; **IIR** AIM-9X *Sidewinder II*;

**SARH** AIM-7M *Sparrow* **ARH** AIM-120B/C **AMRAAM**

**ASM** AGM-65D/G *Maverick*; AGM-130A; AGM-176 *Griffin*

**LACM** **Strategic** AGM-86B (ALCM); **Tactical** AGM-86C

(CALCM); AGM-86D (penetrator); AGM-158 **JASSM**;

AGM-158B **JASSM-ER**

**ARM** AGM-88A/B **HARM**

**EW** MALD/MALD-J

### BOMBS

**Laser-guided** GBU-10/12/16 *Paveway II*, GBU-24 *Paveway III*

**INS/GPS guided** GBU 31/32/38 **JDAM**; GBU-54 **Laser JDAM**; GBU-15 (with BLU-109 penetrating warhead or Mk84); GBU-39B **Small Diameter Bomb** (250lb); GBU-43B **MOAB**; GBU-57A/B **MOP**; Enhanced *Paveway III*

## Reserve Organisations

**Air National Guard** 105,000 reservists (incl 4,250 active)

### FORCES BY ROLE

#### BOMBER

- 1 sqn with B-2A *Spirit* (personnel only)

#### FIGHTER

- 5 sqn with F-15C/D *Eagle*

- 1 sqn with F-22A *Raptor* (+1 sqn personnel only)

#### FIGHTER/GROUND ATTACK

- 11 sqn with F-16C/D *Fighting Falcon*

#### GROUND ATTACK

- 4 sqn with A-10C *Thunderbolt II*

#### ISR

- 3 sqn with E-8C **J-STARS** (mixed active force and ANG personnel)

#### COMBAT SEARCH & RESCUE

- 2 sqn with HC-130P/N *Combat King*

- 1 sqn with MC-130P *Combat Shadow*

- 3 sqn with HH-60G *Pave Hawk*

#### TANKER

- 17 sqn with KC-135R *Stratotanker* (+1 sqn personnel only)

- 3 sqn with KC-135T *Stratotanker*

#### TRANSPORT

- 1 sqn with B-737-700 (C-40C)

- 4 sqn with C-17A *Globemaster* (+2 sqn personnel only)

- 14 sqn with C-130H *Hercules* (+1 sqn personnel only)

- 1 sqn with C-130H/LC-130H *Hercules*

- 2 sqn with C-130J-30 *Hercules*

- 1 sqn with Learjet 35A (C-21A)

- 1 sqn with WC-130H *Hercules*

**TRAINING**

- 1 sqn with C-130H *Hercules*
- 1 sqn with F-15C/D *Eagle*
- 4 sqn with F-16C/D *Fighting Falcon*

**COMBAT/ISR UAV**

- 4 sqn with MQ-1B *Predator*
- 2 sqn with MQ-9A *Reaper* (+4 sqn personnel only)

**EQUIPMENT BY TYPE****AIRCRAFT** 477 combat capable

**FTR** 131: 92 F-15C *Eagle*; 19 F-15D *Eagle*; 20 F-22A *Raptor*  
**FGA** 276: 254 F-16C *Fighting Falcon*; 22 F-16D *Fighting Falcon*

**ATK** 72 A-10C *Thunderbolt II*

**ISR** 13 E-8C J-STARS

**ELINT** 11 RC-26B *Metroliner*

**CSAR** 9 HC-130P/N *Combat King*

**TKR** 172: 148 KC-135R *Stratotanker*; 24 KC-135T *Stratotanker*

**TPT** 218: **Heavy** 34 C-17A *Globemaster III*; **Medium** 179: 134 C-130H *Hercules*; 23 C-130J/J-30 *Hercules*; 10 LC-130H *Hercules*; 4 MC-130P *Combat Shadow*; 8 WC-130H *Hercules*; **Light** 2 Learjet 35A (C-21A); **PAX** 3 B-737-700 (C-40C)

**HELICOPTERS** • **CSAR** 17 HH-60G *Pave Hawk*

**UAV** • **CISR** • **Heavy** 51: 35 MQ-1B *Predator*; 16 MQ-9A *Reaper*

**Air Force Reserve Command** 67,100 reservists (incl 2,700 active)

**FORCES BY ROLE****BOMBER**

- 1 sqn with B-52H *Stratofortress* (personnel only)

**FIGHTER**

- 2 sqn with F-22A *Raptor* (personnel only)

**FIGHTER/GROUND ATTACK**

- 2 sqn with F-16C/D *Fighting Falcon* (+2 sqn personnel only)

**GROUND ATTACK**

- 1 sqn with A-10C *Thunderbolt II* (+2 sqn personnel only)

**ISR**

- 1 (Weather Recce) sqn with WC-130J *Hercules*

**AIRBORNE EARLY WARNING & CONTROL**

- 1 sqn with E-3B/C *Sentry* (personnel only)

**COMBAT SEARCH & RESCUE**

- 1 sqn with HC-130P/N *Combat King*
- 2 sqn with HH-60G *Pave Hawk*

**TANKER**

- 4 sqn with KC-10A *Extender* (personnel only)
- 6 sqn with KC-135R *Stratotanker* (+2 sqn personnel only)

**TRANSPORT**

- 1 (VIP) sqn with B-737-700 (C-40C)
- 2 sqn with C-5B *Galaxy* (+1 sqn personnel only)
- 1 sqn with C-5M *Super Galaxy* (personnel only)
- 2 sqn with C-17A *Globemaster* (+9 sqn personnel only)
- 8 sqn with C-130H *Hercules*
- 1 sqn with C-130J-30 *Hercules*
- 1 (Aerial Spray) sqn with C-130H *Hercules*

**TRAINING**

- 1 (aggressor) sqn with A-10C *Thunderbolt II*; F-15C/E *Eagle*; F-16 *Fighting Falcon*; F-22A *Raptor* (personnel only)

- 1 sqn with A-10C *Thunderbolt II*

- 1 sqn with B-52H *Stratofortress*

- 1 sqn with C-5A *Galaxy*

- 1 sqn with F-16C/D *Fighting Falcon*

- 5 (flying training) sqn with T-1A *Jayhawk*; T-6A *Texan II*; T-38C *Talon* (personnel only)

**COMBAT/ISR UAV**

- 2 sqn with MQ-1B *Predator*/MQ-9A *Reaper* (personnel only)

**ISR UAV**

- 1 sqn with RQ-4B *Global Hawk* (personnel only)

**EQUIPMENT BY TYPE****AIRCRAFT** 97 combat capable

**BBR** 18 B-52H *Stratofortress*

**FGA** 53: 49 F-16C *Fighting Falcon*; 4 F-16D *Fighting Falcon*

**ATK** 55 A-10C *Thunderbolt II*

**ISR** 10 WC-130J *Hercules* (Weather Recce)

**CSAR** 6 HC-130P/N *Combat King*

**TKR** 70 KC-135R *Stratotanker*

**TPT** 110: **Heavy** 40: 6 C-5A *Galaxy*; 16 C-5B *Galaxy*; 18 C-17A *Globemaster III*; **Medium** 66: 56 C-130H *Hercules*; 10 C-130J-30 *Hercules*; **PAX** 4 B-737-700 (C-40C)

**HELICOPTERS** • **CSAR** 15 HH-60G *Pave Hawk***Civil Reserve Air Fleet**

Commercial ac numbers fluctuate

**AIRCRAFT** • **TPT** 517 international (391 long-range and 126 short-range); 36 national

**Air Force Stand-by Reserve** 16,858 reservists

Trained individuals for mobilisation

**US Special Operations Command**

**(USSOCOM)** 63,150; 6,550 (civilian)

Commands all active, reserve and National Guard Special Operations Forces (SOF) of all services based in CONUS.

**Joint Special Operations Command**

Reported to comprise elite US SF, including Special Forces Operations Detachment Delta ('Delta Force'), SEAL Team 6 and integral USAF support.

**US Army Special Operations Command**  
34,100**FORCES BY ROLE****SPECIAL FORCES**

- 5 SF gp (4 SF bn, 1 spt bn)
- 1 ranger regt (3 ranger bn; 1 cbt spt bn)

**MANOEUVRE****Aviation**

- 1 (160th SOAR) regt (4 avn bn)

**COMBAT SUPPORT**

- 1 civil affairs bde (5 civil affairs bn)
- 2 psyops gp (3 psyops bn)

**COMBAT SERVICE SUPPORT**

- 1 (sustainment) log bde (1 sigs bn)

**EQUIPMENT BY TYPE**

**APC** • **PPV** 640 M-ATV

**HELICOPTERS**

- MRH** 50 AH-6M/MH-6M *Little Bird*

**TPT 130:** Heavy 68 MH-47G *Chinook*; **Medium** 62 MH-60K/L/M *Black Hawk*

#### UAV

**CISR** • Heavy 12 MQ-1C *Gray Eagle*

**ISR** • **Light** 29: 15 XPV-1 *Tern*; 14 XPV-2 *Mako*

**TPT** • Heavy 28 CQ-10 *Snowgoose*

### Reserve Organisations

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#### Army National Guard

##### FORCES BY ROLE

##### SPECIAL FORCES

2 SF gp (3 SF bn)

#### Army Reserve

##### FORCES BY ROLE

##### COMBAT SUPPORT

2 psyops gp

4 civil affairs comd HQ

8 civil affairs bde HQ

36 civil affairs bn (coy)

### US Navy Special Warfare Command 9,850

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#### FORCES BY ROLE

##### SPECIAL FORCES

8 SEAL team (total: 48 SF pl)

2 SEAL Delivery Vehicle team

#### EQUIPMENT BY TYPE

SF 6 DDS

#### Naval Reserve Force

##### SPECIAL FORCES

8 SEAL det

10 Naval Special Warfare det

2 Special Boat sqn

2 Special Boat unit

1 SEAL Delivery Vehicle det

### US Marine Special Operations Command (MARSOC) 3,000

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#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF regt (3 SF bn)

##### COMBAT SUPPORT

1 int bn

##### COMBAT SERVICE SUPPORT

1 spt gp

### Air Force Special Operations Command (AFSOC) 16,200

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#### FORCES BY ROLE

##### GROUND ATTACK

1 sqn with AC-130U *Spectre*

2 sqn with AC-130W *Stinger* II

##### TRANSPORT

3 sqn with CV-22B *Osprey*

1 sqn with DHC-8; Do-328 (C-146A)

2 sqn with MC-130H *Combat Talon*

3 sqn with MC-130J *Commando* II

3 sqn with PC-12 (U-28A)

#### TRAINING

1 sqn with M-28 *Skytruck* (C-145A)

1 sqn with CV-22A/B *Osprey*

1 sqn with HC-130J *Combat King* II; MC-130J *Commando* II

1 sqn with HC-130P/N/J *Combat King/Combat King* II; MC-130H *Combat Talon* II; MC-130J *Commando* II

1 sqn with Bell 205 (TH-1H *Iroquois*)

1 sqn with HH-60G *Pave Hawk*; UH-1N *Huey*

#### COMBAT/ISR UAV

1 sqn with MQ-1B *Predator*; MQ-9 *Reaper*

1 sqn with MQ-9 *Reaper*

#### EQUIPMENT BY TYPE

##### AIRCRAFT 27 combat capable

**ATK** 27: 2 AC-130J *Ghostrider*; 13 AC-130U *Spectre*; 12 AC-130W *Stinger* II

**CSAR** 4: 2 HC-130N *Combat King*; 1 HC-130P *Combat King*; 1 HC-130J *Combat King* II

**TPT** 93: **Medium** 44: 20 MC-130H *Combat Talon* II; 24 MC-130J *Commando* II; **Light** 49: 9 Do-328 (C-146A); 4 M-28 *Skytruck* (C-145A); 36 PC-12 (U-28A)

**TILT-ROTOR** 46 CV-22A/B *Osprey*

##### HELICOPTERS

**CSAR** 3 HH-60G *Pave Hawk*

**TPT** • **Light** 34: 24 Bell 205 (TH-1H *Iroquois*); 10 UH-1N *Huey*

**UAV** • **CISR** • **Heavy** 40: 10 MQ-1B *Predator*; 30 MQ-9 *Reaper*

### Reserve Organisations

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#### Air National Guard

##### FORCES BY ROLE

##### ELECTRONIC WARFARE

1 sqn with C-130J *Hercules*/EC-130J *Commando Solo*

##### ISR

1 sqn with Beech 350ER *King Air* (MC-12W *Liberty*)

##### TRANSPORT

1 flt with B-737-200 (C-32B)

#### EQUIPMENT BY TYPE

##### AIRCRAFT

**EW** 3 EC-130J *Commando Solo*

**ISR** 13 Beech 350ER *King Air* (MC-12W *Liberty*)

**TPT** 5: **Medium** 3 C-130J *Hercules*; **PAX** 2 B-737-200 (C-32B)

#### Air Force Reserve

##### FORCES BY ROLE

##### TRAINING

1 sqn with AC-130U *Spectre* (personnel only)

1 sqn with M-28 *Skytruck* (C-145A) (personnel only)

##### COMBAT/ISR UAV

1 sqn with MQ-9 *Reaper* (personnel only)

### Cyber

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The DoD Cyber Strategy, released in 2015, named cyber as the primary strategic threat to the US, 'placing it above terrorism' for the first time since 9/11. The US has well-developed cyber capabilities, and there are military cyber elements within each service branch, under US

Cyber Command (itself under US Strategic Command), co-located with the NSA. The NSA director also heads Cyber Command. Main force units are: US Army Cyber Command (ARCYBER); Fleet Cyber Command (the US 10th Fleet); 24th Air Force; and Marine Force Cyber Command. The DoD began building a Cyber Mission Force (CMF) in 2012. The CMF will consist of 133 teams, organised across three objectives: Cyber Protection Forces will defend DoD networks; National Mission Forces will defend the US and its interests against cyber attacks of significant consequence; and Combat Mission Forces will support combatant commands by generating integrated cyberspace effects in support of operational plans and contingency operations. High-level DoD cyber exercises include the defence-focused *Cyber Flag* series and the *Cyber Guard* series, which involves broader actors from across government and includes CNI scenarios.

In October 2012, President Barack Obama signed Presidential Policy Directive 20, the purpose of which was to establish clear standards for US federal agencies in confronting threats in cyberspace. This document was made public in the Snowden leaks. It is notable for the distinction it draws between defensive and offensive cyber operations. According to PPD-20, the US 'shall identify potential targets of national importance where [offensive cyber-effects operations] can offer a favourable balance of effectiveness and risk as compared with other instruments of national power, establish and maintain [offensive cyber-effects operations] capabilities integrated as appropriate with other US offensive capabilities, and execute those capabilities in a manner consistent with the provisions of this directive'. PPD 20 states that presidential approval is required for any cyber operations with 'significant consequences'.

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## DEPLOYMENT

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### AFGHANISTAN

**NATO** • *Operation Resolute Support* 6,834; 1 div HQ; 2 div HQ (fwd); 1 Lt inf bde HQ; 1 air aslt bde HQ; 2 inf bn; 2 para bn; 1 cbt avn bde

**US Central Command** • *Operation Freedom's Sentinel* 3,000

#### EQUIPMENT BY TYPE

F-16C/D *Fighting Falcon*; EC-130H *Compass Call*; C-130 *Hercules*; AH-64 *Apache*; OH-58 *Kiowa*; CH-47 *Chinook*; UH-60 *Black Hawk*; HH-60 *Pave Hawk*; RQ-7B *Shadow*; MQ-1 *Predator*; MQ-9 *Reaper*

### ALBANIA

OSCE • Albania 1

### ARABIAN SEA

**US Central Command** • Navy • 5th Fleet: 1 DDGHM; 1 LHD; 1 LPD; 1 LSD

**Combined Maritime Forces** • TF 53: 1 AE; 2 AKE; 1 AOH; 3 AO

### ARUBA

**US Southern Command** • 1 Forward Operating Location

### ASCENSION ISLAND

**US Strategic Command** • 1 detection and tracking radar at Ascension Auxiliary Air Field

### ATLANTIC OCEAN

**US Northern Command** • US Navy: 6 SSBN; 25 SSGN; 1 SSN; 5 CVN; 10 CGHM; 13 DDGDM; 11 DDGM; 4 FFH; 3 PCO; 3 LHD; 3 LPD; 5 LSD

### AUSTRALIA

**US Pacific Command** • 180; 1 SEWS at Pine Gap; 1 comms facility at Pine Gap; 1 SIGINT stn at Pine Gap

**US Strategic Command** • 1 detection and tracking radar at Naval Communication Station Harold E Holt

### BAHRAIN

**US Central Command** • 3,250; 1 HQ (5th Fleet); 2 AD bty with MIM-104E/F *Patriot* PAC-2/3

### BELGIUM

**US European Command** • 1,200

### BOSNIA-HERZEGOVINA

OSCE • Bosnia and Herzegovina 7

### BRITISH INDIAN OCEAN TERRITORY

**US Strategic Command** • 550; 1 Spacetrack Optical Tracker at Diego Garcia; 1 ground-based electro optical deep space surveillance system (*GEODSS*) at Diego Garcia

**US Pacific Command** • 1 MPS sqn (MPS-2 with equipment for one MEB) at Diego Garcia with 5 logistics and support ships; 1 naval air base at Diego Garcia, 1 support facility at Diego Garcia

### CAMEROON

**US Africa Command** • 300

### CANADA

**US Northern Command** • 130

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 6

### COLOMBIA

**US Southern Command** • 50

### CUBA

**US Southern Command** • 750 (JTF-GTMO) at Guantánamo Bay

### CURACAO

**US Southern Command** • 1 Forward Operating Location

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 3

### DJIBOUTI

**US Africa Command** • 1,200; 1 tpt sqn with C-130H/J-30 *Hercules*; 1 spec ops sqn with MC-130H; PC-12 (U-28A); 1 CSAR sqn with HH-60G *Pave Hawk*; 1 naval air base

### EGYPT

MFO 692; 1 ARNG recce bn; 1 ARNG spt bn

### EL SALVADOR

**US Southern Command** • 1 Forward Operating Location (Military, DEA, USCG and Customs personnel)

### ETHIOPIA

**US Africa Command** • some MQ-9 *Reaper*

### GERMANY

**US Africa Command** • 1 HQ at Stuttgart

**US European Command** • 40,450; 1 Combined Service HQ (EUCOM) at Stuttgart–Vaihingen



US Army 25,100

#### FORCES BY ROLE

1 HQ (US Army Europe (USAREUR)) at Heidelberg; 1 SF gp; 1 cav SBCT; 1 armd recce bn; 1 arty bn; 1 (hvy cbt avn) hel bde; 1 int bde; 1 MP bde; 1 sigs bde; 1 spt bde; 1 (APS) armd bde eqpt set

#### EQUIPMENT BY TYPE

M1 *Abrams*; M2/M3 *Bradley*; *Stryker*, M109; M777; M270 MLRS; AH-64 *Apache*; CH-47 *Chinook*; UH-60 *Black Hawk*  
US Navy 500  
USAF 13,900

#### FORCES BY ROLE

1 HQ (US Air Force Europe (USAFE)) at Ramstein AB; 1 HQ (3rd Air Force) at Ramstein AB; 1 ftr wg at Spangdahlem AB with 1 ftr sqn with 24 F-16C/D *Fighting Falcon*; 1 tpt wg at Ramstein AB with 16 C-130J-30 *Hercules*; 2 Gulfstream (C-20H); 9 Learjet (C-21A); 1 C-40B  
USMC 950

### GREECE

**US European Command** • 380; 1 naval base at Makri; 1 naval base at Soudha Bay; 1 air base at Iraklion

### GREENLAND (DNK)

**US Strategic Command** • 130; 1 AN/FPS-132 Upgraded Early Warning Radar and 1 Spacetrack Radar at Thule

### GUAM

**US Pacific Command** • 5,500; 4 SSGN; 1 MPS sqn (MPS-3 with equipment for one MEB) with 4 Logistics and Support vessels; 1 tpt hel sqn with MH-60S; 1 AD bty with THAAD; 1 air base; 1 naval base

### HAITI

UN • MINUSTAH 5

### HONDURAS

**US Southern Command** • 370; 1 avn bn with CH-47F *Chinook*; UH-60 *Black Hawk*

### INDIAN OCEAN

**US European Command** • **US Navy** • 6th Fleet: 1 DDGGM

### IRAQ

**US Central Command** • *Operation Inherent Resolve* 3,500; 1 inf div HQ; 1 mne coy; 1 atk hel coy with AH-64D *Apache*; MQ-1B *Predator*

### ISRAEL

**US Strategic Command** • 1 AN/TPY-2 X-band radar at Mount Keren

### ITALY

**US European Command** • 11,360

US Army 3,900; 1 AB IBCT(-)

US Navy 3,600; 1 HQ (US Navy Europe (USNAVEUR)) at Naples; 1 HQ (6th Fleet) at Gaeta; 1 MP sqn with 9 P-3C *Orion* at Sigonella

USAF 3,850; 1 ftr wg with 2 ftr sqn with 21 F-16C/D *Fighting Falcon* at Aviano

USMC 10

### JAPAN

**US Pacific Command** • 50,000

US Army 2,300 1 SF gp; 1 avn bn; 1 SAM regt

US Navy 19,600; 1 HQ (7th Fleet) at Yokosuka; 1 base at Sasebo; 1 base at Yokosuka

#### EQUIPMENT BY TYPE

1 CVN; 3 CGHM; 3 DDGGM; 5 DDGM; 1 LCC; 4 MCO; 1 LHD; 1 LPD; 2 LSD

USAF 12,400

#### FORCES BY ROLE

1 HQ (5th Air Force) at Okinawa – Kadena AB; 1 ftr wg at Misawa AB with (2 ftr sqn with 22 F-16C/D *Fighting Falcon*); 1 wg at Okinawa – Kadena AB with (2 ftr sqn with 27 F-15C/D *Eagle*; 1 tkr sqn with 15 KC-135R *Stratotanker*; 1 AEW&C sqn with 2 E-3B *Sentry*; 1 CSAR sqn with 10 HH-60G *Pave Hawk*); 1 tpt wg at Yokota AB with 10 C-130H *Hercules*; 3 Beech 1900C (C-12J); 1 Spec Ops gp at Okinawa – Kadena AB with (1 sqn with 5 MC-130H *Combat Talon*; 1 sqn with 5 MC-130J *Commando II*); 1 ISR sqn with RC-135 *Rivet Joint*

USMC 15,700

#### FORCES BY ROLE

1 Marine div (3rd); 1 ftr sqn with 12 F/A-18D *Hornet*; 1 tkr sqn with 12 KC-130J *Hercules*; 2 tpt sqn with 12 MV-22B *Osprey*

**US Strategic Command** • 1 AN/TPY-2 X-band radar at Shariki; 1 AN/TPY-2 X-Band radar at Kyogamisaki

### JORDAN

**US Central Command** • *Operation Inherent Resolve* 1 FGA sqn with 12 F-16C *Fighting Falcon*; 1 AD bty with MIM-104E/F *Patriot* PAC-2/3

### KOREA, REPUBLIC OF

**US Pacific Command** • 28,500

US Army 19,200

#### FORCES BY ROLE

1 HQ (8th Army) at Seoul; 1 div HQ (2nd Inf) located at Tongduchon; 1 armd bde; 1 (cbt avn) hel bde; 1 ISR hel bn; 1 arty bde; 1 AD bde

#### EQUIPMENT BY TYPE

M1 *Abrams*; M2/M3 *Bradley*; M109; M270 MLRS; AH-64 *Apache*; OH-58D *Kiowa Warrior*; CH-47 *Chinook*; UH-60 *Black Hawk*; MIM-104 *Patriot*/FIM-92A *Avenger*; 1 (APS) armd bde eqpt set

US Navy 250

USAF 8,800

#### FORCES BY ROLE

1 (AF) HQ (7th Air Force) at Osan AB; 1 ftr wg at Osan AB with (1 ftr sqn with 20 F-16C/D *Fighting Falcon*; 1 atk sqn with 24 A-10C *Thunderbolt II*); 1 ftr wg at Kunsan AB with (2 ftr sqn with 20 F-16C/D *Fighting Falcon*); 1 ISR sqn at Osan AB with U-2S

USMC 250

### KUWAIT

**US Central Command** • 13,000; 1 armd bde; 1 ARNG (cbt avn) hel bde; 1 spt bde; 1 atk sqn with 12 A-10C *Thunderbolt II*; 4 AD bty with MIM-104E/F *Patriot* PAC-2/3; 1 (APS) armd bde set; 1 (APS) inf bde set



**LIBERIA**

UN • UNMIL 4; 4 obs

**MALI**

UN • MINUSMA 10

**MARSHALL ISLANDS**

US Strategic Command • 1 detection and tracking radar at Kwajalein Atoll

**MEDITERRANEAN SEA**

US European Command • US Navy • 6th Fleet: 4 DDGM; 1 LHD; 1 LPD; 1 LSD; 1 LCC

**MIDDLE EAST**

UN • UNTSO 2 obs

**MOLDOVA**

OSCE • Moldova 3

**NETHERLANDS**

US European Command • 380

**NIGER**

US Africa Command • 250

**NORWAY**

US European Command • 1 (APS) SP 155mm arty bn set

**PACIFIC OCEAN**

US Pacific Command • US Navy • 3rd Fleet: 8 SSBN; 17 SSGN; 10 SSN; 4 CVN; 9 CGHM; 18 DDGHM; 6 DDGM; 4 FFHM; 3 MCO; 2 LHD; 1 LHA; 3 LPD; 3 LSD

US Pacific Command • US Navy • 7th Fleet: 1 FFHM

**PERSIAN GULF**

US Central Command • Navy • 5th Fleet: 2 DDGM; 10 PCO; 6 (Coast Guard) PCC

Combined Maritime Forces • CTF-152: 4 MCO; 1 AFSB

**PORTUGAL**

US European Command • 700; 1 spt facility at Lajes

**QATAR**US Central Command • 8,000: 1 bbr sqn with 6 B-1B *Lancer*; 1 ISR sqn with 4 RC-135 *Rivet Joint*; 1 ISR sqn with 4 E-8C *JStars*; 1 tkr sqn with 24 KC-135R/T *Stratotanker*; 1 tpt sqn with 4 C-17A *Globemaster*; 4 C-130H/J-30 *Hercules*; 2 AD bty with MIM-104E/F *Patriot* PAC-2/3

US Strategic Command • 1 AN/TPY-2 X-band radar

**SAUDI ARABIA**

US Central Command • 350

**SERBIA**NATO • KFOR • *Joint Enterprise* 688; elm 1 ARNG armd bde HQ; 1 amrd/armd inf coy

OSCE • Kosovo 4

**SINGAPORE**

US Pacific Command • 180; 1 log spt sqn; 1 spt facility

**SOUTH SUDAN**

UN • UNMISS 6

**SPAIN**

US European Command • 2,100; 1 air base at Morón; 1 naval base at Rota

**THAILAND**

US Pacific Command • 300

**TURKEY**US European Command • 1,550; 1 FGA sqn with 6 F-15C *Eagle*; 6 F-15E *Strike Eagle*; 1 atk sqn with A-10C *Thunderbolt* II; 1 CISR UAV sqn with MQ-1B *Predator* UAV; 1 spec ops flt with AC-130U *Spectre*; 1 air base at Incirlik; 1 support facility at Ankara; 1 support facility at Izmir

US Strategic Command • 1 AN/TPY-2 X-band radar at Kürecik

NATO • *Active Fence*: 2 AD bty with *Patriot* PAC-2/3**UKRAINE**

310 (trg mission)

OSCE • Ukraine 54

**UNITED ARAB EMIRATES**US Central Command • 5,000: 1 ftr sqn with 6 F-22A *Raptor*; 1 FGA sqn with 12 F-15E *Strike Eagle*; 1 ISR sqn with 4 U-2; 1 AEW&C sqn with 4 E-3 *Sentry*; 1 tkr sqn with 12 KC-10A; 1 ISR UAV sqn with RQ-4 *Global Hawk*; 2 AD bty with MIM-104E/F *Patriot* PAC-2/3**UNITED KINGDOM**

US European Command • 9,550

**FORCES BY ROLE**1 ftr wg at RAF Lakenheath with 1 ftr sqn with 24 F-15C/D *Eagle*, 2 ftr sqn with 23 F-15E *Strike Eagle*; 1 ISR sqn at RAF Mildenhall with OC-135/RC-135; 1 tkr wg at RAF Mildenhall with 15 KC-135R *Stratotanker*; 1 CSAR sqn with 8 HH-60G *Pave Hawk*; 1 Spec Ops gp at RAF Mildenhall with (1 sqn with 5 CV-22B *Osprey*; 1 sqn with 5 MC-130J *Commando* II)

US Strategic Command • 1 AN/FPS-132 Upgraded Early Warning Radar and 1 Spacetrack Radar at Fylingdales Moor

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**FOREIGN FORCES**

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Canada 17 USCENTCOM; 303 NORTHCOM (NORAD)

Germany Air Force: trg units with 40 T-38 *Talon*; 69 T-6A *Texan* II; 24 *Tornado* IDS; • Missile trg at Fort Bliss (TX)Netherlands 1 hel trg sqn with AH-64D *Apache*; CH-47D *Chinook*Singapore Air Force: trg units with F-16C/D; 12 F-15SG; AH-64D *Apache*; 6+ CH-47D *Chinook* hel

United Kingdom 630

Table 4 Selected Arms Procurements and Deliveries, North America

Designation	Type	Quantity	Contract Value (Current)	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Canada (CAN)</b>								
<i>Commando</i>	Recce	500	C\$603m (US\$603m)	US	Textron (Textron Marine & Land Systems)	2012	2016	Tactical Armoured Patrol Vehicle. Option for 100 more. Delays have pushed first delivery back to 2016
<i>Harry DeWolf-class</i>	PSOH	6	C\$2.3bn (US\$2.2bn)	CAN	Irving Shipbuilding	2013	2018	For navy. Arctic Patrol Ship Project. Based on NOR coast guard <i>Svalbard</i> -class. Construction begun Sep 2015
<i>Queenston-class</i>	AG	2	C\$2.6bn (US\$2.5bn)	CAN	Vancouver Shipyards	2013	2019	For navy. TKMS design. Joint Support Ship. Option on a third vessel
<i>CH-148 Cyclone</i>	Med tpt hel	28	US\$5bn	US	Lockheed Martin (Sikorsky)	2004	2015	Programme has suffered from delays. Amended contract signed early 2014. Deliveries begun mid-2015
<b>United States (US)</b>								
<i>Stryker</i>	APC (W)	4,507	US\$15.2bn	US	General Dynamics (GDLS)	2001	2002	Multiple variants; includes Double V-Hull versions
<i>Virginia-class</i>	SSN	22	US\$62bn	US	General Dynamics (Electric Boat)/Huntingdon Ingalls Industries	1998	2004	Twelfth of class commissioned late 2015
<i>Gerald R. Ford-class</i>	CVN	2	US\$18.8bn	US	Huntingdon Ingalls Industries	2008	2016	Second of class keel laid in late 2015. Total cost for the two vessels is currently estimated at US\$24.4bn
<i>Zumwalt-class</i>	CGHM	3	US\$11.8bn	US	General Dynamics (BIW)/Huntingdon Ingalls Industries	2008	2015	DDG-1000; first vessel launched 2013; ISD was due 2015. Total cost for the three vessels is currently estimated at US\$12.4bn
<i>Arleigh Burke-class</i>	DDGHM	72	US\$75.2bn	US	General Dynamics (BIW)/Huntingdon Ingalls Industries	1985	1991	Sixty-third of class launched Apr 2015
<i>Freedom/Independence-class</i>	FFHM	21	US\$10.6bn	AUS/US	Austal (Austal USA)/Lockheed Martin	2005	2008	Littoral Combat Ship programme. At least 12 of each design to be built. Fifth of class to commission in late 2015
<i>America-class</i>	LHA	2	US\$6.5bn	US	Huntingdon Ingalls Industries	2007	2014	First vessel commissioned Oct 2014. Second vessel laid down Jun 2014. Third vessel planned
<i>San Antonio-class</i>	LPD	12	US\$19.8bn	US	Huntingdon Ingalls Industries	1996	2002	Enduring problems and delays with class. Tenth vessel launched Nov 2014
LRS-B	Bbr ac	See notes	See notes	US	Northrop Grumman	2015	n.k.	Contract for design phase estimated to cost US\$21.4bn. Includes options for first 21 ac from total planned fleet of 100. Average procurement cost of each ac cannot be greater than US\$550m
<i>F-35A Lightning II</i>	FGA ac	131	US\$23.1bn	US	Lockheed Martin	2007	2011	CTOL variant. 75 delivered as of late 2015

Table 4 **Selected Arms Procurements and Deliveries, North America**

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
F-35B <i>Lightning II</i>	FGA ac	56	US\$12.6bn	US	Lockheed Martin	2008	2011	STOVL variant. 39 delivered as of late 2015
F-35C <i>Lightning II</i>	FGA ac	30	US\$7.6bn	US	Lockheed Martin	2010	2012	CV variant. 17 delivered as of late 2015
P-8A <i>Poseidon</i>	ASW ac	62	US\$13.8bn	US	Boeing	2011	2012	30 delivered as of late 2015. FY16 will fund additional 16
EA-18G <i>Growler</i>	EW ac	150	US\$15.4bn	US	Boeing	2003	2009	114 delivered as of late 2015
KC-46A <i>Pegasus</i>	Tkr ac	7	US\$1.6bn	US	Boeing	2011	2015	First production ac. FY16 would fund additional 12
C-130J-30 <i>Hercules</i>	Med tpt ac	102	US\$8.3bn	US	Lockheed Martin	1995	1999	Deliveries ongoing. FY16 would fund additional 14
CV-22 <i>Osprey</i>	Tilt Rotor ac	50	US\$4.2bn	US	Textron (Bell)/ Boeing	2002	2006	For USAF. 46 delivered as of late 2015
MV-22 <i>Osprey</i>	Tilt Rotor ac	301	US\$25.8bn	US	Textron (Bell)/ Boeing	1997	1999	For USMC. 261 delivered as of late 2015. FY16 would fund additional 19
AH-1Z <i>Viper</i>	Atk hel	76	US\$2.6bn	US	Textron (Bell)	2010	2013	New build
AH-64E <i>Apache</i>	Atk hel	175	US\$4bn	US	Boeing	2010	2011	17 new build and 158 remanufactured. FY16 would fund additional 64 remanufactured
CH-47F/MH-47G <i>Chinook</i>	Hvy tpt hel	480	US\$12.9bn	US	Boeing	2000	2004	238 new build hel and 232 remanufactured. FY16 would fund an additional 12 and 27 respectively
UH-60M/HH-60M <i>Black Hawk</i>	Med tpt hel	766	US\$13.4bn	US	Lockheed Martin (Sikorsky)	2004	2006	Deliveries ongoing
UH-72A <i>Lakota</i>	Lt tpt hel	397	US\$2.5bn	Int'l	Airbus Group (Airbus Group Inc)	2006	2006	FY16 budget would fund additional 28
MH-60R <i>Seahawk</i>	ASW hel	249	US\$10.2bn	US	Lockheed Martin (Sikorsky)	2000	2006	217 delivered by late 2015. FY16 would fund additional 29
MH-60S <i>Knight Hawk</i>	MRH	275	US\$6.7bn	US	Lockheed Martin (Sikorsky)	1999	2002	272 delivered by late 2015
MQ-1C <i>Gray Eagle</i>	Hvy CISR UAV	141	US\$2.6bn	US	General Atomics/ASI	2010	2011	For army. FY16 would fund additional 17
MQ-8C <i>Fire Scout</i>	Hvy ISR UAV	22	US\$487.2m	US	Northrop Grumman	2012	2013	First delivered Jul 2013
MQ-9 <i>Reaper</i>	Hvy CISR UAV	284	US\$4.5bn	US	General Atomics	2001	2002	Deliveries ongoing. FY16 would fund additional 29
RQ-4A/B <i>Global Hawk</i>	Hvy ISR UAV	45	US\$4.7bn	US	Northrop Grumman	1995	1997	Deliveries ongoing
Terminal High-Altitude Area Defense (THAAD)	SAM	36	US\$3.2bn	US	Lockheed Martin	2010	2012	Four batteries delivered (including two RDT&E-funded batteries)

## Chapter Four

# Europe

Across the continent, policymakers were in 2015 preoccupied with the uncomfortable reality that while the threats and risks to European security had increased during recent years, the means to address them had not recovered from the long cycle of defence cuts that began after the Cold War and accelerated after the 2008 financial crisis. Russia's actions had, as they saw it, brought conflict and a disregard for the established principles of peace and security back to a continent where it was thought that such issues were a feature of the past. Meanwhile, the Islamic State of Iraq and al-Sham (ISIS) counts among its personnel many foreign fighters, thousands of whom hold Western passports. Returnees, now trained and experienced, constitute a terrorism threat to Europe. Moreover, continuing conflict in Africa and the Middle East has led to significant refugee flows, as countries in the region edge towards failure and collapse.

Indeed, NATO Secretary-General Jens Stoltenberg said on 22 May 2015 that 'the tectonic plates of Euro-Atlantic security have shifted both in the East and the South'. That same month, Federica Mogherini, the EU's High Representative for Foreign Affairs and Security Policy, argued that 'the security situation in the EU's direct neighbourhood has deteriorated significantly: the concurrency, intensity, frequency and complexity of conflicts and crises in the neighbourhood have increased'.

In fact, concern over 'hybrid' warfare (see *The Military Balance 2015*, pp. 17–20) is likely to trigger closer coordination between NATO and the EU. Its complexity, and the fact that its exponents might apply all levers of power, blending economics, information operations, diplomacy, intelligence, and conventional and irregular military force, has highlighted the requirement for clarity over both indicators of and responses to hybrid warfare. For instance, what are Europe's vulnerabilities and what are the signs that an attack is under way? Then, what framework can be mobilised, and in what way, to craft a timely and effective response? While on most matters, national governments will be expected to lead, the EU and NATO have identified strategic communications and intelligence exchanges as areas that could benefit from closer coordination. However, the next steps are

less clear, and dividing lines remain among EU and NATO member states.

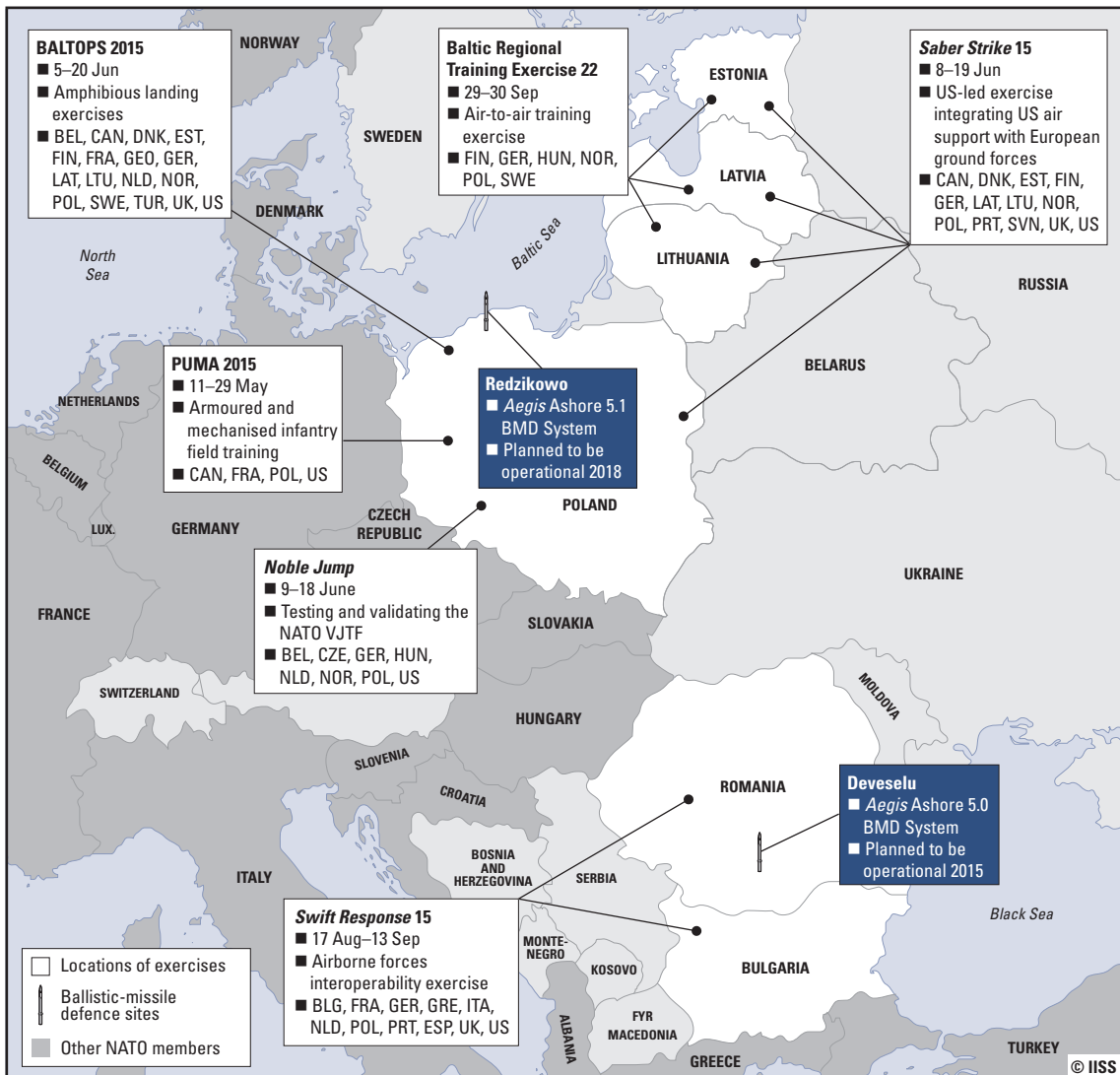
More broadly, security and defence postures continued to shift as threat perceptions evolved. Senior leaders recognised the challenge and tried to instil unity of purpose. General Philip Breedlove, NATO's Supreme Allied Commander – Europe (SACEUR), told the US Senate on 30 April 2015 that NATO's 'top concern is a revanchist Russia'. He later elaborated, saying Russia 'seeks to further weaken and break up the system that we have developed here in Europe over the past decades'. At the same time, in NATO's southern flank, 'non-state actors are directly challenging regional and international order', leading to mass migration and creating a fertile ground for radicalisation.

A key concern was concurrency: Europe was dealing with complex instability in the east and the south simultaneously. As such, the priorities of the continent's governments were not always well aligned: threat perceptions had increased, but they were perceived differently.

### **NATO: towards the Warsaw Summit**

NATO is trying to improve the readiness of its armed forces, reinforce the collective-defence posture and speed up alliance decision-making. Many NATO leaders point out that full implementation of the Readiness Action Plan (RAP), agreed at its 2014 Summit, would amount to the biggest reconfiguration of NATO capabilities since the end of the Cold War. Nonetheless, General Petr Pavel – the new Chairman of NATO's Military Committee – declared on 12 September 2015 that 'The conditions are set for the RAP to be delivered in time for the Warsaw Summit'. At the same time, it is clear that NATO's reorientation overall is a more long-term process that will continue beyond the July 2016 Summit.

NATO's exercise activity has developed both in frequency and scope, in line with the 'reassurance' activities developed for its eastern members in the wake of the Ukraine conflict. Of the roughly 270 exercises that were planned for 2015, approximately half took place in the Alliance's east. In June, exercise *Noble Jump* tested the ability of NATO units



Map 1 NATO's Developing Activities in Eastern Europe

(around 2,900 personnel from nine nations) to rapidly deploy to Zagan, Poland, and operate in the Very High Readiness Joint Task Force (VJTF) format. One of the uncomfortable lessons was that in peacetime – which might well be the condition under which the VJTF is deployed – bureaucracy means that it can take upwards of 14–30 days to move munitions, weapons and equipment across European borders; NATO is seeking to address this issue. Meanwhile, exercise *Trident Juncture*, scheduled for October/November 2015, was intended to again test the VJTF's rapid-deployment capacity and also improve alliance interoperability. However, with up to 36,000 troops, 60 vessels and 140 aircraft taking part, it was

also NATO's largest exercise in more than a decade. Looking forward, the Alliance will need to rediscover some of the skills involved in planning and executing multinational activities of this scale.

NATO is also trying to enhance the NATO Response Force (NRF), which will be increased from 13,000 troops to 40,000. (The VJTF forms the high-readiness element of the NRF.) SACEUR has been given the authority to prepare NRF troops for deployment up to the point of issuing an activation command, a prerogative reserved for the North Atlantic Council. Meanwhile, on 1 September the first six so-called NATO Force Integration Units (NFIU) were inaugurated in Bulgaria, Estonia, Latvia,



Lithuania, Poland and Romania. Numbering about 40–50 personnel, these are intended to aid NATO forces' rapid deployment by working with host nations to identify logistics and transport networks and other support infrastructure. While to some observers the NFIU might constitute a tripwire that would trigger Alliance involvement in case of attack, they are unlikely to mollify the desire of some allies, including the three Baltic states, to have permanent NATO bases on their territory.

On 24 June 2015, NATO defence ministers issued new political guidance for defence planning but left the basic level of ambition unchanged: to be able to conduct two major joint-forces operations and six small operations, or one large collective-defence operation. Poland is leading moves to further reorient the Alliance towards collective-defence tasks, and will likely seek to ensure that the Warsaw Summit includes such discussions. Indeed, Poland's Defence Minister Tomasz Siemoniak stated on 19 May that Poland 'would like to see the Warsaw Summit ...

initiate a new stage in NATO's strategic adaptation ... It is necessary to change the profile of the NATO structure, which will give the Alliance the possibility to react not only at the level of a brigade ... but also at the level of a division ... and a corps.' Poland considers the VJTF insufficient to permanently strengthen NATO's eastern flank and is, in essence, asking allies for support in bringing a formation the size of the enhanced NRF as a whole to the VJTF readiness level.

At the same time, NATO is seeking to strengthen its support for partner countries, such as Jordan and Iraq. The Defence Capacity Building Initiative, which also harks back to the Wales Summit in 2014, seeks to project stability by improving the capabilities of other states to deal with security challenges. For example, the package agreed with Iraq on 31 July 2015, explicitly placed in the context of countering ISIS, covers a wide range of advice including on security-sector reform, countering improvised explosive devices, explosive-ordnance disposal and demining, civil-military planning, cyber defence, military training and civil-emergency planning.

### Turkey takes action

Following the 20 July 2015 terrorist attack on Suruç, a town close to the border with Syria, which killed more than 30 people and has been attributed to the Islamic State of Iraq and al-Sham (ISIS), Turkey began military operations against ISIS positions and the Kurdistan Workers' Party (PKK) on 24 July. It also authorised the US to conduct counter-ISIS strikes from Turkey into Syria and Iraq. On 26 July, Turkey invoked Article IV of the North Atlantic Treaty, under which the Allies agree 'to consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the Parties is threatened'. The then-Turkish foreign minister Mevlüt Çavuşoğlu, aware of the unease with which some of the Allies viewed Ankara's response, suggested Turkey wanted to 'inform our Allies about the measures we are taking and the operations we are conducting against terrorism, as well as to hold consultations with them'. It seemed that the Turkish government was more interested in a NATO statement of solidarity than military support. On the occasion of the NATO Military Committee Conference in Istanbul, the Turkish Chief of Defence General Hulusi Akar argued on 12 September that 'DAESH [ISIS] and PKK/PYD terrorist organisations have been posing a great threat to security in the region ... Emerging threats in NATO's eastern and southern flanks demand the resolve and solidarity of the Allies more than ever.'

### EU: seeking to build a strategy

The European Union has struggled in the past 24 months to create momentum around its Common Security and Defence Policy (CSDP). A summit meeting in December 2013 was supposed to re-energise this policy area, but was instead dominated by the eurozone crisis. Aspirations were confirmed, but little actual progress was made. The European Council meeting of 25–26 June 2015 was supposed to be the next occasion for meaningful debate on defence priorities. In the event, the unfolding refugee crisis and economic travails prevented this. However, a central aspect of the June 2015 Council conclusions was the decision to prepare an EU global strategy on foreign and security policy to be submitted to the European Council by June 2016. A May 2015 'reflection paper', intended to prepare the ground, argued the EU was surrounded by instability, conflict and hybrid challenges and needed to clarify where it was ready to engage and with what means.

The paper was meant to rehearse the argument that a new strategy was needed, so the absence of suggestions about potential actions was not surprising. However, early presentations in autumn 2015 on the forthcoming strategy document suggested that, equally, it might fall short of connecting means and ends. While this might be an attempt to manage

expectations, it might also reflect a growing perception that the global strategy will need to be supported by sector-specific strategies. For example, in the second half of 2015, there was increasing momentum behind the idea of drafting an EU defence white paper to complement the global strategy. While such strategy documents might be useful if they provide guidance for action, the danger might be that the EU could end up in an extended period of self-contemplation while threats and risks are growing.

The European Union Naval Force – Mediterranean (EUNAVFOR–MED) operation, launched on 22 June 2015, underlines the requirement for action. It aims to disrupt human-smuggling and -trafficking networks to save life and prevent further destabilisation. In its first phase, the focus was on patrolling and intelligence collection to support the detection and surveillance of trafficking networks. During the second phase, the EU force would conduct boarding, inspection, seizure and rerouting operations of suspicious vessels. A third phase would allow the disposal of vessels and enabling assets, and allow traffickers and smugglers to be apprehended. A force-generation conference held on 16 September produced sufficient assets for phase two, which was launched on 7 October.

### **OSCE: looking to build on renewed relevance**

While the EU was manoeuvring to position itself better for the future, the Organization for Security and Co-operation in Europe (OSCE) was struggling

to make use of its new-found relevance, thrust upon it by the crisis over Ukraine. Previously at risk of marginalisation, the OSCE was given a new lease of life by the security challenges in eastern Ukraine as decision-makers came to view the organisation's consensual decision-making and inclusive membership – both Russia and the US are members, as is Ukraine – as a suitable framework to prevent further escalation.

The value perceived in its institutional structure, and its long-standing focus on setting standards for behaviour and managing tensions, made it a prime candidate to assume a facilitating role around the Russia–Ukraine crisis. At the same time, its institutional weaknesses – examples include the lack of cooperation from conflict parties and episodes of hostage-taking experienced by its special monitoring mission to Ukraine – mean that decisions will likely continue to be taken in other fora, with the OSCE being an instrument for implementation. An important question for the OSCE will be whether German chairmanship in 2016 can move it forward, bringing closer to the organisation some of the formats used for actual decision-making, such as the so-called Normandy format, which convenes leaders from France, Germany, Russia and Ukraine in telephone calls and meetings.

In 2015, Europe's multilateral security and defence institutions differed in the ways they attempted to address their respective weaknesses. NATO, with the reassurance measures adopted at its 2014 Wales Summit and in particular the RAP (see *The Military*

### **New German defence white paper**

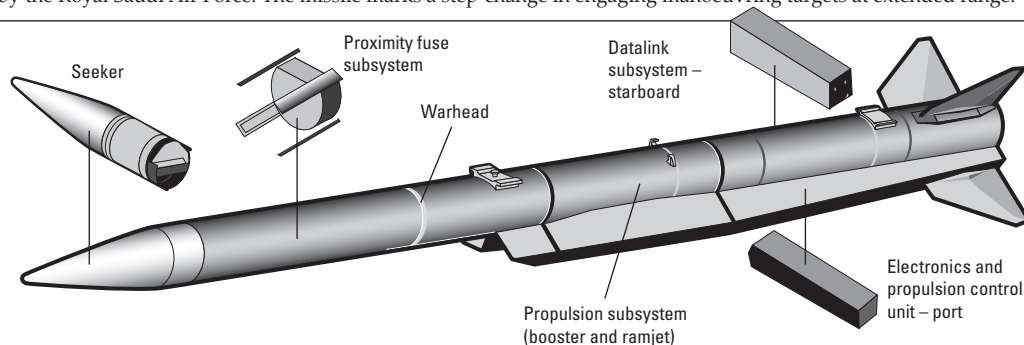
In October 2014, Defence Minister Ursula von der Leyen initiated a government-wide effort to draft a new white paper on security policy and the future of the German armed forces. Expected in summer 2016, the white paper is due to be approved by the full cabinet, and will replace the 2006 edition. The drive for a new document was triggered by changes in the international security environment – Russia's challenge to the European order, hybrid conflict, transnational terrorism and epidemics such as Ebola – and by fundamental changes that affect the German armed forces, such as the reform process after the suspension of conscription. Von der Leyen said the process would allow reflection on Germany's international role, and should set its level of ambition, as well as provide a supporting narrative explaining why and where Berlin would choose to use its armed

forces. At the end of the February–October consultation phase, it seemed reasonable to expect that the white paper would reinforce collective defence as a primary concern.

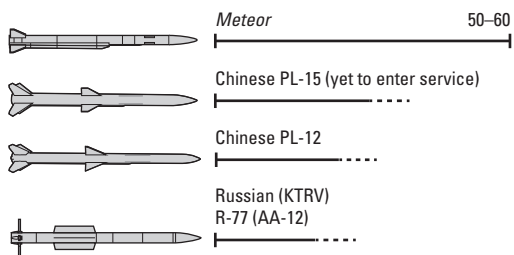
Germany is facing increased expectations regarding its international role. In March 2015, Berlin announced plans for a 6.2% defence-spending increase in 2016–19, amounting to approximately €8 billion (US\$8.9bn) in additional funding. While this was an important political signal, suggesting the era of defence cuts was over, the impact is likely to be limited. On the basis of current economic projections, the percentage of GDP spent on defence would probably be lower in 2019 than in 2015, despite the budget increase. In addition, around €5.5bn (US\$6.1bn) of the additional spending would be directed towards personnel, rather than new investment.

Figure 2 Europe's Meteor Air-to-Air Missile

The MBDA *Meteor* rocket-ramjet-powered air-to-air missile (AAM) is due to enter service in 2016 in Sweden, one of the six-nation partnership supporting development of the missile programme. The partnership is led by the UK and also includes France, Germany, Italy and Spain. The UK launched the project for an AIM-120 AAM successor in 1995, with *Meteor* selected by the UK in 2000. The Swedish Air Force will operationally deploy *Meteor* on its JAS 39C *Gripen* combat aircraft, whilst the UK is planning to introduce the missile on its *Typhoon* aircraft in 2018. *Meteor* has also been ordered by the Royal Saudi Air Force. The missile marks a step-change in engaging manoeuvring targets at extended range.

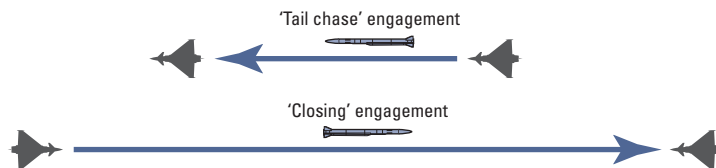


**Estimated closing-engagement no-escape-zone range comparison (nm)**



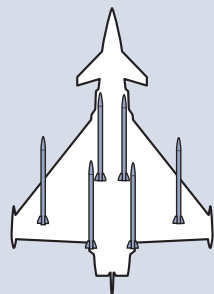
- 'No-escape zone': a volume of space within which a target cannot defeat kinematically a missile, irrespective of avoidance manoeuvres.
- Due to solid-propellant-motor limitations, previous medium- and long-range missiles have been restricted in their ability at extended ranges to engage fighter-size targets capable of executing escape manoeuvres. *Meteor*, however, will still be under ramjet power when it arrives at a target, even at ranges of up to 60 nautical miles.
- While this does not ensure the destruction of the target aircraft, it increases greatly the probability of a successful engagement.

**Rear- and forward-hemisphere engagement**

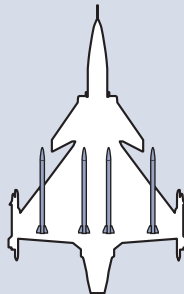


'Closing' engagements can occur at far greater ranges since the missile is not required to run down a receding target that may be travelling at speeds of up to Mach 2.

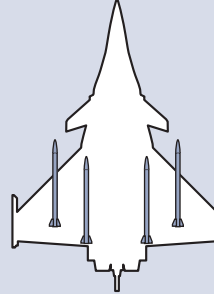
**Notional *Meteor* missile load-out**



- Eurofighter Typhoon**
- Four to six *Meteor*
  - Two Advanced Short-Range Air-to-Air Missiles



- Saab JAS 39C Gripen**
- Four *Meteor*
  - Two Infra-Red Imaging System Tail/Thrust Vector-Controlled missiles



- Dassault Rafale**
- Four *Meteor*
  - Two infra-red MICA multi-mission air-to-air missiles

*Balance 2015*, pp. 58–9), in effect defined a two-year process of adjusting its posture, but less clear is what will animate strategy following the July 2016 Summit. Despite its adjustments since 2014, NATO seemed to lack effective capacity to understand crisis developments through intelligence, surveillance and reconnaissance assets. Past reductions in analytical capability and complicated and time-consuming arrangements for intelligence-sharing all took their toll. The EU has struggled to instil its security ambitions with meaning and is engaged in a loop of consultation, discussion and strategy-writing that will last at least until mid-2016. Meanwhile the OSCE, which had occupied a quiet backwater of the multilateral security environment and was propelled into a central crisis-management role by the Russia–Ukraine crisis, found that while its instruments had some utility, crucial decision-making power was located elsewhere.

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## DEFENCE ECONOMICS

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### Macroeconomics

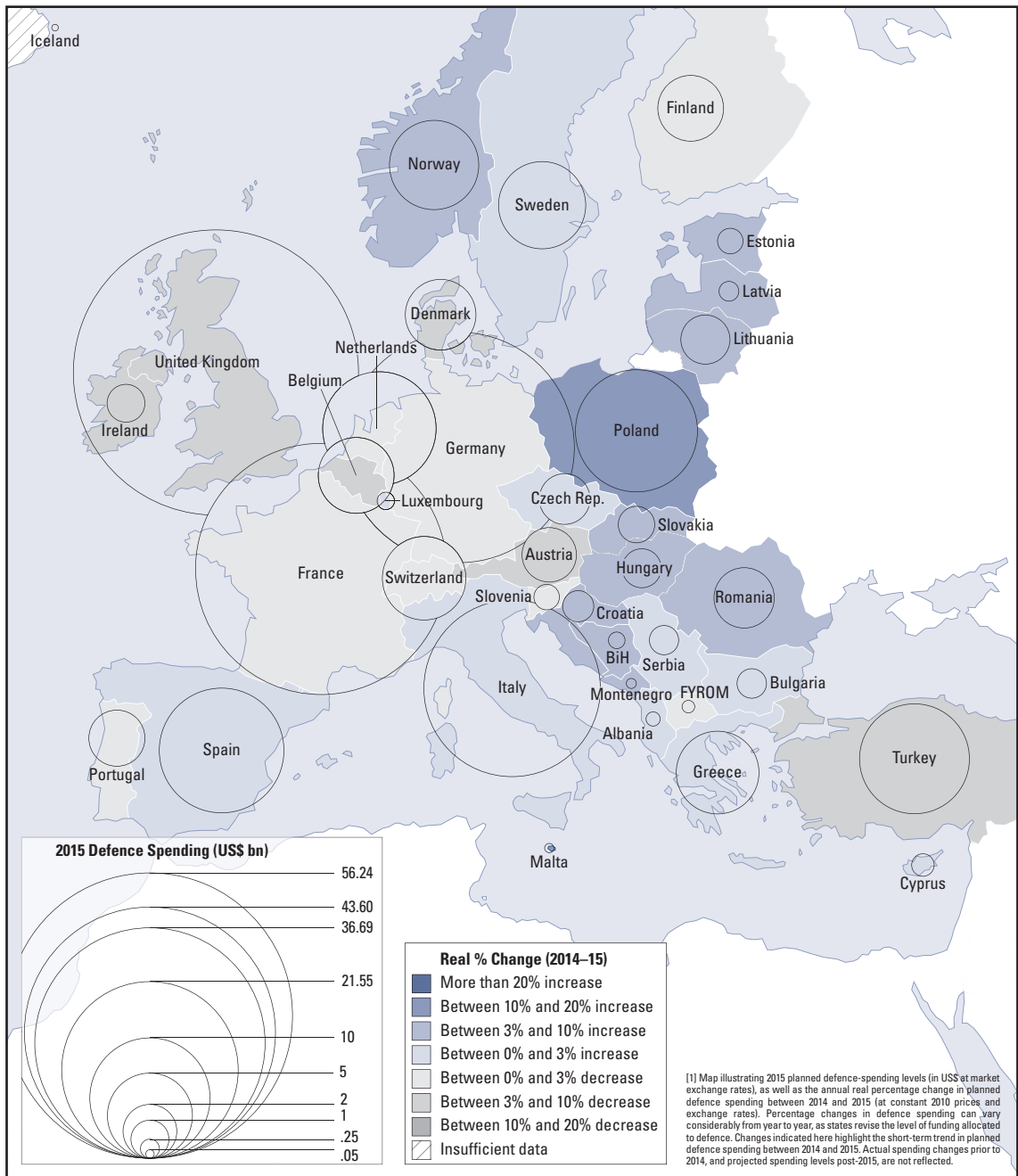
After a period of economic contraction across the continent following the 2008 financial crisis, in 2014 and 2015 Europe experienced low but gradually rising growth rates of around 1%. However, falling global commodity prices combined with persistent output gaps – the estimated percentage difference between actual and potential output – led to heightened disinflationary pressure in much of the region. With a number of Northern European states facing deflation in late 2014 and early 2015, the European Central Bank announced it would begin ‘quantitative easing’ in March 2015, undertaking some €60 billion (US\$66.8bn) in asset purchases each month until at least September 2016. While this had achieved only a limited impact on growth by October, disinflationary pressures abated. A number of states continued to implement structural reforms to revitalise economic performance levels. Portugal and Spain generally instituted measures faster than France and Italy, which remained focused on realising the constitutional reforms required in order for future economic reforms to be more easily adopted. Overall, although high levels of household, bank and sovereign indebtedness continue to act as drags on economic activity in much of the region, improving labour-market conditions and increased consumer confidence (albeit from very low levels) have allowed a limited degree of upward economic momentum to be achieved.

### Defence spending

This qualified improvement in regional economic activity, along with concern over Russia’s actions in eastern Ukraine, has for the first time since 2008 produced a limited amount of fiscal space within European states for increasing defence outlays. Since the onset of the Ukraine crisis in February 2014, just over half of NATO European states (14 of 26) have increased defence-spending levels, two of which have also accelerated procurement timetables. Overall, three waves of European defence-budget increases are discernible since the Ukraine crisis began.

The first wave of budgetary responses came from Baltic and Eastern European states. In March 2014, less than a month into the conflict, Latvia and Lithuania announced their intention to raise defence spending to 2% of GDP by 2020, from 2014 levels of around 0.7% and 0.9% of GDP respectively. Legislation to this effect was passed later in the year: the 2015 Latvian defence budget was 12% higher than 2014 levels, while Lithuania raised 2015 spending by just under one-third in its draft budgetary legislation. In April 2014, the Romanian prime minister made similar calls to raise defence outlays to 2% of GDP by 2017 (up from 1.4% in 2014); in January 2015, major political parties in the Romanian parliament signed an agreement to this effect. Similarly, after six months of negotiations, major political parties in the Czech Republic agreed in September 2014 to increase the country’s defence budget to 1.4% of GDP by 2020 (up from 1% of GDP in 2014), in part to fund an expansion in personnel strength. Elsewhere in Eastern Europe, Hungary announced an 8% increase in its 2015 defence budget, bringing defence spending to around 0.75% of GDP, and aims to augment outlays by 0.1% of GDP annually from 2016 to 2022. Bulgaria aims to raise defence spending from the current 1.3% of GDP to 2% by 2024. Poland has accelerated acquisition timetables in its z1140bn (US\$44bn), ten-year equipment-procurement and -modernisation programme announced in 2013, opting for more rapid purchases of attack helicopters, as well as various unmanned, missile and rocket systems (see pp. 66–72).

A second wave of increases involved Nordic states. In April 2014, Sweden announced a SEK28bn (around US\$4bn) cumulative uptick in planned budgets between 2014 and 2024; this was revised in April 2015 to an approximate SEK10.2bn (around US\$1.5bn) increase between 2016 and 2020. Increments were to be allocated to equipment procurement and modernisation (including the acquisition of more submarines,



Map 2 Europe Regional Defence Spending<sup>1</sup>

Sub-regional groupings referred to in defence economics text: Central Europe (Austria, Czech Republic, Germany, Hungary, Poland, Slovakia and Switzerland), Northern Europe (Denmark, Estonia, Finland, Latvia, Lithuania, Norway and Sweden), Southern Europe (Cyprus, Greece, Italy, Malta, Portugal and Spain), Southeastern Europe (Bulgaria, Romania and Turkey), the Balkans (Albania, Bosnia–Herzegovina, Croatia, FYROM, Montenegro, Serbia and Slovenia) and Western Europe (Belgium, France, Iceland, Ireland, Luxembourg, the Netherlands and the United Kingdom).

combat aircraft and tactical transports, as well as accelerated purchases of medium-range air-defence systems), increasing flying hours for combat aircraft and raising naval crewing levels to allow vessels to spend more time at sea. Norway augmented spending in 2014

by around 2% (around US\$150 million) relative to 2013, mainly to fund increased operational activities. Its 2015 defence budget was a 3.5% increase over 2014 levels.

Western European states constitute the third group that augmented spending in 2014 and 2015.



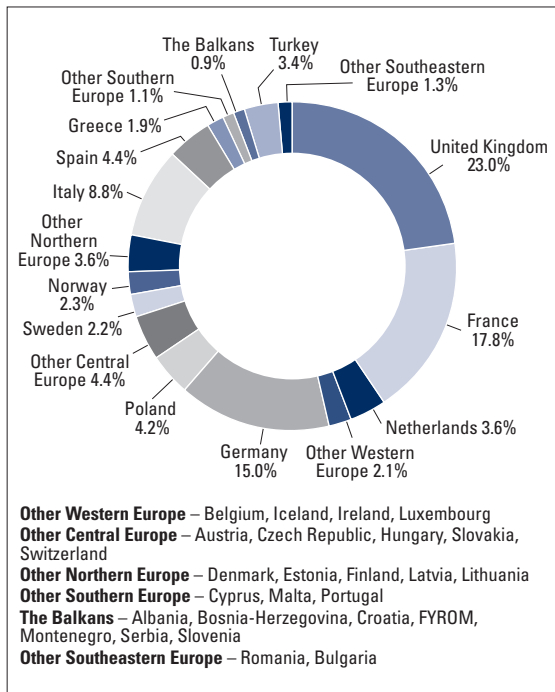


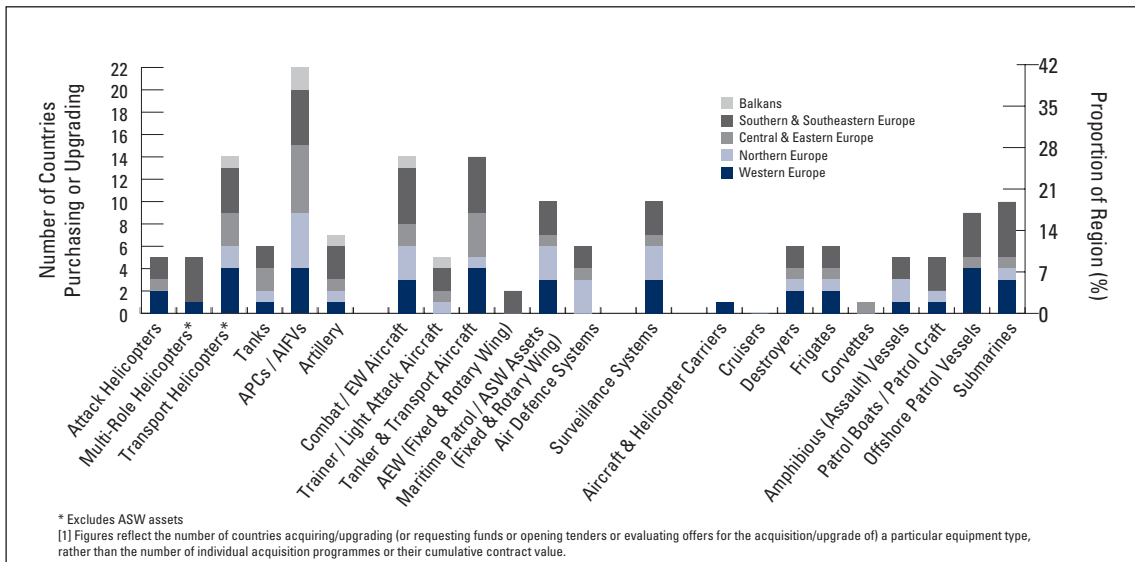
Figure 3 Europe Defence Spending by Country and Sub-Region 2015

In September 2014, the Netherlands announced a €200m (US\$224m) increase for 2016, with a further €100m to be allocated each year from 2017, potentially to 2020. Much of the increase in 2016 is being directed at ground forces, funding the acquisition of further protected patrol vehicles, unmanned systems

and additional heavy transport helicopters, as well as replenishing munitions inventories following operations in Afghanistan. In addition, funds would be used to take into service again a number of medium transport helicopters. In March 2015, Germany announced it would boost its defence budget by 6.2% above 2015 levels between 2016 and 2019 – around €8bn (US\$9bn) cumulatively over the period, to reach an annual outlay of around €35bn (US\$39bn) in 2019 – although in part this increase was achieved by reclassifying defence-ministry civilian-staff redundancy payments from the general budget to the defence budget. These funds will be used to return to frontline service around 100 mothballed main battle tanks (MBTs), and to upgrade them after 2017. After the January 2015 *Charlie Hebdo* attack, France in April 2015 announced it was ring-fencing its 2015 defence budget and that future-years defence budgets – previously planned to remain broadly flat – would rise by €3.85bn (around US\$4.3bn) by 2019, funding a lower level of personnel reductions than initially planned. In November 2015, the UK announced that real-terms defence outlays would increase to 2020, by 0.5% per annum.

Overall, while these additional funds will provide some relief to defence ministries across Europe, the significance of the announced increments should not be overstated. In a number of cases, increases come against a backdrop of crisis-driven spending reductions, while in half of the continent budgets continue to stagnate or fall, both in real terms and as a proportion of GDP, serving to offset increases announced

Figure 4 Europe Selected Procurement & Upgrade Priorities Since 2011<sup>1</sup>



elsewhere. Hence, aggregate real-terms outlays (i.e. after accounting for inflation and exchange-rate fluctuations) in 2015 were the same as their 2014 levels. Even where funding increases have been announced, in a number of cases – such as Germany, France and the Netherlands – the rate of defence-budget growth is lower than current IMF growth projections, meaning that on current trajectories these states will likely be spending around 0.1 percentage points less as a proportion of GDP in 2020 than they were in 2014. Should this situation transpire, it will break pledges made at NATO's 2014 Summit in Wales.

### Procurement

Despite the decline in procurement budgets since the 2008 financial crisis, Europe remains the third-largest defence-spending region in the world, after North America and Asia. As shown in Figure 4, around seven of the 36 regional states analysed (or around 20%) were, on average, active in each of the 21 equipment categories assessed. However, this relatively low level of activity is partly a reflection of the large number of small states in Europe with limited defence budgets (half of the region typically allocates less than US\$2bn to defence).

This masks a high degree of variation in the procurement activity across Europe. Larger economies able to allocate US\$12bn or more on defence each year – the UK, France, Germany, Italy, Spain and Turkey – were most active, undertaking acquisitions or upgrades in 60–75% of equipment categories. Mid-range defence spenders such as Sweden, Norway, the Netherlands and Poland – which all spend US\$7–11bn per year – were active in 30–50% of equipment categories. States allocating US\$2–5bn, including Finland, Denmark, Belgium, Greece, Romania and Portugal, were involved in 15–40% of categories (Switzerland, Austria and the Czech Republic were exceptions), while the 18 or so states allocating less than US\$2bn annually on defence were typically the least active in defence procurement, on average engaged in under 15% of categories analysed (these included the Balkan countries and several Eastern European states such as Slovakia and Hungary).

Regional acquisition priorities since 2011 have involved a broad spectrum of capabilities, including combat aircraft, air-defence and surveillance systems; surface ships, submarines and maritime-patrol/anti-submarine-warfare platforms; as well as armoured vehicles and air-mobility assets including transport aircraft and helicopters.

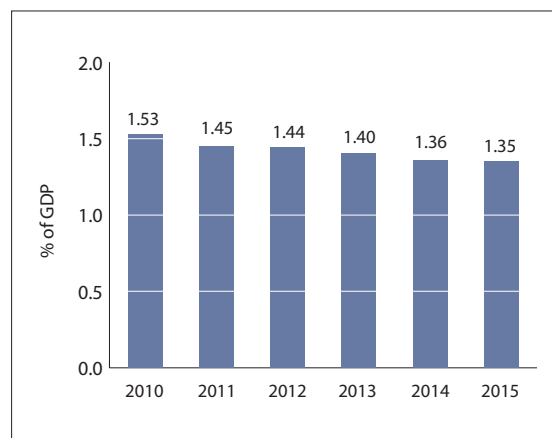


Figure 5 Europe Regional Defence Expenditure as % of GDP

### Defence industry

There were a number of notable developments in the European defence-industrial landscape in 2014 and 2015. The most significant was the signing of an agreement in July 2015 to merge France's state-owned armoured-vehicle manufacturer, Nexter, with Germany's family-controlled Krauss-Maffei Wegmann (KMW). This will lead to the creation of an equally co-owned joint venture holding company based in the Netherlands, for the time being named KANT – 'KMW and Nexter Together'. The deal marked a significant step towards the long-awaited consolidation of the European land sector, which has suffered from industrial overcapacity for more than a decade, but which had resisted previous attempts at integration. The tie-up, proposals for which were first announced in May 2014, made sense from a number of perspectives. Both firms were similarly sized, meaning that the merger would be one of equals, making it less likely that one would dominate the other in terms of organisational culture or decision-making power. Secondly, unlike an all-German KMW–Rheinmetall merger – preferred in some quarters of Germany – KANT's binational character leaves open better prospects for further pan-European consolidation in the land sector. By contrast, the German-only company produced by a KMW–Rheinmetall merger might have proved too dominant an industry player for other European states to permit its absorption of their medium-sized firms.

Official approval of the deal from the French, German, EU and US authorities (where KMW has a subsidiary) was expected in early 2016. Once merged,

KANT will focus on coordinating now-joint assets, such as sharing areas of technological comparative advantage and expanding the company's future product range through joint research and development. One potentially major project in this regard is the development of a successor to KMW's highly successful *Leopard 2* tank. The merger is also envisaged to bring about cost reductions by realising economies of scale, for example through the joint purchase of raw materials as well as capital goods used for manufacturing. However, any rationalisation of existing KMW and Nexter production facilities, or their respective workforces, will not commence until at least five years after the merger completes. The combined entity would have total annual sales of around €2bn (US\$2.2bn) and an order book worth some €6.5bn (US\$7.2bn), making it the largest land-systems manufacturer in Europe. However, aside from the potential benefits highlighted above, questions remain over the precise export restrictions under which KANT will have to operate: until now, France and Germany have tended to place differing restrictions on defence exports.

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## FRANCE

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France's defence resources in 2014 and 2015 were stretched more than at any point since 1945. The terrorist attack on the magazine *Charlie Hebdo* in January 2015 led to the deployment of over 10,000 troops to public areas across the country. Then, in November, multiple terror attacks in Paris led to further domestic deployments, and a state of emergency. During the year, instead of pulling back from overseas missions as some in government were advocating, the Hollande administration did more: French forces were deployed in as many as eight combat theatres, more than at any time in recent history.

The navy was in 2015 involved in five theatres (North Atlantic, Black Sea, Mediterranean, Indian Ocean and Gulf of Guinea), though it was configured – according to Defence Minister Jean-Yves Le Drian – to undertake only two missions simultaneously. The air force was stretched, with pilots and support crew operating at high tempo, and UAV operators in short supply. In December 2014, the air force was reported to be operating at 90% of its available capacity – mainly across the Sahel region, in Iraq and from Djibouti – reflecting both the tempo of operations and limitations in the availability of the combat air fleet. The role of the army, meanwhile, was shifted

to encompass homeland protection, with thousands of troops standing guard over almost 700 locations (mainly synagogues and mosques) across France. These deployments dipped in mid-year, but were reinforced after the November attacks.

## International deployments

France continued to support NATO's efforts, announced at the Wales Summit in September 2014, to increase military capacity and build up forces on the Alliance's eastern flank. In 2015, French E-3F *Sentry* airborne early warning and control (AEW&C) aircraft flew over Eastern Europe, while maritime patrol craft and frigates participated in intelligence gathering. Early in the year, France deployed tanks, armoured fighting vehicles and 300 troops to Poland as part of the US–France–Poland exercise *Puma*; later, France fully embedded into NATO's Integrated Air and Missile Defence structure. French combat aircraft are due to again deploy to the NATO Baltic Air Policing mission in 2016, and France has also committed to participating in the future NATO rapid-reaction force. Although official statements, such as a March 2015 speech by Le Drian in Berlin, continued to stress a belief in the EU's Common Security and Defence Policy, the reality is that France's deployments have been primarily driven by national priorities, with significant commitments to NATO.

French military forces remain deployed beyond Europe. Under *Opération Chammal* – France's contribution to allied air activities in Iraq against ISIS – by February 2015 Paris had deployed around 850 aircrew and support staff to the Middle East to support surveillance and strike missions. These were carried out by *Rafale*, *Mirage 2000N* and *Mirage 2000D* combat aircraft, in conjunction with an E-3F AEW&C aircraft and an *Atlantique 2* maritime-patrol aircraft, flying from the French base in Abu Dhabi and a base in Jordan. In February 2015, around 100 military advisers were despatched on various tasks in the region including helping to train the Iraqi army's 6th Division and Iraq's Counter-Terrorism Service. The aircraft carrier *Charles de Gaulle* and its 2,600-strong naval force were also deployed the same month. For a time, until the carrier group departed in April, that deployment brought the total number of French forces involved in the fight against ISIS to almost 3,500. However, *Chammal* has provoked debate in France, with questions raised over its effectiveness and strategic objectives.

Before the November attacks, the top priority in 2015 for France had been *Opération Barkhane*, with its 3,500 troops deployed to conduct operations against terrorist and insurgent groups in cooperation with Chad, Burkina Faso, Mali, Mauritania and Niger (see *The Military Balance 2015*, pp. 64–66). *Barkhane* is a long-term mission to which Paris has deployed substantial military assets, including armoured vehicles; helicopters; logistics vehicles; transport and combat aircraft; and UAVs. A number of old forward-operating bases in the northern stretches of the Sahel have also been revived: Atar in Mauritania, Madama in Niger and Faya-Largeau in Chad. The objective is to kill or capture as many jihadi fighters as possible, to destroy their arms caches (over 60 had been discovered by October 2015) and to disrupt logistics routes emanating from southern Libya. The mission relies heavily on US assistance for transport, refuelling, and intelligence, surveillance and reconnaissance (ISR), while US special forces also operate closely with their French counterparts.

However, the growing presence of ISIS across the Sahel has added to the threat from al-Qaeda in the Islamic Maghreb, and there is some concern in Paris that missions might broaden further. Even with advanced ISR and rapid-response capacities, French personnel numbers and capabilities are limited given the vast area of operations. The *Barkhane* mission commander, General Jean-Pierre Palasset, has recognised that his forces are ‘at the limits of military efficiency’.

At the same time, France has been involved in several other theatres, contributing a frigate and maritime-patrol aircraft to the EU’s anti-piracy *Operation Atalanta* in the Gulf of Aden. France’s base in Djibouti, where that aircraft was based, was reduced to around 1,600 personnel in 2015. In addition, almost 900 French troops are assigned to the UN Interim Force in Lebanon (UNIFIL). Meanwhile, *Opération Sangaris* continued in the Central African Republic, where French forces were deployed to help prepare for a larger African Union force as part of the MISA international support mission. *Sangaris* quietly wound down throughout 2015, falling to around 900 personnel by September.

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## DEFENCE ECONOMICS

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France’s 2013 Defence White Book foresaw many of the crises that face the country two years later, but their scale, seriousness and simultaneity were unan-

anticipated. As a consequence, the 2014–19 defence budget was revised upwards by nearly €4 billion (US\$4.5bn), a significant signal at a time when the need for public-expenditure cuts was the government’s main imperative.

Finance Minister Michel Sapin was looking for a 3% cut in all areas of public spending, yet as early as December 2014 it was clear that the overall defence budget of €31.4bn (US\$35bn) earmarked for 2015 would fall short by some €2.3bn (US\$2.6bn). Moreover, the projected income in ‘exceptional receipts’, from the sale of defence assets, in particular the €3bn (US\$3.3bn) anticipated windfall from the marketing of telecommunications frequencies, stalled as no obvious buyer had emerged. The state considered extraordinary measures, selling off logistical equipment on aircraft, ships and helicopters to a private company and then leasing it back.

But after the *Charlie Hebdo* attacks, the *Loi de Programmation Militaire* (LPM), so painstakingly negotiated only a year previously, was revised significantly upwards. Two weeks after the terrorist attacks, President François Hollande decided that of the 34,000 positions that had been scheduled to be cut by 2019, 18,500 would be saved. The services pressed to increase the figure to 23,000. In April 2015, arbitrating in favour of Le Drian against Sapin and insisting that there could be no haggling over the security of the country, Hollande increased the defence budget by €3.85bn (US\$4.3bn) for 2016–19 (the army had requested €8bn).

The *Charlie Hebdo* attacks led to the first real halt in the downward trajectory of France’s defence budget since the end of the Cold War. Furthermore, it was the first time ever that a French LPM – introduced during the late 1950s – had been revised upwards. Parliament adopted the new 2014–19 LPM incorporating these changes in June 2015. However, despite this resource reprieve, the armed forces remained stretched, because most of the increments were allocated towards future personnel and equipment acquisition, rather than current operations.

### *Procurement and industry*

As a result of increased financial resources, the armed forces recovered almost all the budget cuts they had suffered in the two previous LPMs, although all of the restructuring projects outlined in 2013–14 – including regiment disbandments and base closures – are to continue. Moreover, two-thirds of the additional €3.8bn (US\$4.3bn) is due to be spent after the end of



Hollande's term (€1bn, US\$1.1bn, in 2018 and €1.5bn, US\$1.7bn, in 2019). Meanwhile, some unexpected savings were made as a result of falling energy prices and booming defence exports.

Domestic 'protection operations' are due to be allocated €2.8bn (US\$3.1bn) of new funds, with the operational land force planned to increase from 66,000 to 77,000 troops, and €1bn (US\$1.1bn) directed towards equipment and investment (including seven additional *Tiger* attack helicopters and six NH-90 transport helicopters). Introduction of the A400M into service continues to be slower than planned; and France in late-year requested two C-130Js and two KC-130Js for the air force. Additional resources were allocated to intelligence (more Earth-observation satellites and US-sourced *Reaper* UAVs), cyber defence (several hundred new posts) and special forces. It was also envisaged that the army would take on some 12,000 recruits in 2015, rather than the 7,000 planned.

These developments, along with notable export successes in 2014 and 2015, have boosted France's defence industry. In the naval sector, in 2015 Egypt purchased an *Aquitaine*-class destroyer originally built for the French Navy; the second foreign customer for the French FREMM programme build after Morocco. (Italy also builds FREMM vessels.) Significantly, the LPM 2014–19 calls for the construction of six anti-submarine and two air-defence FREMM variants, with the need for a further three envisaged. French shipbuilding company DCNS has also accelerated production of the 4,000-tonne intermediate-sized frigate programme (*Frégate de Taille Intermédiaire*), in the belief that the design has considerable export potential. However, DCNS's principal focus is on Australia's submarine requirement, potentially worth some €34bn (US\$38bn). In May 2015, Canberra shortlisted three companies to tender (DCNS, ThyssenKrupp and Mitsubishi). Meanwhile, the saga of the *Mistral* sale to Russia finally concluded in August 2015, when an agreement was reached to cancel the controversial deal. France agreed to reimburse Russia for the full cost of the ships (€1.2bn, or US\$1.3bn) and avoided a potentially huge penalty. In September, France agreed to sell the vessels to Egypt for €950 million (US\$1.1bn), although the deal would not include technology transfer.

The fortunes of aerospace firm Dassault have also improved, after a number of failed export bids. In early 2015, the *Rafale* was selected as the preferred aircraft for a combat-aircraft requirement in India (36 aircraft) and in Egypt and Qatar (24 aircraft each). By

late 2015, the first Egyptian aircraft had been delivered, and negotiations continued over the Qatar and India requirements. This interest in *Rafale* has led to optimism about further exports, but should all these contracts materialise they will require Dassault to carefully manage production schedules and delivery dates; years of only domestic orders would likely have resulted in a production line operating at low capacity. *Rafale* is also in the running for possible combat-aircraft programmes in Canada, Belgium, Indonesia, Malaysia and the United Arab Emirates. For Dassault, a growing order book will, in the medium term, make the *Rafale* more cost competitive, as serial production costs decrease.

The Middle Eastern interest in French defence products followed the opening offered to Paris by changing perceptions of US regional policy. Disputes between Washington and Riyadh over the Iran nuclear deal and US policy over both Syria and Yemen have enabled a French rapprochement with Gulf states, Saudi Arabia in particular. Moreover, while US dependence on Gulf oil is decreasing, France continues to import almost 40% of its oil from the region. Under Hollande, France has focused on links with oil producers Algeria, Egypt and Saudi Arabia. In parallel, Hollande and Foreign Minister Laurent Fabius took a tough line on the Iran nuclear deal, arguing that there should be no sanctions relief before there is clear evidence of Tehran's compliance. France's growing regional stature was evident when Hollande was invited to attend the Gulf Cooperation Council summit in Riyadh in May 2015; the first Western leader accorded that honour. France is seen as a strong and reliable new partner in the region.

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## POLAND

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Since its accession to NATO in 1999, Poland has grown into a significant European military power. This is primarily the result of the transformation of its armed forces and their participation in expeditionary operations, including in Iraq and Afghanistan. On the eve of the Ukraine conflict in 2014, Poland unveiled its largest ever defence-procurement programme and reconfigured its military-command structure. But Poland's growing significance in European defence also owes much to recent security developments on Europe's eastern flank. Indeed, since hostilities erupted in Ukraine, Poland has sought to reorientate NATO away from crisis management and back towards an emphasis on a deterrent posture; it is



likely to use its position as the host of the 2016 NATO Summit to further this objective.

### Defence policy

Polish defence thinking is driven by the country's strategic culture and history. This includes the role of Central and Eastern Europe as both a target of and a barrier against Soviet expansionism, and the view that the US is a bastion of the democratic and liberal order in Europe. These factors, when combined with the nation's turbulent history, have a significant effect on both the current and long-term choices made by Polish leaders. This can be seen in Poland's predominant threat perceptions, and the way in which the country manages its alliances.

Even after the end of the Cold War, Poland was concerned by the possibility of military confrontation with Russia. Though this was long considered unlikely, it began to be openly discussed after the conflict in Ukraine began. The probability of a military clash with Russia is still seen as low, though higher than before. The most likely security challenge is regarded as a 'hybrid warfare' scenario: military action remaining below the threshold of conflict, but combined with the manipulation of energy dependencies, information warfare and criminal activities. Unease over Russian capability enhancements in the enclave of Kaliningrad will only focus Poland's concerns.

There is, however, a disparity between the threat perception seen in Poland's principal strategic documents and the importance of the Russian threat in Polish security policy. Both the 2014 National Security Strategy (NSS) and the 2013 White Book on National Security attempt to present a rounded approach to security. The 2014 NSS is intended to provide policy guidance and views asymmetric threats (such as terrorism, WMD proliferation, organised crime and cyber attack) and non-military security challenges (for example, disruptions to energy supply, migration and corruption) as equally important. Yet, some Polish security analysts argue that state resilience to these threats is low. Indeed, issues like cyber defence have only recently started to be viewed as a security challenge affecting many sectors and, as a consequence, an area that requires an integrated response, including reaching out to the private sector and combining military and civilian expertise. One exception is, perhaps, energy security; significant investment has been made in this sector with the aim of improving security of supply, with measures

including the construction of underground storage containers, interconnections with neighbouring EU countries and a liquid-natural-gas port in Świnoujście.

The NSS only briefly discusses the possibility of military conflict involving Poland, indicating that conventional war is the least probable threat. But the document is clear in its analysis of Poland's security environment. It points to the need to 'preserve a significant and lasting commitment of the United States in European security matters' within the context of the US rebalance towards the Asia-Pacific; the weakening political cohesion of NATO and the EU; the erosion of arms controls and military confidence-building mechanisms; and the growth of authoritarian regimes in Europe as key challenges. It also assesses the principal tasks for Poland's armed forces as ensuring state capacity to: defend and counter aggression; maintain readiness to carry out territorial defence; 'conduct a strategic defence operation' on Polish territory; participate in anti-terrorist actions at home and abroad; contribute to a defence operation abroad, in line with NATO Article V; and undertake intelligence tasks.

### Alliance relationships

NATO is the cornerstone of Poland's alliance policy. It is seen as providing the strongest security guarantee against potential Russian aggression; indeed, this was the core motivation for joining NATO. However, continued US engagement in European security is seen as a central indicator of the Alliance's effectiveness, combined with robust, multinational military structures that serve both as a deterrent and a potential means of reinforcing national defence capacity in a time of crisis.

Meanwhile, Warsaw does not consider the EU through a hard security lens, but rather as constituting an indirect security guarantee. Likewise, it is unlikely that Warsaw sees the Common Security and Defence Policy (CSDP) as a tool that can help it directly address Polish security challenges. Polish participation in CSDP military and civilian missions (in Bosnia-Herzegovina, the Central African Republic, Chad, the Democratic Republic of the Congo, Georgia and Mali), together with proposals to enhance the EU's capacity to run autonomous military operations by establishing a permanent HQ, were driven mostly by Warsaw's desire to strengthen its political position in the Union.

Naturally, Central and Eastern Europe occupy a special position. Warsaw traditionally envisaged a 'Baltic-Black Sea' bloc to counterbalance Russian

influence and in this context, the Visegrad Group (or V4: Poland, Czech Republic, Slovakia and Hungary) is a key regional construct promoted by Warsaw. The V4 has had successes at the political level, such as facilitating the accession of its members to NATO and the EU. The group also has ambitions in the field of defence cooperation. Some common armaments projects failed before they were launched, but there have also been positive developments. In 2014, the V4 defence ministers signed the 'Long Term Vision of the Visegrad Countries on Deepening Their Defence Cooperation', which set ambitions for 'practical cooperation in capability development, procurement and defence industry' as well as establishing multinational units and running cross-border activities; and education, training and exercises. The V4 Battlegroup – part of the post-2004 EU Battlegroups concept – remains a central plank of Visegrad defence cooperation; it is scheduled to be on standby in the first half of 2016, with the certification exercise (*Common Challenge* 2015) scheduled to take place in Poland in late November 2015.

Poland has proposed that some elements of the battlegroup form a standing capability, reflected in a June 2015 announcement by the group that: 'We expect the V4 Defence Ministers to use lessons learned from the preparation of the V4 EU Battlegroup to further work on the establishment of a permanent V4 Modular Force which could be used as our joint regional contribution to NATO and EU capacities.' This would also have value in bolstering the broader military capacity of V4 members, some of which have faced significant budget reductions since 2008, not least through the joint training, planning and logistics support activity – and 'advanced ground combat vehicle project' – identified earlier in April 2015 at the Visegrad Group's meeting in Tomášov, Slovakia.

Moreover, on 24 July 2015, Poland, Lithuania and Ukraine signed a technical and legal agreement to finally move forward on a planned joint brigade, first proposed in 2009 and initially scheduled for 2011. The brigade, planned to be some 4,500-strong, now aims to reach initial operating capability in early 2016 and will have its headquarters in Lublin, Poland. Polish Minister of Defence Tomasz Siemoniak stated at the time that the brigade was also to be seen as 'a form of support and aid to our Ukrainian friends in reform of their armed forces'.

Poland sees US security engagement in Europe as vital, but there has until recently been only a modest defence component to this special ('strategic')

partnership, notwithstanding Polish participation in coalition operations in Iraq in 2003, or the decision to buy F-16 combat aircraft. US–Poland military cooperation deepened after the US committed to build a modified ballistic-missile-defence (BMD) site in Redzikowo, as part of the NATO missile-defence programme. Equipped with the *Aegis* Ashore system, but using smaller SM-2 Block IIA interceptors, the site is planned to be operational by 2018. When completed, it will constitute a much-sought-after US military asset in Poland, with significant – to the Polish perception – geopolitical importance. Likewise, the American air detachment at the Łask air base, deployed in 2012 for joint training on F-16s, and the 2015 decision on pre-positioning US armoured vehicles in Polish bases, are both seen in Poland more as bilateral security guarantees than solely as means of furthering military cooperation.

### Military transformation

Poland's armed forces are undergoing significant transformation. This process started in 2008 with the suspension of conscription and subsequent professionalisation. The overall size of the force has been set at 100,000, with an additional 20,000-strong National Reserve Force (NSR), a lower-readiness support branch, which may be used only in peacetime.

The most recent reform was to the overall command structure. This was reorganised in order to streamline the chain of command and better enable joint operations. In effect from 1 January 2014, the role of the General Staff was reduced to a strategic-planning function, while command over service branches was instead given to the newly established General Command. Operational Command assumed responsibility for forces on operations (for example, those engaged on NATO air-policing tasks) and those on international engagements.

After the crisis in Ukraine began, there was some discussion about reintroducing conscription to bolster territorial defence. Instead, the armed forces began developing cooperation with civilian militia associations by, for instance, organising paramilitary games, and courses on tactics and marksmanship. So far, these associations have been largely disregarded in national-defence considerations, but they are now starting to be considered as a potential arm of Poland's territorial-defence capability. Moreover, it was also proposed that the NSR be reformed with the aim of transforming it into a more central part of Poland's territorial-defence considerations.

## Force modernisation

Poland's armed forces continue to rely on legacy Soviet systems, despite some modern Western additions. The air force uses F-16 Block 52+ combat aircraft, which are now being integrated with AGM-158 Joint Air-to-Surface Standoff Missiles (the contract was signed in September 2015). Airlift is provided by C-295M, C-130E *Hercules* and three shared C-17

*Globemaster* III's (under NATO's Strategic Airlift Capability programme). The remaining aircraft are Soviet-era airframes. However, 16 of 32 MiG-29s successfully received service-life extensions, and 18 of 32 Su-22M-4s are due to be life-extended by ten years in anticipation of a decision on a replacement.

Likewise, the army boasts only two types of modern vehicles: second-hand *Leopard* 2A4/5 MBTs

Table 5 **Poland: Selected Pre-production Procurement Programmes**

Programme	Company	Current Status	Development started	Planned in-service (date)	Planned numbers	Value (Est.)	Notes
<i>Homar</i> (MRLS)	PGZ-HSW (POL)	Contract negotiations in progress	2007	2018	60	zł2.6bn (US\$688m)	300km range. Production contract expected in late 2015. HSW to work with a foreign company to develop <i>Homar</i>
<i>Orka</i> (SSK)	-	Programme approved	2012	2025	3	zł8bn (US\$2.1bn)	Tender to be released in late 2015. Plan is to arm the boats with LACMs. Potential for ordering with another NATO country
<i>Miecznik</i> (FS)	PGZ (POL)	Contract negotiations in progress	2012	2021	3	zł8.5bn (US\$2.2bn)	Coastal-defence corvettes. Production contract planned for 2016
<i>Czapla</i> (FS)	PGZ (POL)	Contract negotiations in progress	2012	2023	3	zł13.3bn (US\$3.5bn)	Patrol vessel with MCM capability based on <i>Miecznik</i> design. Production contract planned for 2016
Multi-role heli (Med Tpt Hel)	Airbus Helicopters (Int'l)	Contract negotiations in progress	2010	2017	50	zł13.3bn (US\$3.5bn)	H225M selected and has finished trials with Polish MoD. Contract announcement expected late 2015. Planned number reduced from 72 to 50
<i>Kruk</i> (Atk Hel)	-	Technical dialogue ongoing	n.k.	2019	16–32 (1–2 Sqn)	zł4bn (US\$1bn)	Mi-24 replacement. Tender to be launched in 2016. Contract expected in 2017
<i>Wisła</i> (MR SAM)	Raytheon (USA)	Contract negotiations in progress	2012	2025	8 batteries	zł20bn (US\$5.2bn)	PAC-3 selected in early 2015. Production contract expected in 2016
<i>Narew</i> (SR SAM)	PGZ (POL)	Programme approved	2012	2019	19 batteries	zł11bn (US\$2.9bn)	SA-6 and SA-8 replacement. 11 batteries by 2022 and eight more subsequently. PGZ to develop system with foreign company
<i>Poprad</i> (VSR SAM mounted on 4x4)	PGZ-Pit Radwar (POL)	Contract negotiations in progress	2012	2021	77	n.k.	<i>GROM</i> MANPADs mounted onto a 4x4. Production contract expected to be signed before end of 2015
<i>Piorun</i> (MANPADS)	PGZ-Mesko (POL)	In development	2010	2017	486	n.k.	Modernisation of <i>GROM</i>
<i>Zefir</i> (MALE UAV)	-	Full requirements TBC	2012	2019	12	n.k.	Foreign and Polish firms to collaborate in order to make an offer for this requirement. Programme has been delayed
<i>Gryf</i> (Tactical, LE UAV)	-	Full requirements TBC	2012	2017	48	n.k.	Foreign and Polish firms to collaborate in order to make an offer for this requirement. Programme has been delayed
<i>Orlik</i> (Tactical, SE UAV)	-	Negotiations in progress	2012	2016	12	n.k.	Selected UAV to be announced in 2016
<i>Wizjer</i> (Mini-UAV)	-	Negotiations in progress	2012	2017	15	n.k.	Selected UAV to be announced in 2016

acquired from Germany and 8x8 *Rosomak* infantry fighting vehicles (IFVs). The remaining fleet includes Soviet-era tanks, including the PT-91M (a Polish T-72 variant) and the T-72M1, as well as legacy IFVs such as BMP-1 and BRDM-2. Air mobility and close fire-support is provided by legacy Mi-24 and Mi-8/17 helicopters – to be withdrawn by 2019. The navy, which has experienced protracted underinvestment, does not have any equipment developed after 1989. Two *Pulaski*-class frigates donated by the US represent its core capability, though these require ongoing maintenance and costly upgrades, supported by three RBS-15-missile-equipped *Orkan*-class patrol craft. Warsaw's underwater capability comprises four *Sokol*-class and one *Orzel*-class submarine. As a consequence, the Coastal Missile Unit, armed with Kongsberg NSM missiles, takes on most coastal-defence tasks.

The requirement to replace legacy equipment, as well as the need to acquire new capabilities able to meet Poland's strategic objectives, were major drivers of a significant procurement initiative launched in May 2013 – the Technical Modernisation Programme 2013–22 (TMP), intended to fully modernise all branches of Poland's armed forces by the early 2020s (see Table 5).

Air and missile defence is receiving most attention. Air-defence capability currently comprises outdated and obsolete Soviet systems, such as S-200 *Wega*, S-125 *Newa*, SA-6 and SA-8, which have proved hard to keep serviceable with increasing age. Requirements include the *Wista* medium-range project, for which the US *Patriot* was selected in early 2015. This is estimated to cost some US\$4–6bn and is due to reach full operating capability by 2025. The short-range *Narew* programme is projected to cost US\$2–3bn and enter service by 2019. There is also a requirement for very-short-range air-defence systems, both man-portable and on wheeled platforms, to complete tiers of the planned 'Shield of Poland' (*Tarcza Polski*) air-defence network.

Another set of programmes, *Zefyr* and *Gryf*, aim to acquire different classes of armed and unarmed UAVs, ranging from light to medium-altitude, long-endurance versions; these are planned to enter service by 2018. Rotary-wing lift requirements have already started to be addressed: in spring 2015, Poland decided to buy 50 EC-725 *Caracal* multi-role helicopters (including combat search-and-rescue and special-operations variants) to replace its ageing Mi-8/17s. A replacement for the Mi-24 attack heli-

copter is also likely, with the *Kruk* programme having a notional requirement for 28 attack/anti-tank helicopters in service by 2019.

The navy is also undergoing significant modernisation, including the aspiration for three cruise-missile-capable submarines – *Tomahawk* was the system mentioned publicly in 2015 – due in service by 2025, as well as three mine-countermeasure ships (*Kormoran II* project), anti-mine patrol vessels (*Czapla* programme) and three larger coastal-defence vessels (*Miecznik* programme) with anti-ship capability. The army is set to receive modernised *Leopard 2* MBTs and a new generation of multiple-rocket launchers. However, there has been no decision on a future-tracked IFV to succeed the outdated BMP-1. Should these programmes deliver the planned capabilities on time, they will constitute a significant boost for Poland's armed forces, bringing to bear modern systems more interoperable with those of their Western partners.

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## DEFENCE ECONOMICS

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### Defence budget

The Polish defence budget has grown steadily for the last 15 years, enabling the transformation and rearmament of the armed forces. Sustained resource allocations have been made possible by the Act on the Technical Modernisation of the Armed Forces, effective from 2002, which placed a legal obligation on governments to allocate in each annual budget at least 1.95% of GDP to national defence, based on the preceding year's output. Poland's economy has not suffered from recession since the mid-1990s, so the zł32bn (US\$10.2bn) defence allocation in 2014 was more than twice as much as the zł14.8bn (US\$3.6bn) budgeted in 2002.

Although the rate of defence-budget growth is lower when inflation is taken into consideration, it remains significant, constituting an approximate 44% cumulative increase in real terms. Notably, the modernisation act also made it compulsory to spend at least 20% of the defence budget on investment. This provision allowed for the rearmament of the armed forces but forced the reduction of fixed costs, mostly personnel and facilities, in order to create sufficient funds for this investment. In 2002, when the modernisation act was passed, investment accounted for just 12.5% of the defence budget, but by 2014 this had grown to almost 26%. By contrast, personnel costs fell from 54% in 2002 to 48% in 2014, while maintenance

costs (on facilities, munitions, services and spares) fell further, down from 30% in 2002 to around 22% in 2014. The share of the defence budget as a proportion of total governmental outlays also increased, from just under 8% in 2002 to 9.8% in 2014.

Annual defence spending increased by nearly 20% to reach a zł38.3bn (US\$10.3bn) high in 2015, equivalent to 2.27% of GDP. In part, this was because Poland paid the final tranche of zł5.35bn (US\$1.4bn) for F-16 aircraft deliveries. From 2016, spending is meant to remain at 2% of GDP, because of an update made to the modernisation act after the defence-spending pledge agreed at the 2014 NATO Summit in Wales. A significant proportion of spending is allocated to the Technical Modernisation Programme 2013–22, under which Warsaw plans to invest zł140bn (around US\$40bn) in state-of-the-art weapons.

Future Polish defence budgets will be determined by three factors: economic growth, internal spending efficiencies, and required procurement outlays associated with the country's major air and missile-defence acquisition programmes. However, an over-complicated regulatory system and understaffing has hindered Poland's ability to fully utilise the defence funds allocated. Absent further acquisition reform and other measures, Poland may not be able to fully address this situation. Furthermore, recapitalisation of air and missile defence is set to be financed from the general investment budget (the 20% allocation mentioned above) and yearly defence-budget surpluses. This means that the financing for this programme is stable, unless cost overruns mean the project needs funds from the general defence budget; this could, in turn, affect other programmes.

## Defence industry

Poland's defence industry comprises three distinct groups. The first consists of a small number of subsidiaries of the world's major aerospace primes: PZL Warszawa Okęcie (an Airbus subsidiary), PZL-Świdnik (AgustaWestland) and PZL Mielec (Sikorsky). These firms were privatised after 2000 and are now part of their owners' global supply chains, with products ranging from platforms (such as AW149 and S-70i helicopters) to components (C-295M and A400M parts) and subsystems (UH-60 helicopter cabins and engine parts). Independent firms, specialising mainly in military electronics, form the second group. These form a larger set than the first grouping, comprising around 20–30 companies, and are characterised by a high degree of innovation. Many fund

R&D outlays themselves, and offer indigenously developed technologies on the global market. This positioning drives revenues from subcontracting work for large international primes, or through the sale of licences. An example of the former is the development of next-generation routers for Raytheon's *Patriot* system by Teldat. Meanwhile, WB Electronics – whose portfolio includes light UAVs, and communications and fire-control systems – in 2009 sold the licence for the FONET in-vehicle communications system to the US-based Harris Corporation.

The third and largest group consists of state-owned companies. In 2014, these were consolidated into one holding, Polish Armaments Group (*Polska Grupa Zbrojeniowa*, or PGZ). This pool of over 60 individual firms has 17,500 employees and covers land systems, munitions and military electronics. The firms also have significant assets at their disposal, including substantial production facilities, research laboratories and test ranges. They offer a wide product range, including artillery and surveillance radars, very-short-range air-defence systems and armoured vehicles, such as the PT-91 tank and the *Rosomak* IFV.

These state-owned firms are widely regarded as uncompetitive at the European level unless they undergo significant restructuring and are provided with modern technology. They have never participated in European collaborative armaments programmes or developed close links with Western European or US primes. To date, their interactions with foreign partners have been limited to offset agreements and the integration of foreign components and subsystems acquired on the open market onto indigenously produced platforms. Further, they suffer from legacy production issues, limited R&D funds and – most importantly – a shortage of competitive technologies.

Aware of the structural handicaps that characterise its defence-technological and -industrial base, Poland has pursued a consolidation strategy. Previous attempts (such as Bumar/Polish Defence Holding) failed to achieve meaningful results largely because of the technical rather than practical approach to consolidation (resulting in, for example, asset duplication and un-unified management structures). Since 2014, PGZ has assembled nearly all state-owned defence businesses under one umbrella and is expected to integrate individual companies into competency clusters. This is intended to generate savings, eliminate duplication, cease internal competition and



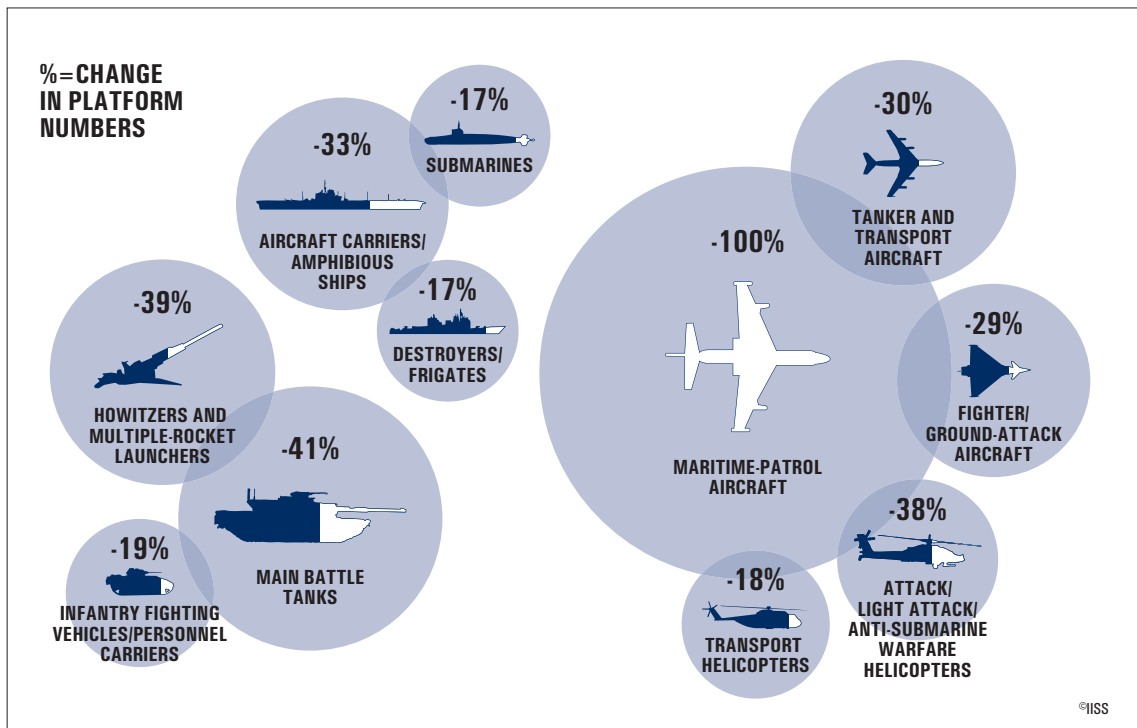


Figure 6 Selected UK Equipment Holding Changes 2010–15

increase interaction with global top primes, many of which might team with PGZ as they bid for the new defence-modernisation programmes. However, as of late 2015, PGZ was still at an early stage of establishing its internal management structures, and had only recently unveiled a general strategy, revealing a continuing reliance on the domestic market and new modernisation programmes.

## UNITED KINGDOM

The United Kingdom retains a broad-spectrum expeditionary military capability, albeit close to critical mass. The November 2015 Strategic Defence and Security Review (SDSR) signaled that increased defence spending would improve military capability – though this would be delivered over the next decade. Nonetheless, the employment of force overseas, particularly ground troops in a combat role, remained inhibited by public, political and media scepticism about the utility of force following the Iraq and Afghan wars.

The number of operations remained high, and this had a significant impact on the Royal Air Force (RAF) in particular. Some 450 troops remained in Kabul, participating in the NATO *Operation Resolute Support*

training and advisory mission. For the first half of 2015, the UK's largest overseas operation was the 1,300-strong military element assisting Sierra Leone's efforts to counter the Ebola outbreak in West Africa. This task force included a logistic ship, *Merlin* helicopters, engineers and medical personnel.

In the Middle East, the UK claimed to be second only to the US in the number of sorties flown against ISIS in Syria and Iraq. The number of UK trainers in Iraq was, however, lower than that of many other US allies. UK training teams, advisers and experts during 2015 also deployed to Ukraine and Nigeria, among other locations, while ships were deployed to assist with search-and-rescue operations in the Mediterranean and as part of the EU's NAVFOR-MED mission to counter migrant-smugglers and traffickers.

Units from all three services took part in NATO reassurance activities in Europe, with plans announced for regular deployments of company-sized land forces to the Baltic states and Poland. There was also a significant increase in RAF interceptions of Russian aircraft in the UK Air Defence Zone. Military cooperation with France developed further in 2015, and the UK broadened its concept of a national Joint Expeditionary Force to that of

an Anglo-French Combined Joint Expeditionary Force (CJEF). Its modest strategic pivot to the Gulf continued in October 2015, when the UK and Bahrain governments began the construction of a permanent UK naval base in the Kingdom.

### Armed forces

The **Army** completed its reorganisation to the Army 2020 force structure and continued its withdrawal from Germany. Modernisation of the armoured-vehicle fleet also continued. A fleet of 589 *Ajax* (formerly *Scout*) armoured vehicles was ordered to replace ageing reconnaissance platforms, and the *Warrior* Capability Sustainment Programme to modernise the army's armoured infantry fighting vehicles continued. But a firm programme to replace the ageing British fleet of obsolete armoured personnel carriers and armoured utility vehicles awaited announcement. There was also an increasing gap between the requirements of modern armoured warfare and the ageing *Challenger 2* main battle tank. It was unclear how much of this gap would be closed by the *Challenger* life-extension programme.

The end of combat deployments to Afghanistan had not reduced the **RAF's** high operational tempo. British involvement in the US-led air campaign against ISIS led to the air force delaying the disbandment of a *Tornado* GR4 squadron, while there was renewed emphasis on developing the *Typhoon's* air-to-surface capability. As of the fourth quarter of 2015, the last of the RAF's GR4 units was due to be disbanded in 2019. Meanwhile, deliveries continued: new *Wildcat* and *Chinook* helicopters were delivered to all three services, and the 12th of 14 *A330 Voyager* tanker-transports was handed over to the RAF in June 2015. By then the RAF had also received five of the planned 22 *A400M* transport aircraft.

The **Royal Navy's** (RN) crucial Type-26 frigate programme progressed slowly, with an £859m (US\$1.3bn) demonstration-phase contract awarded in April 2015. Meanwhile, construction is now under way on all three third-generation *River*-class offshore-patrol vessels, and the third *Astute*-class nuclear-powered attack submarine was delivered. Earlier, in December 2014, the chiefs of the US Navy and the RN unveiled a joint document on a shared vision for combined sea power. It underscored US support for regenerating British carrier capability, with a view to future combined carrier operations. Perhaps more significantly, the RN continued to face the prospect of potentially inadequate personnel numbers to

maintain its operational tasks and plans – especially following the 2014 announcement that both new aircraft carriers, HMS *Queen Elizabeth* and HMS *Prince of Wales*, will be brought into service.

### Defence review: increasing military ambition

Introducing the 23 November SDSR, Prime Minister David Cameron said that the UK needed 'to deter state based threats, tackle terrorism, remain a world leader in cyber security and ensure we have the capability to respond rapidly to crises'. The review confirmed pledges made in the Conservative manifesto to bring both new aircraft carriers into service and retain the continuous-at-sea deterrent, building four new ballistic-missile submarines. Costs for this 'Successor' programme have increased by at least £6bn (US\$9.3bn) to £31bn (US\$47.8bn), with a £10bn (US\$15.4bn) contingency. The review speaks of the current *Vanguard*-class submarines beginning to leave service 'by the early 2030s'; the *Vanguard* boats were due to start retiring in 2024.

The SDSR indicated a willingness to rebuild military readiness and ambition. For example, the Army is returning to its pre-2010 target of generating a division-sized force at six months' notice, instead of the 2010 target of a year's notice. The scale of ambition for a large-scale deployment of a joint force of division size, or air and maritime equivalents, is planned to increase from the current target of 30,000 troops to 50,000 by 2025. Meanwhile, the Army is to increase its readiness by fielding two new 'Strike Brigades'. They will be formed from one of the three existing armoured infantry brigades and an infantry brigade. The recently formed 1st Intelligence Surveillance and Reconnaissance Brigade and 77 Brigade (designed to conduct modern information operations) are both to further develop their capabilities, particularly to counter hybrid warfare. Additionally, special forces are to increase their global covert operations and counter-terrorist capabilities. Though special forces' personnel are unlikely to increase in number, £2bn (US\$3.1bn) is to be invested in improving equipment and helicopter and air support, including retaining 14 C-130J *Hercules* aircraft.

The review confirmed the procurement of all seven *Astute* nuclear submarines and that the six Type-45 destroyers will be retained, meaning that the RN frigate and destroyer fleet will, for now, remain at 19. The new Type-26 fleet will be limited to eight vessels, optimised for anti-submarine warfare, and

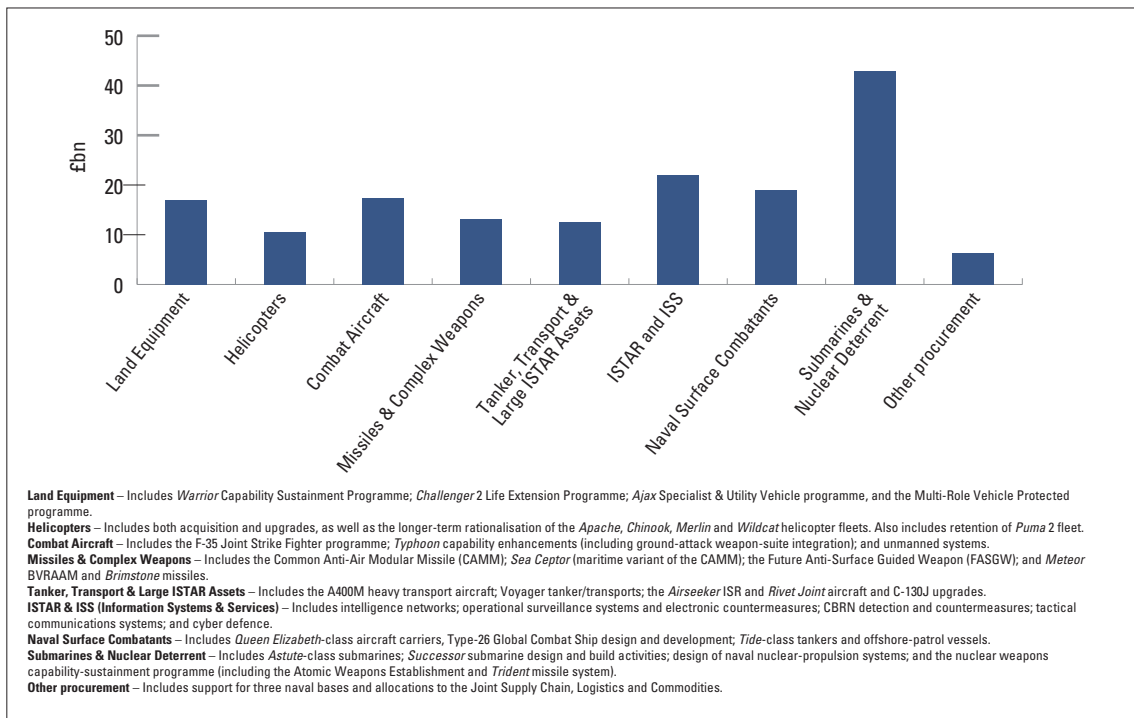


Figure 7 Pre-SDSR UK Equipment Plan 2015–25 Funding Breakdown

though these are to replace Type-23 frigates, their in-service date will be delayed. A new class of lighter general-purpose frigate is to be developed, which could eventually lead to increased numbers. Mine countermeasures vessels are slated to reduce from 15 to 12, though numbers of offshore-patrol vessels and logistics ships will rise. The helicopter carrier HMS *Ocean* will decommission in 2018, with this capability in part provided by one or both aircraft carriers.

Most of the existing equipment programmes are unaffected, though a second squadron of F35 *Lightning II* combat aircraft will be bought in the early 2020s, allowing 24 aircraft to be deployed on an aircraft carrier (the commitment remains to buy 138 in total). The RAF is to receive nine Boeing P-8 maritime-patrol aircraft from 2020. These will support the surface fleet and *Vanguard* submarines, and have a surveillance role over land as well as sea.

Meanwhile, the life of Eurofighter *Typhoon* combat aircraft will be extended, and this will have the effect of increasing the number of front-line *Typhoon* squadrons from five to seven, while the last of the three remaining *Tornado* squadrons will be withdrawn in 2018–19. Airborne reconnaissance capability will be bolstered not only by *Protector* UAVs, but by the extension of the *Sentinel* surveillance aircraft and

the Beechcraft *Shadow* aircraft. Additionally, a new programme for a UK high-altitude long-endurance UAV for surveillance and communications relay was announced.

### Personnel challenges

After the 2015 SDSR, the size of the Army will remain at 82,000, while the RAF is to increase by 400 personnel and the RN by 300. The review lists a range of initiatives under way to modernise pay, accommodation and allowances. But the services are understaffed by more than 4%. Army recruiting is forecasting a 20% shortfall in soldier entrants. The RAF and the RN currently have acute shortages of many key specialists, especially pilots, engineers, technicians, submariners and nuclear experts. The initiative to use US Coast Guard personnel to fill gaps in the RN's engineering staff is under way, with the first personnel now deployed at sea. The SDSR does not acknowledge these shortfalls, nor indicate how they will be addressed. The Ministry of Defence (MoD) is planning that the base salary for the armed forces is to increase by no more than 1% per year for the next four years. As long as the UK economy keeps expanding, salary growth in the private sector will probably exceed this. It is not

clear than the MoD's plans will adequately counter the considerable 'pull' that an expanding economy will exert on the brightest and the best people in the armed forces. The armed forces' ability to recruit and retain personnel of sufficient quality is probably the greatest risk to current and future UK military capability.

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## DEFENCE ECONOMICS

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### Defence-budget uplift

In the five years since the 2010 SDSR there have been significant reductions to the UK defence budget. Defence spending in 2015 was, in real terms, around 19% lower than in 2010: approximately half of this consisted of cuts to the core budget, while the remainder was the product of winding down operations in Afghanistan. Given the considerable capability reductions since 2010 (see Figure 6), a significant element of the defence-related debate before the May 2015 general election was over potential further cuts to defence funding. However, none of the major political parties was willing to explicitly commit to maintaining defence outlays at the NATO target of 2% of GDP, despite the UK pledging to do so at NATO's Summit in Wales in September 2014.

The election of a majority Conservative government resulted in a more benign budgetary picture for the MoD than many anticipated during the campaign, not least because of the defence-related pledges in the Conservatives' election manifesto. As part of an earlier effort between 2010 and 2013 to balance the accounts of the UK's military procurement agency (Defence Equipment and Support, or DE&S), the equipment and support budget was promised a 1% real-terms uplift from 2016 onwards. This enabled the acquisition of seven *Astute*-class submarines, the F-35 Joint Strike Fighter combat aircraft, *Ajax* armoured vehicles and Type-26 frigates (see Figure 7). Taken together, these manifesto pledges and previous long-term acquisition-funding arrangements effectively committed some 70% of the total defence budget,

meaning that much of the defence budget was implicitly 'ring-fenced'.

These commitments were honoured in the chancellor's 'Summer budget' in July 2015, which relaxed the previously planned pace of budgetary consolidation – to reach an overall surplus by FY2019/20 instead of FY2018/19. This provided the fiscal space for the government to announce an annual increase in defence funding to FY2020/21 of 0.5% per year in real terms. This rising trajectory of planned defence allocations effectively fixed the budgetary envelope for the period of the SDSR 2015, some five months before it was set to be released. The 2015 review therefore occurred against a considerably more benign fiscal backdrop than the 2010 SDSR (when, instead of a 0.5% uplift in funding, cuts averaging 2% per annum were required), with more time for the MoD to plan the internal distribution of these predetermined funds.

### Uncertainty over the NATO 2% target

Alongside this real-terms uplift in the Summer budget came a commitment to meet the 'properly measured NATO pledge to spend 2% of national income on defence every year of this decade'. The inclusion of the qualifier 'properly measured' indicated that, at least in part, the 2% of GDP NATO target would be achieved through the reclassification of existing funding previously included under other budget lines – such as war pensions, peacekeeping missions and civilian MoD personnel pensions – under the defence-budget heading.

On release, the 2015 SDSR indicated that the defence budget, currently £34.4bn (US\$51.9bn) was to be increased for five years by 0.5% per year, in real terms, with an additional £12bn to be spent on the equipment programme over the next ten years. As such, the UK will continue to meet NATO's 2% of GDP defence-budget target (though it reorganised the way some spending is allocated to achieve this) and claims to be the only major country simultaneously meeting that goal and the United Nations target of 0.7% of GNI for development aid.

## Albania ALB

Albanian Lek		2014	2015	2016
GDP	lek	1.4tr	1.46tr	
	US\$	13.3bn	11.6bn	
<i>per capita</i>	US\$	4,787	4,200	
Growth	%	1.9	2.7	
Inflation	%	1.6	2.2	
Def exp [a]	lek	19.4bn		
	US\$	184m		
Def bdgt [b]	lek	16.8bn	17.1bn	17.6bn
	US\$	182m	136m	
FMA (US)	US\$	2.6m	2.4m	2.4m
US\$1=lek		105.48	125.88	

[a] NATO definition

[b] Excludes military pensions

Population 3,029,278

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.9%	4.6%	5.0%	4.6%	20.0%	5.3%
Female	8.9%	4.3%	4.8%	4.7%	22.0%	6.0%

## Capabilities

The Albanian armed forces remain limited to internal security and disaster-relief tasks, and small-scale peacekeeping or training deployments. International engagement has become more important, with several initiatives under way to increase interoperability with foreign forces. In September 2015 it was agreed that Albanian troops would participate in the EU mission to Mali, ships from Standing NATO Maritime Group Two visited Vlore and British troops took part in the annual infantry exercise *Biza-15* as part of NATO standardisation training. During a visit to the Pentagon in late 2014, the Albanian defence minister highlighted a need for force modernisation with NATO-standard equipment. The small air brigade operates only helicopters, and the naval element has only littoral capabilities.

**ACTIVE 8,000** (Land Force 3,000 Naval Force 650 Air Force 550 Other 3,800) Paramilitary 500

## ORGANISATIONS BY SERVICE

### Land Force 3,000

#### FORCES BY ROLE SPECIAL FORCES

- 1 SF bn
- 1 cdo bn

#### MANOEUVRE

- Light
- 3 lt inf bn

#### COMBAT SUPPORT

- 1 mor bty
- 1 NBC coy

#### EQUIPMENT BY TYPE

ARTY • MOR 93: 82mm 81; 120mm 12

### Naval Force 650

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 5: 1 *Kronhstadt*; 2 *Nyryat I*; 2 *Shanghai II+* (PRC) with two single 533mm TT

LOGISTICS AND SUPPORT • ARL 1; YPT 1 *Poluchat*

### Coast Guard

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 35

PBF 13: 8 V-4000; 5 *Archangel*

PB 9: 4 *Iluria* (Damen Stan 4207); 3 Mk3 *Sea Spectre*; 2 (other)

PBR 13: 4 Type-227; 1 Type-246; 1 Type-303; 7 Type-2010

### Air Force 550

Flying hours at least 10–15 hrs/year.

#### EQUIPMENT BY TYPE

##### HELICOPTERS

TPT 27: Medium 4 AS532AL *Cougar*; Light 23: 1 AW109; 5 Bell 205 (AB-205); 7 Bell 206C (AB-206C); 8 Bo-105; 2 H145

### Regional Support Brigade 700

#### FORCES BY ROLE

##### COMBAT SUPPORT

1 cbt spt bde (1 engr bn, 1 (rescue) engr bn, 1 CIMIC det)

### Military Police

#### FORCES BY ROLE

##### COMBAT SUPPORT

1 MP bn

### Logistics Brigade 1,200

#### FORCES BY ROLE

##### COMBAT SERVICE SUPPORT

1 log bde (1 tpt bn, 2 log bn)

## DEPLOYMENT

Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1998)

**Decision on deployment of troops abroad:** By the parliament upon proposal by the president (Art. 171 II)

#### AFGHANISTAN

NATO • *Operation Resolute Support 44*

#### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea 1*

#### SERBIA

NATO • KFOR 14

OSCE • Kosovo 1

#### UKRAINE

OSCE • Ukraine 2



## FOREIGN FORCES

Austria OSCE 3  
 Canada OSCE 3  
 Germany OSCE 1  
 Italy OSCE 3  
 Macedonia (FYROM) OSCE 1  
 Montenegro OSCE 2  
 Slovenia OSCE 1  
 Spain OSCE 1  
 United Kingdom OSCE 2  
 United States OSCE 1

### Austria AUT

Euro €		2014	2015	2016
GDP	€	329bn	335bn	
	US\$	438bn	373bn	
per capita	US\$	51,433	43,547	
Growth	%	0.4	0.8	
Inflation	%	1.5	1.0	
Def exp [a]	€	2.06bn		
	US\$	2.73bn		
Def bdgt [a]	€	2.02bn	1.84bn	
	US\$	3.23bn	2.05bn	
US\$1=€		0.75	0.90	

[a] Includes military pensions

Population 8,665,550

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.2%	2.7%	3.2%	3.3%	24.4%	8.2%
Female	6.9%	2.6%	3.1%	3.2%	24.6%	10.8%

### Capabilities

Following its 2013 National Security Strategy, Austria released its Defence Strategy in 2014 and a new Military-Strategic Concept in 2015. This hierarchy of documents confirms territorial defence as the main task for Austria's armed forces, despite this being judged an unlikely contingency. Not being a NATO member, the country focuses on the EU as its core multinational security framework. Given the limited size of its armed forces and budget constraints, multinational cooperation is an integral part of defence planning. Austria has defined a sustainable deployment of 1,100 soldiers as its level of ambition for international crisis-management operations, and defence-modernisation efforts are to be aligned more closely with missions likely to be encountered on such operations. In 2015, the armed forces faced another round of budget cuts and there have been reductions in key personnel-capability areas, such as combat aircrew. From 2016 onwards, however, the government agreed to provide additional funding to pay for equipment-modernisation efforts.

**ACTIVE 22,250 (Army 11,850 Air 2,750 Support 7,650)**

Conscript liability 6 months recruit trg, 30 days reservist refresher trg for volunteers; 120–150 days additional for

officers, NCOs and specialists. Authorised maximum wartime strength of 55,000

**RESERVE 156,250 (Joint structured 25,100; Joint unstructured 131,150)**

Some 12,000 reservists a year undergo refresher trg in tranches

## ORGANISATIONS BY SERVICE

**Joint Command – Land Forces 11,850**

### FORCES BY ROLE

#### MANOEUVRE

##### Mechanised

1 (3rd) bde (1 recce/SP arty bn, 1 armd bn, 1 mech inf bn, 1 inf bn, 1 cbt engr bn, 1 CBRN defence coy, 1 spt bn)

1 (4th) bde (1 recce/SP arty bn, 1 armd bn, 1 mech inf bn, 1 inf bn, 1 CBRN defence coy, 1 spt bn)

##### Light

1 (6th) bde (3 inf bn, 1 cbt engr bn, 1 CBRN defence coy, 1 spt bn)

1 (7th) bde (1 recce/arty bn, 3 inf bn, 1 cbt engr bn, 1 CBRN defence coy, 1 spt bn)

### EQUIPMENT BY TYPE

MBT 40 *Leopard* 2A4

RECCE 12 CBRN *Dingo*

AIFV 112 *Ulan*

APC 94

APC (W) 71 *Pandur*

PPV 23 *Dingo* II

ARTY 120

SP • 155mm 30 M109A5ÖE

MOR • 120mm 90 sGrW 86 (10 more in store)

AT • MSL • MANPATS PAL 2000 BILL

ARV 26: 20 4KH7FA-SB; 6 M88A1

MW 6 AID2000 Trailer

**Joint Command – Air Force 2,750**

The Air Force is part of Joint Forces Comd and consists of 2 bde; Air Support Comd and Airspace Surveillance Comd  
 Flying hours 160 hrs/year on hel/tpt ac; 110 hrs/year on ftr

### FORCES BY ROLE

#### FIGHTER

2 sqn with *Typhoon*

#### ISR

1 sqn with PC-6B *Turbo Porter*

#### TRANSPORT

1 sqn with C-130K *Hercules*

#### TRAINING

1 trg sqn with Saab 105Oe\*

1 trg sqn with PC-7 *Turbo Trainer*

#### TRANSPORT HELICOPTER

2 sqn with Bell 212 (AB-212)

1 sqn with OH-58B *Kiowa*

1 sqn with S-70A *Black Hawk*

2 sqn with SA316/SA319 *Alouette* III

**AIR DEFENCE**

2 bn  
1 radar bn

**EQUIPMENT BY TYPE****AIRCRAFT** 37 combat capable

FTR 15 Eurofighter *Typhoon* Tranche 1  
TPT 11: **Medium** 3 C-130K *Hercules*; **Light** 8 PC-6B  
*Turbo Porter*  
TRG 34: 12 PC-7 *Turbo Trainer*; 22 Saab 105Oe\*

**HELICOPTERS**

MRH 24 SA316/SA319 *Alouette III*  
ISR 10 OH-58B *Kiowa*  
TPT 32: **Medium** 9 S-70A *Black Hawk*; **Light** 23 Bell 212  
(AB-212)

**AD**

SAM 24 *Mistral* (6 more in store)  
GUNS • 35mm 24 Z-FlAK system (6 more in store)

MSL • AAM • IIR IRIS-T

**Joint Command – Special Operations Forces****FORCES BY ROLE****SPECIAL FORCES**

2 SF gp  
1 SF gp (reserve)

**Support 7,650**

Support forces comprise Joint Services Support Command and several agencies, academies and schools.

**Cyber**

The Austrian Cyber Security Strategy was approved in March 2013. A Cyber Security Steering Group to coordinate on government level has been established, as well as a 'Cyber Security Platform' to manage public-private cooperation. The defence ministry's primary goal is to ensure national defence in cyberspace as well as securing defence ministry and armed forces ICT. According to the 2013 strategy, the Federal Ministry of Defence and Sports will 'play the leading role in coordinating measures to protect sovereignty in the framework of military national defence (cyber defence)'. The Military Cyber Emergency Readiness Team (milCERT) is working at initial operational capability (IOC), and it was reported that a Cyber Defence Centre will be at IOC in 2016.

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Constitution:** incl 'Federal Constitutional Law' (1/1930)

**Specific legislation:** 'Bundesverfassungsgesetz über Kooperation und Solidarität bei der Entsendung von Einheiten und Einzelpersonen in das Ausland' (KSE-BVG, 1997)

**Decision on deployment of troops abroad:** By government on authorisation of the National Council's Main Committee; simplified procedure for humanitarian and rescue tasks (Art. 23j of the 'Federal Constitutional Law'; § 2 of the KSE-BVG)

**AFGHANISTAN**

NATO • *Operation Resolute Support* 10

**ALBANIA**

OSCE • Albania 3

**BOSNIA-HERZEGOVINA**

EU • EUFOR • *Operation Althea* 319; 1 inf bn HQ; 1 inf coy

**CENTRAL AFRICAN REPUBLIC**

EU • EUMAM RCA 5

**CYPRUS**

UN • UNFICYP 5

**LEBANON**

UN • UNIFIL 180; 1 log coy

**MALI**

EU • EUTM Mali 8

**MIDDLE EAST**

UN • UNTSO 5 obs

**SERBIA**

NATO • KFOR 505; 2 mech inf coy

OSCE • Kosovo 2

**UKRAINE**

OSCE • Ukraine 18

**WESTERN SAHARA**

UN • MINURSO 5 obs

**Belgium BEL**

Euro €		2014	2015	2016
<b>GDP</b>	€	402bn	412bn	
	US\$	534bn	459bn	
<i>per capita</i>	US\$	47,682	40,456	
<b>Growth</b>	%	1.1	1.3	
<b>Inflation</b>	%	0.5	0.7	
<b>Def exp [a]</b>	€	3.91bn		
	US\$	5.2bn		
<b>Def bdgt [b]</b>	€	3.73bn	3.58bn	3.49bn
	US\$	4.96bn	3.98bn	
<b>US\$1=€</b>		0.75	0.90	

[a] NATO definition

[b] Includes military pensions

**Population** 10,449,361

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	8.7%	2.8%	3.1%	3.2%	23.4%	7.9%
<b>Female</b>	8.3%	2.7%	3.0%	3.2%	23.3%	10.3%

**Capabilities**

Continued commitment to budget reductions and a subsequent need for prioritisation led the government to dedicate over two-thirds of the operational budget to *Operation Desert Falcon* in Iraq, NATO exercises and air-policing missions in Europe. Belgian troops were also deployed for domestic security operations following terrorist attacks. Belgium continues to pursue high-readiness levels and

deployable niche capabilities. This includes plans for new light reconnaissance vehicles and upgrades for all *Pandur* vehicles. The Belgian Navy benefited from the acquisition of two new patrol and coastal combatants for littoral defence while also pursuing counter-mine capability.

**ACTIVE 30,800 (Army 11,300 Navy 1,600 Air 6,000 Medical Service 1,400 Joint Service 10,500)**

### RESERVE 6,800

1,250 assigned to units and headquarters in peacetime; others on ORBAT but only assigned in time of crisis.

## ORGANISATIONS BY SERVICE

### Land Component 11,300

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF gp

##### MANOEUVRE

###### Reconnaissance

1 ISR gp (2 ISR coy, 1 surv coy)

###### Mechanised

1 (med) bde (4 mech bn)

###### Light

1 (lt) bde (1 cdo bn, 1 lt inf bn, 1 para bn)

##### COMBAT SUPPORT

1 arty gp (1 arty bty, 1 mor bty, 1 AD bty)

2 engr bn (1 cbt engr coy, 1 lt engr coy, 1 construction coy)

1 EOD unit

1 CBRN coy

1 MP coy (with 1 pl dedicated to EUROCORPS)

3 CIS sigs gp

##### COMBAT SERVICE SUPPORT

3 log bn

#### EQUIPMENT BY TYPE

AIFV 37: 19 *Piranha* III-C DF30; 18 *Piranha* III-C DF90

APC 331

APC (W) 123: 45 *Pandur*; 64 *Piranha* III-C; 14 *Piranha* III-PC

PPV 208 *Dingo* 2 (inc 52 CP)

ARTY 105

TOWED 105mm 14 LG1 MkII

MOR 91: 81mm 39; 120mm 52

AD • SAM 45 *Mistral*

AEV 11: 3 *Leopard* 1; 8 *Piranha* III-C

ARV 16: 3 *Leopard* 1; 4 *Pandur*; 9 *Piranha* III-C

VLB 4 *Leguan*

### Naval Component 1,500

#### EQUIPMENT BY TYPE

##### PRINCIPAL SURFACE COMBATANTS 2

FRIGATES • FFGHM 2 *Leopold* I (ex-NLD *Karel Doorman*)

with 2 quad Inchr with *Harpoon* AShM, 1 16-cell Mk48

VLS with RIM-7P *Sea Sparrow* SAM, 4 single Mk32

324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS, 1

76mm gun (capacity 1 med hel)

##### PATROL AND COASTAL COMBATANTS

PCC 2 *Castor*

##### MINE WARFARE • MINE COUNTERMEASURES

MHC 5 *Flower* (*Tripartite*)

## LOGISTICS AND SUPPORT 8

AGFH 1 *Godetia* (log spt/comd) (capacity 1 *Alouette* III)

AGOR 1 *Belgica*

AXS 1 *Zenobe Gramme*

YTL 3 *Wesp*

### Naval Aviation

(part of the Air Component)

#### EQUIPMENT BY TYPE

##### HELICOPTERS

ASW 3 NH90 NFH

MRH 3 SA316B *Alouette* III (to be replaced by NH90 NFH)

### Air Component 6,000

Flying hours 165 hrs/yr on cbt ac. 300 hrs/yr on tpt ac. 150 hrs/yr on hel; 250 hrs/yr on ERJ

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK/ISR

4 sqn with F-16AM/BM *Fighting Falcon*

##### SEARCH & RESCUE

1 sqn with *Sea King* Mk48

##### TRANSPORT

1 sqn with A330; ERJ-135 LR; ERJ-145 LR; *Falcon* 20 (VIP); *Falcon* 900B

1 sqn with C-130H *Hercules*

##### TRAINING

1 OCU sqn with F-16AM/BM *Fighting Falcon*

1 sqn with SF-260D/M

1 BEL/FRA unit with *Alpha Jet*\*

1 OCU unit with AW109

##### TRANSPORT HELICOPTER

2 sqn with AW109 (ISR)

##### ISR UAV

1 sqn with RQ-5A *Hunter* (B-Hunter)

#### EQUIPMENT BY TYPE

##### AIRCRAFT 88 combat capable

FTR 59: 49 F-16AM *Fighting Falcon*; 10 F-16BM *Fighting Falcon*

TPT 19: **Medium** 11 C-130H *Hercules*; **Light** 4: 2 ERJ-135 LR; 2 ERJ-145 LR; **PAX** 4: 1 A321; 2 *Falcon* 20 (VIP); 1 *Falcon* 900B

TRG 61: 29 *Alpha Jet*\*; 9 SF-260D; 23 SF-260M

##### HELICOPTERS

ASW 1 NH90 NFH opcon Navy

MRH 3 SA316B *Alouette* III opcon Navy

SAR 3 *Sea King* Mk48 (to be replaced by NH90 NFH)

TPT 24: **Medium** 4 NH90 TTH; **Light** 20 AW109 (ISR)

UAV • **ISR** • **Heavy** 12 RQ-5A *Hunter* (B-Hunter) (1 more in store)

##### MSL

**AAM** • **IR** AIM-9M/N *Sidewinder*; **ARH** AIM-120B

AMRAAM

##### BOMBS

**INS/GPS guided**: GBU-31 JDAM; GBU-38 JDAM; GBU-54 (dual-mode)

**Laser-Guided**: GBU-10/GBU-12 *Paveway* II; GBU-24

*Paveway* III

**PODS Infrared/TV**: 12 *Sniper*

## Cyber

A national Cyber Security Strategy was released in 2012. The defence ministry released a Cyber Security Strategy for Defence in 2014, outlining three pillars of its cyber-security capability: Cyber Defence, Cyber Intelligence and Cyber Counter-Offensive. It stated that defence 'has to have a minimum response capability by end of 2014', an 'initial operating capacity' by the end of 2016 and a 'full operational capacity' by 2020. In mid-2015, recruitment was opened for additional cyber specialists within the defence ministry.

## DEPLOYMENT

### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1831)

**Specific legislation:** 'Loi relatif à la mise en oeuvre des forces armées, à la mise en condition, ainsi qu'aux périodes et positions dans lesquelles le militaire peut se trouver' (1994)

**Decision on deployment of troops abroad:** By the government (Federal Council of Ministers) and the minister of defence (1994 law, Art. 88, 106, 167 of constitution)

### AFGHANISTAN

NATO • *Operation Resolute Support* 43

### CHAD

*Operation Barkhane* 2

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 1; 1 obs

### FRANCE

NATO • Air Component 28 *Alpha Jet* located at Cazeaux/Tours

### IRAQ

*Operation Inherent Resolve* 25

### LEBANON

UN • UNIFIL 1

### MALI

EU • EUTM Mali 95

### MEDITERRANEAN SEA

EU • EU NAVFOR MED: 1 FFGHM

NATO • SNMCMG 2: 1 MHC

### MIDDLE EAST

UN • UNTSO 2 obs

### NORTH SEA

NATO • SNMCMG 1: 1 AFGH

### UKRAINE

OSCE • Ukraine 1

## FOREIGN FORCES

United States US European Command: 1,200

## Bosnia-Herzegovina BIH

Convertible Mark		2014	2015	2016
GDP	mark	26.8bn	27.4bn	
	US\$	18.2bn	15.6bn	
<i>per capita</i>	US\$	4,693	4,030	
Growth	%	1.1	2.1	
Inflation	%	-0.9	0.5	
Def bdgt [a]	mark	325m	331m	
	US\$	220m	188m	
FMA (US)	US\$	4.5m	4m	4m
US\$1=mark		1.47	1.76	

[a] Includes military pensions

Population 3,867,055

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.0%	3.2%	3.2%	3.8%	26.3%	5.3%
Female	6.5%	2.9%	3.0%	3.6%	26.8%	8.3%

## Capabilities

Bosnia's armed forces are composed of troops from all three formerly warring entities. An agreement was signed between EUFOR and the Bosnian armed forces in 2015 agreeing training in 2016 and 2017. The US donated demining equipment to the Bosnian forces through the Humanitarian Mine Action programme as part of a continued effort to rid the country of landmines and unexploded ordnance. Talks between neighbouring countries have been held to discuss the possibility of a joint Balkan force, able to respond to natural disasters or humanitarian-relief needs. This demonstrates the ongoing evolution of the Bosnian military as it works with its new NATO allies, as well as improved local relations, allowing for greater integration.

**ACTIVE 10,500 (Armed Forces 10,500)**

## ORGANISATIONS BY SERVICE

### Armed Forces 10,500

1 ops comd; 1 spt comd

### FORCES BY ROLE

#### MANOUEVRE

##### Light

3 inf bde (1 recce coy, 3 inf bn, 1 arty bn)

#### COMBAT SUPPORT

1 cbt spt bde (1 tk bn, 1 engr bn, 1 EOD bn, 1 int bn, 1 MP bn, 1 CBRN coy, 1 sigs bn)

#### COMBAT SERVICE SUPPORT

1 log comd (5 log bn)

### EQUIPMENT BY TYPE

MBT 45 M60A3

APC • APC (T) 20 M113A2

ARTY 224

TOWED 122mm 100 D-30

MRL 122mm 24 APRA-40

MOR 120mm 100 M-75

## AT

## MSL

SP 60: 8 9P122 *Malyutka*; 9 9P133 *Malyutka*; 32 BOV-1; 11 M-92

MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K115 *Metis* (AT-7 *Saxhorn*); HJ-8; *Milan*

## VLB MTU

MW Bozena

### Air Force and Air Defence Brigade 800

#### FORCES BY ROLE

##### HELICOPTER

1 sqn with Bell 205; Mi-8MTV *Hip*; Mi-17 *Hip* H

1 sqn with Mi-8 *Hip*; SA342H/L *Gazelle* (HN-42/45M)

##### AIR DEFENCE

1 AD bn

#### EQUIPMENT BY TYPE

##### AIRCRAFT

FGA (7 J-22 *Orao* in store)

ATK (6 J-1 (J-21) *Jastreb*; 3 TJ-1(NJ-21) *Jastreb* all in store)

ISR (2 RJ-1 (IJ-21) *Jastreb\** in store)

TRG (1 G-4 *Super Galeb* (N-62)\* in store)

##### HELICOPTERS

MRH 13: 4 Mi-8MTV *Hip*; 1 Mi-17 *Hip* H; 1 SA-341H *Gazelle* (HN-42); 7 SA-342L *Gazelle* (HN-45M)

TPT 21: **Medium** 8 Mi-8 *Hip* **Light** 13 Bell 205 (UH-1H *Iroquois*)

TRG 1 Mi-34 *Hermit*

##### AD

##### SAM

SP 27: 1 *Strela*-10M3 (SA-13 *Gopher*); 20 2K12 *Kub* (SA-6 *Gainful*); 6 *Strela*-1 (SA-9 *Gaskin*)

MANPAD 9K34 *Strela*-3 (SA-14 *Gremlin*); 9K310 (SA-16 *Gimlet*)

##### GUNS 764

SP 169: **20mm** 9 BOV-3 SPAAG; **30mm** 154: 38 M53; 116 M-53-59; **57mm** 6 ZSU 57/2

TOWED 595: **20mm** 468: 32 M-55A2, 4 M38, 1 M55 A2B1, 293 M55 A3/A4, 138 M75; **23mm** 38: 29 ZU-23, 9 GSh-23; **30mm** 33 M-53; **37mm** 7 Type-55; **40mm** 49: 31 L60, 16 L70, 2 M-12

### DEPLOYMENT

#### Legal provisions for foreign deployment:

**Constitution:** Codified constitution within Dayton Peace Agreement (1995)

**Specific legislation:** 'Law on participation of military, police, state and other employees in peacekeeping operations and other activities conducted abroad'

**Decision on deployment of troops abroad:** By the members of the Presidency (2003 'Defence Law' Art. 9, 13)

#### AFGHANISTAN

NATO • *Operation Resolute Support* 53

#### SERBIA

OSCE • Kosovo 10

#### UKRAINE

OSCE • Ukraine 14

### FOREIGN FORCES

Part of EUFOR – *Operation Althea* unless otherwise stated.

#### Albania 1

Austria 319; 1 inf bn HQ; 1 inf coy

Bulgaria 10 • OSCE 1

Canada OSCE 1

Chile 15

Czech Republic 2 • OSCE 1

Finland 8

France 1

Germany OSCE 4

Greece 1

Hungary 164 1 inf coy

Ireland 7 • OSCE 4

Italy 4 • OSCE 7

Macedonia (FYROM) 11

Netherlands 6

Poland 39

Portugal 8

Romania 39

Russia OSCE 2

Serbia OSCE 1

Slovakia 19 • OSCE 1

Slovenia 9

Spain 2 • OSCE 2

Sweden 2

Switzerland 20

Turkey 243; 1 inf coy

United Kingdom 31; • OSCE 1

United States OSCE 7

### Bulgaria BLG

Bulgarian Lev L		2014	2015	2016
GDP	L	82.2bn	82.9bn	
	US\$	55.8bn	47.2bn	
<i>per capita</i>	US\$	7,751	6,582	
Growth	%	1.7	1.7	
Inflation	%	-1.6	-0.8	
Def exp [a]	L	1.1bn		
	US\$	749m		
Def bdgt [b]	L	1.05bn	1.05bn	
	US\$	710m	595m	
FMA (US)	US\$	7m	5m	5m
US\$1=L		1.47	1.76	

[a] NATO definition

[b] Excludes military pensions

Population 7,186,893

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.5%	2.4%	2.8%	3.5%	25.0%	7.6%
Female	7.0%	2.2%	2.6%	3.3%	25.0%	11.1%



## Capabilities

Despite long-term plans for reform, the armed forces still rely heavily on Soviet-era equipment, although this was addressed by the 2015 release of the Bulgarian Armed Forces 2020 development programme. Reform plans would see the defence budget rise by 2024 and the procurement of key equipment such as AIFVs, combat aircraft and patrol ships. Training with neighbours and NATO partners has continued, highlighting the importance of the Alliance to Bulgaria's security. Bulgarian troops and sailors were involved in a series of exercises with the US in 2015 and Sofia continued annual drills with Ukraine in spite of the conflict there.

**ACTIVE 31,300 (Army 16,300 Navy 3,450 Air 6,700 Central Staff 4,850) Paramilitary 16,000**

**RESERVE 303,000 (Army 250,500 Navy 7,500 Air 45,000)**

## ORGANISATIONS BY SERVICE

### Army 16,300

Forces are being reduced in number.

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bde

##### MANOEUVRE

###### Reconnaissance

1 recce bn

###### Mechanised

2 mech bde

##### COMBAT SUPPORT

1 arty regt

1 engr regt

1 NBC bn

##### COMBAT SERVICE SUPPORT

1 log regt

#### EQUIPMENT BY TYPE

**MBT** 80 T-72

**RECCE** *Maritza* NBC

**AIFV** 160: 90 BMP-1; 70 BMP-23

**APC** 127

**APC (T)** 100 MT-LB

**APC (W)** 27: 20 BTR-60; 7 M1117 ASV

**ARTY** 311

**SP • 122mm** 48 2S1

**TOWED • 152mm** 24 D-20

**MRL 122mm** 24 BM-21

**MOR 120mm** 215 2S11 SP *Tundzha*

**AT**

##### MSL

SP 24 9P148 *Konkurs* (AT-5 *Spandrel*)

**MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); (9K11 *Malyutka* (AT-3 *Sagger*) in store)

**GUNS** 126: **85mm** (150 D-44 in store); **100mm** 126 MT-12

**AD**

##### SAM

SP 24 9K33 *Osa* (SA-8 *Gecko*)

**MANPAD** 9K32 *Strela* (SA-7 *Grail*)†

**GUNS** 400 **100mm** KS-19 towed/**57mm** S-60 towed/**23mm** ZSU-23-4 SP/ZU-23 towed

**RADARS • LAND** GS-13 *Long Eye* (veh); SNAR-1 *Long Trough* (arty); SNAR-10 *Big Fred* (veh, arty); SNAR-2/-6 *Pork Trough* (arty); *Small Fred/Small Yawn* (veh, arty)

**AEV** MT-LB

**ARV** T-54/T-55; MTP-1; MT-LB

**VLB** BLG67; TMM

## Navy 3,450

### EQUIPMENT BY TYPE

#### PRINCIPAL SURFACE COMBATANTS 4

##### FRIGATES 4

**FFGM** 3 *Drazki* (ex-BEL *Wielingen*) with 2 twin Inchr with MM-38 *Exocet* ASHM, 1 octuple Mk29 GMLS with RIM-7P *Sea Sparrow* SAM, 2 single 533mm ASTT with L5 HWT, 1 sextuple 375mm MLE 54 Creusot-Loire A/S mor, 1 100mm gun

**FFM** 1 *Smeli* (ex-FSU *Koni*) with 1 twin Inchr with 2 *Osa-M* (SA-N-4 *Gecko*) SAM, 2 RBU 6000 *Smerch* 2 A/S mor, 2 twin 76mm guns

#### PATROL AND COASTAL COMBATANTS 3

**PCFGM** 1 *Mulnaya* (ex-FSU *Tarantul* II) with 2 twin Inchr with P-15M *Termit-M* (SS-N-2C *Styx*) ASHM, 2 quad Inchr (manual aiming) with *Strela-2* (SA-N-5 *Grail*) SAM, 1 76mm gun

**PCM** 2 *Reshitelni* (ex-FSU *Pauk* I) with 1 *Strela-2* (SA-N-5 *Grail*) SAM (manual aiming), 4 single 406mm TT, 2 RBU 1200 A/S mor, 1 76mm gun

#### MINE COUNTERMEASURES 6

**MHC** 1 *Tsibar* (*Tripartite* – ex-BEL *Flower*)

**MSC** 3 *Briz* (ex-FSU *Sonya*)

**MSI** 2 *Olya* (ex-FSU)

#### AMPHIBIOUS 1

LCU 1 *Vydra*

**LOGISTICS AND SUPPORT** 14: 1 ADG; 2 AGS; 2 AOL; 1 ARS; 2 AT; 1 AX; 2 YDT; 1 YPT; 2 YTR

### Naval Aviation

**HELICOPTERS • ASW** 3 AS565MB *Panther*

## Air Force 6,700

Flying hours 30–40 hrs/yr

#### FORCES BY ROLE

##### FIGHTER/ISR

1 sqn with MiG-21bis/UM *Fishbed*

1 sqn with MiG-29A/UB *Fulcrum*

##### FIGHTER/GROUND ATTACK

1 sqn with Su-25K/UBK *Frogfoot*

##### TRANSPORT

1 sqn with An-30 *Clank*; C-27J *Spartan*; L-410UVP-E;

PC-12M

##### TRAINING

1 sqn with L-39ZA *Albatros\**

1 sqn with PC-9M

##### ATTACK HELICOPTER

1 sqn with Mi-24D/V *Hind* D/E

##### TRANSPORT HELICOPTER

1 sqn with AS532AL *Cougar*; Bell 206 *Jet Ranger*; Mi-17 *Hip* H

**EQUIPMENT BY TYPE****AIRCRAFT** 42 combat capableFTR 16: 12 MiG-29A *Fulcrum*; 4 MiG-29UB *Fulcrum*FGA 12: 10 MiG-21bis *Fishbed*; 2 MiG-21UM *Mongol B* (to be withdrawn by end-2014)ATK 14: 10 Su-25K *Frogfoot*; 4 Su-25UBK *Frogfoot* (to be withdrawn by end-2014)ISR 1 An-30 *Clank*TPT 7: **Medium** 3 C-27J *Spartan*; **Light** 4: 1 An-2T *Colt*; 2 L-410UVP-E; 1 PC-12MTRG 12: 6 L-39ZA *Albatros\**; 6 PC-9M (basic)**HELICOPTERS**ATK 6 Mi-24D/V *Hind D/E*MRH 6 Mi-17 *Hip H*TPT 18: **Medium** 12 AS532AL *Cougar*; **Light** 6 Bell 206 *Jet Ranger***UAV • EW** *Yastreb-2S***AD****SAM** S-300 (SA-10 *Grumble*); S-75 *Dvina* (SA-2 *Guideline* towed); S-125 *Pechora* (SA-3 *Goa*); S-200 (SA-5 *Gammon*); 2K12 *Kub* (SA-6 *Gainful*)**MSL****AAM • IR** R-3 (AA-2 *Atoll*)‡ R-73 (AA-11 *Archer*) **SARH** R-27R (AA-10 *Alamo A*)**ASM** Kh-29 (AS-14 *Kedge*); Kh-23 (AS-7 *Kerry*)‡; Kh-25 (AS-10 *Karen*)**Paramilitary 16,000****Border Guards 12,000**

Ministry of Interior

**FORCES BY ROLE****MANOEUVRE****Other**

12 paramilitary regt

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 26****PB** 18: 1 Obzor (NLD *Damen Stan 4207*); 9 *Grif* (FSU *Zhuk*); 3 *Nesebar* (ex-GER *Neustadt*); 5 *Burgas* (GER *Lurssen 21*)**PBF** 8 *Emine* (EST *Baltic 130*)**Security Police 4,000****DEPLOYMENT****Legal provisions for foreign deployment:****Constitution:** Codified constitution (1991)**Decision on deployment of troops abroad:** By the president upon request from the Council of Ministers and upon approval by the National Assembly (Art. 84 XI)**AFGHANISTAN**NATO • *Operation Resolute Support 110***ARMENIA/AZERBAIJAN**

OSCE • Minsk Conference 1

**BOSNIA-HERZEGOVINA**EU • EUFOR • *Operation Althea 10*

OSCE • Bosnia and Herzegovina 1

**LIBERIA**

UN • UNMIL 2 obs

**MALI**

EU • EUTM Mali 4

**SERBIA**

NATO • KFOR 12

OSCE • Kosovo 1

**UKRAINE**

OSCE • Ukraine 17

**Croatia CRO**

Croatian Kuna k		2014	2015	2016
GDP	k	328bn	332bn	
	US\$	57.1bn	48.9bn	
<i>per capita</i>	US\$	13,473	11,551	
Growth	%	-0.4	0.8	
Inflation	%	-0.2	-0.4	
Def exp [a]	k	4.63bn		
	US\$	804m		
Def bdtg	k	4.28bn	4.56bn	
	US\$	744m	671m	
FMA (US)	US\$	2.5m	2.5m	2.5m
US\$1=k		5.75	6.79	

[a] NATO definition

**Population** 4,464,844

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.4%	3.0%	3.1%	3.2%	24.1%	7.4%
Female	7.0%	2.8%	3.0%	3.1%	25.0%	10.8%

**Capabilities**

Croatia continues to work towards the long-term goals laid out in its 2005 defence review and the associated 2006–15 long-term development plan, as well as the National Security Strategy, Defence Strategy and Military Strategy. Plans were announced in 2015 that would see legacy equipment replaced in coming years. Croatia regularly takes part in NATO exercises.

**ACTIVE 16,550** (Army 11,250 Navy 1,600 Air 1,850 Joint 1,850) Paramilitary 3,000*Conscript liability* Voluntary conscription, 8 weeks**ORGANISATIONS BY SERVICE****Joint 1,850** (General Staff)**FORCES BY ROLE****SPECIAL FORCES**

1 SF bn

**Army 11,250****FORCES BY ROLE****MANOEUVRE****Armoured**

1 armd bde

**Light**

1 mot inf bde

**Other**

1 inf trg regt

**COMBAT SUPPORT**

1 arty/MRL regt

1 AT regt

1 ADA regt

1 engr regt

1 int bn

1 MP regt

1 NBC bn

1 sigs regt

**COMBAT SERVICE SUPPORT**

1 log regt

**EQUIPMENT BY TYPE**

MBT 75 M-84

AIFV 102 M-80

APC 345

APC (T) 15 BTR-50

APC (W) 142: 1 BOV-VP; 23 LOV OP; 118 Patria AMV

PPV 188: 4 *Cougar* HE; 147 M-ATV; 37 *Maxxpro*

ARTY 221

SP 14: 122mm 8 2S1; 155mm 6 PzH 2000

TOWED 64: 122mm 27 D-30; 130mm 19 M-46H1;

155mm 18 M1H1

MRL 39: 122mm 37: 6 M91 *Vulkan*; 31 BM-21 *Grad*;

128mm 2 LOV RAK M91 R24

MOR 104: 82mm 29 LMB M96; 120mm 75: 70 M-75; 5

UBM 52

AT • MSL

SP 28 POLO BOV 83

MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot*(AT-4 *Spigot*); 9K115 *Metis* (AT-7 *Saxhorn*); 9K113*Konkurs* (AT-5 *Spandrel*); *Milan* (reported)

AD

SP 9 *Strijela*-10 CRO

GUNS 96

SP 20mm 39 BOV-3 SP

TOWED 20mm 57 M55A4

ARV M84A1; WZT-3

VLB 3 MT-55A

MW Bozena; 1 *Rhino***Navy 1,600**

Navy HQ at Split

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 5**PCGF 1 *Koncar* with 2 twin lnchr with RBS-15B AShM, 1

AK630 CIWS, 1 57mm gun

PCG 4:

2 *Kralj* with 4 single lnchr with RBS-15B AShM, 1

AK630 CIWS, 1 57mm gun

2 *Vukovar* (ex-FIN *Helsinki*) with 4 single lnchr with

RBS-15M AShM, 1 57mm gun

**MINE WARFARE • MINE COUNTERMEASURES •**MHI 1 *Korcula***AMPHIBIOUS**LCT 2 *Cetina* with 1 quad lnchr with *Strela-2*† (SA-N-5*Grail*) SAM

LCVP 3: 2 Type-21; 1 Type-22

LOGISTICS AND SUPPORT 11: AKL 1; YDT 2; YFL 1;

YFU 5; YTM 2

MSL • TACTICAL • AShM 3 RBS-15K

**Marines****FORCES BY ROLE****MANOEUVRE****Amphibious**

2 indep mne coy

**Coast Guard****FORCES BY ROLE**

Two divisions, headquartered in Split (1st div) and Pula (2nd div).

**EQUIPMENT BY TYPE**PATROL AND COASTAL COMBATANTS • PB 4 *Mirna*

LOGISTICS AND SUPPORT • AX 5

**Air Force and Air Defence 1,850**

Flying hours 50 hrs/year

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**1 (mixed) sqn with MiG-21bis/UMD *Fishbed***TRANSPORT**1 sqn with An-32 *Cline***TRAINING**

1 sqn with PC-9M; Z-242L

1 hel sqn with Bell 206B *Jet Ranger* II**FIRE FIGHTING**1 sqn with AT-802FA *Fire Boss*; CL-415**TRANSPORT HELICOPTER**2 sqn with Mi-8MTV *Hip H*; Mi-8T *Hip C*; Mi-171Sh**EQUIPMENT BY TYPE**

AIRCRAFT 9 combat capable

FGA 9: 5 MiG-21bis *Fishbed*; 4 MiG-21UMD *Fishbed*TPT • Light 2 An-32 *Cline*

TRG 25: 20 PC-9M; 5 Z-242L

FF 11: 5 AT-802FA *Fire Boss*; 6 CL-415**HELICOPTERS**MRH 11 Mi-8MTV *Hip H*TPT 21: **Medium** 13: 3 Mi-8T *Hip C*; 10 Mi-171Sh; **Light**8 Bell 206B *Jet Ranger* IIUAV • ISR • **Medium** *Hermes* 450**AD • SAM**SP S-300 (SA-10 *Grumble*); 9K31 *Strela-1* (SA-9 *Gaskin*)MANPAD 9K34 *Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1*(SA-16 *Gimlet*)

RADAR 11: 5 FPS-117; 3 S-600; 3 PRV-11

MSL • AAM • IR R-3S (AA-2 *Atoll*)†; R-60 (AA-8 *Aphid*)**Special Forces Command****FORCES BY ROLE****SPECIAL FORCES**

2 SF gp

**EQUIPMENT BY TYPE**APC • PPV 20: 15 M-ATV; 5 *Maxxpro*

**Paramilitary 3,000****Police 3,000 armed****DEPLOYMENT****Legal provisions for foreign deployment:****Constitution:** Codified constitution (2004)**Decision on deployment of troops abroad:** By the parliament (Art. 7 II); simplified procedure for humanitarian aid and military exercises**AFGHANISTAN**NATO • *Operation Resolute Support* 107**INDIA/PAKISTAN**

UN • UNMOGIP 10 obs

**LEBANON**

UN • UNIFIL 1

**SERBIA**

NATO • KFOR 28

OSCE • Kosovo 4

**UKRAINE**

OSCE • Ukraine 12

**WESTERN SAHARA**

UN • MINURSO 7 obs

**Cyprus CYP**

Cypriot Pound C£		2014	2015	2016
GDP	C£	17.5bn	17.4bn	
	US\$	23.3bn	19.4bn	
<i>per capita</i>	US\$	26,109	21,531	
Growth	%	-2.3	0.5	
Inflation	%	-0.3	-1.0	
Def exp	C£	270m		
	US\$	358m		
Def bdgt	C£	319m	319m	
	US\$	424m	355m	
US\$1=C£		0.75	0.90	

Population 1,172,458

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	8.0%	3.4%	4.7%	4.8%	25.1%	5.0%
Female	7.6%	2.9%	3.8%	4.0%	24.1%	6.5%

**Capabilities**

The country's national guard is predominantly a land force supplemented by small air and maritime units. It is intended to act as a deterrent to any possible Turkish incursion, and to provide enough opposition until military support can be provided by Greece, its primary ally. The air wing has a small number of rotary- and fixed-wing utility platforms, including Mi-35 attack helicopters, while the maritime wing is essentially a constabulary force. Expeditionary deployments have been limited, with some officers

joining UN and EU missions. A deal for port access was struck with Moscow in 2015. Despite initial concerns from the EU that a permanent base could be established on the island, the agreement only allows for resupply or refuelling, or for humanitarian operations in the eastern Mediterranean.

**ACTIVE 12,000 (National Guard 12,000)****Paramilitary 750***Conscript liability* 24 months**RESERVE 50,000 (National Guard 50,000)**

Reserve service to age 50 (officers dependent on rank; military doctors to age 60)

**ORGANISATIONS BY SERVICE****National Guard** 1,300 regular; 10,700 conscript (total 12,000)**FORCES BY ROLE****SPECIAL FORCES**

1 comd (regt) (1 SF bn)

**MANOEUVRE****Armoured**

1 lt armd bde (2 armd bn, 1 armd inf bn)

**Mechanised**

1 (1st) mech inf div (1 armd recce bn, 2 mech inf bn)

1 (2nd) mech inf div (1 armd recce bn, 2 armd bn, 2 mech inf bn)

**Light**

3 (4th, 7th &amp; 8th) lt inf bde (2 lt inf regt)

**COMBAT SUPPORT**

1 arty comd (8 arty bn)

**COMBAT SERVICE SUPPORT**

1 (3rd) spt bde

**EQUIPMENT BY TYPE****MBT** 134: 82 T-80U; 52 AMX-30B2**RECCE** 67 EE-9 *Cascavel***AIFV** 43 BMP-3**APC** 294**APC (T)** 168 *Leonidas***APC (W)** 126 VAB (incl variants)**ARTY** 452**SP 155mm** 24: 12 Mk F3; 12 *Zuzana***TOWED** 104: **100mm** 20 M-1944; **105mm** 72 M-56; **155mm** 12 TR-F-1**MRL** 22: **122mm** 4 BM-21; **128mm** 18 M-63 *Plamen***MOR** 302: **81mm** 170 E-44; (70+ M1/M9 in store); **107mm** 20 M2/M30; **120mm** 112 RT61**AT****MSL****SP** 33: 15 EE-3 *Jararaca* with *Milan*; 18 VAB with HOT **MANPATS** HOT; *Milan***RCL** **106mm** 144 M40A1**RL** **112mm** 1,000 APILAS**AD****SAM****SP** 6 9K322 *Tor* (SA-15 *Gauntlet*); *Mistral***STATIC** 12 *Aspide***MANPAD** *Mistral*

**GUNS • TOWED** 60: 20mm 36 M-55; 35mm 24 GDF-003 (with *Skyguard*)  
**ARV** 2 AMX-30D; 1 BREM-1

### Maritime Wing

#### FORCES BY ROLE

##### COMBAT SUPPORT

1 (coastal defence) AShM bty with MM-40 *Exocet* AShM

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 4

PBF 4: 2 Rodman 55; 2 *Vittoria*

**MSL • AShM** 3 MM-40 *Exocet*

### Air Wing

#### AIRCRAFT

TPT • Light 1 BN-2B *Islander*

TRG 1 PC-9

#### HELICOPTERS

ATK 11 Mi-35P *Hind*

MRH 7: 3 AW139 (SAR); 4 SA342L1 *Gazelle* (with

HOT for anti-armour role)

TPT • Light 2 Bell 206L-3 *Long Ranger*

### Paramilitary 750+

#### Armed Police 500+

#### FORCES BY ROLE

##### MANOEUVRE

##### Other

1 (rapid-reaction) paramilitary unit

#### EQUIPMENT BY TYPE

APC (W) 2 VAB VTT

**HELICOPTERS • MRH** 4: 2 AW139; 2 Bell 412 SP

#### Maritime Police 250

##### PATROL AND COASTAL COMBATANTS 10

PBF 5: 2 *Poseidon*; 1 *Shaldag*; 2 *Vittoria*

PB 5 SAB-12

### DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1960)

**Decision on deployment of troops abroad:** By parliament, but president has the right of final veto (Art. 50)

#### LEBANON

UN • UNIFIL 2

### FOREIGN FORCES

**Argentina** UNFICYP 265; 2 inf coy; 1 hel flt

**Austria** UNFICYP 5

**Brazil** UNFICYP 1

**Canada** UNFICYP 1

**Chile** UNFICYP 14

**Greece** Army: 950; €200 (officers/NCO seconded to Greek-Cypriot National Guard)

**Hungary** UNFICYP 77; 1 inf pl

**Norway** UNFICYP 2

**Paraguay** UNFICYP 14

**Serbia** UNFICYP 46; elm 1 inf coy

**Slovakia** UNFICYP 159; elm 1 inf coy; 1 engr pl

**United Kingdom** 2,800; 2 inf bn; 1 hel sqn with 4 Bell 412

*Twin Huey • Operation Shader* 1 FGA sqn with 8 *Tornado*

GR4; 1 *Sentinel* R1; 1 A330 MRTT *Voyager* KC3; 1 C-130J

*Hercules*; 4 CH-47D *Chinook* HC4 • UNFICYP 276: 1 inf coy

### TERRITORY WHERE THE GOVERNMENT DOES NOT EXERCISE EFFECTIVE CONTROL

Data here represents the de facto situation on the northern half of the island. This does not imply international recognition as a sovereign state.

### Capabilities

#### ACTIVE 3,500 (Army 3,500) Paramilitary 150

*Conscript liability* 24 months

#### RESERVE 26,000 (first line 11,000 second line 10,000 third line 5,000)

Reserve liability to age 50

### ORGANISATIONS BY SERVICE

#### Army €3,500

#### FORCES BY ROLE

##### MANOEUVRE

##### Light

7 inf bn

#### EQUIPMENT BY TYPE

ARTY • MOR • 120mm 73

##### AT

MSL • MANPATS 6 *Milan*

RCL • 106mm 36

#### Paramilitary

##### Armed Police €150

#### FORCES BY ROLE

##### SPECIAL FORCES

1 (police) SF unit

#### Coast Guard

##### PATROL AND COASTAL COMBATANTS 6

PCC 5: 2 SG45/SG46; 1 *Rauf Denktash*; 2 US Mk 5

PB 1

### FOREIGN FORCES

#### TURKEY

**Army** €43,000

1 army corps HQ, 1 armd bde, 2 mech inf div, 1 avn comd

#### EQUIPMENT BY TYPE

MBT 348: 8 M48A2 (trg); 340 M48A5T1/2

APC (T) 627: 361 AAPC (incl variants); 266 M113 (incl variants)

##### ARTY

SP 155mm 90 M-44T



TOWED 102: 105mm 72 M101A1; 155mm 18 M114A2; 203mm 12 M115  
 MRL 122mm 6 T-122  
 MOR 450: 81mm 175; 107mm 148 M-30; 120mm 127 HY-12

**AT**

MSL • MANPATS *Milan*; TOW

RCL 106mm 192 M40A1

**AD • GUNS**

TOWED 20mm Rh 202; 35mm 16 GDF-003; 40mm 48 M1

AIRCRAFT • TPT • Light 3 Cessna 185 (U-17)

HELICOPTER • TPT 4 Medium 1 AS532UL *Cougar*

Light 3 Bell 205 (UH-1H *Iroquois*)

PATROL AND COASTAL COMBATANTS 1 PB

## Czech Republic CZE

Czech Koruna Kc		2014	2015	2016
GDP	Kc	4.26tr	4.5tr	
	US\$	205bn	182bn	
<i>per capita</i>	US\$	19,526	17,330	
Growth	%	2.0	3.9	
Inflation	%	0.4	0.4	
Def exp [a]	Kc	41bn		
	US\$	1.97bn		
Def bdgt [b]	Kc	42bn	43.8bn	47.6bn
	US\$	2.02bn	1.78bn	
FMA (US)	US\$	3m	1m	1m
US\$1=Kc		20.76	24.67	

[a] NATO definition

[b] Includes military pensions

Population 10,644,842

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.7%	2.3%	3.0%	3.5%	25.3%	7.4%
Female	7.3%	2.1%	2.8%	3.3%	24.8%	10.6%

## Capabilities

Published in 2015, the Czech national-security strategy confirms that NATO is at the centre of the country's security and asserts that stability and security in Europe have deteriorated. Overall, while a direct military attack was deemed unlikely, aggression against NATO or EU member states cannot be ruled out. The strategy conveys a sense of growing importance being attached to the armed forces. Defence spending is set to rise, and long-term defence planning guidelines for 2030, also published in 2015, support an active personnel number increase to 27,000. The Czech Republic is trying to use additional defence spending to replace legacy equipment in order to both modernise the armed forces and reduce dependency on Russia for spare parts and services. Key acquisition plans include mobile radars, wheeled armoured vehicles and a wheeled chassis for 120mm mortars. The country is also looking to bolster its special-forces capability.

**ACTIVE 21,700** (Army 12,200, Air 5,800, Other 3,700) Paramilitary 3,100

## ORGANISATIONS BY SERVICE

### Army 12,200

#### FORCES BY ROLE

##### MANOEUVRE

###### Reconnaissance

1 ISR/EW regt (1 recce bn, 1 EW bn)

###### Armoured

1 (7th) mech bde (1 armd bn, 2 armd inf bn, 1 mot inf bn)

###### Mechanised

1 (4th) rapid reaction bde (2 mech bn, 1 mot inf bn, 1 AB bn)

##### COMBAT SUPPORT

1 (13th) arty regt (2 arty bn)

1 engr regt (3 engr bn, 1 EOD bn)

1 CBRN regt (2 CBRN bn)

##### COMBAT SERVICE SUPPORT

1 log regt (2 log bn, 1 maint bn)

### Active Reserve

#### FORCES BY ROLE

##### COMMAND

14 (territorial defence) comd

##### MANOEUVRE

###### Armoured

1 armd coy

###### Light

14 inf coy (1 per territorial comd) (3 inf pl, 1 cbt spt pl, 1 log pl)

#### EQUIPMENT BY TYPE

MBT 30 T-72M4CZ; (93 T-72 in store)

AIFV 222: 120 BMP-2; 102 *Pandur* II (inc variants); (98 BMP-1; 68 BMP-2; 34 BPzV all in store)

APC 21:

APC (T) (17 OT-90 in store)

APC (W) (5 OT-64 in store)

PPV 21 *Dingo* 2

ARTY 96:

SP 152mm 48 M-77 *Dana*; (38 more in store)

MOR 120mm 48: 40 M-1982; 8 SPM-85; (42 M-1982 in store)

AT • MSL • MANPATS 9K113 *Konkurs* (AT-5 *Spandrel*)

RADAR • LAND 3 ARTHUR

ARV 10 VPV-ARV (12 more in store)

VLB 3 MT-55A (3 more in store)

MW UOS-155 *Belarty*

### Air Force 5,800

Principal task is to secure Czech airspace. This mission is fulfilled within NATO Integrated Extended Air Defence System (NATINADS) and, if necessary, by means of the Czech national reinforced air-defence system. The air force also provides CAS for army SAR, and performs a tpt role.

Flying hours 120hrs/yr cbt ac; 150 for tpt ac

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

- 1 sqn with *Gripen C/D*
- 1 sqn with L-159 ALCA/L-159T

**TRANSPORT**

- 2 sqn with A319CJ; C-295M; CL-601 *Challenger*; L-410 *Turbolet*; Yak-40 *Codling*

**TRAINING**

- 1 sqn with L-39ZA *Albatros\**

**ATTACK HELICOPTER**

- 1 sqn with Mi-24/Mi-35 *Hind*

**TRANSPORT HELICOPTER**

- 1 sqn with Mi-17 *Hip H*; Mi-171Sh
- 1 sqn with Mi-8 *Hip*; Mi-17 *Hip H*; PZL W-3A *Sokol*

**AIR DEFENCE**

- 1 (25th) SAM regt (2 AD gp)

**EQUIPMENT BY TYPE****AIRCRAFT** 48 combat capable

- FGA 14: 12 *Gripen C* (JAS 39C); 2 *Gripen D* (JAS 39D)
- ATK 25: 20 L-159 ALCA; 5 L-159T
- TPT 15: **Light** 12: 4 C-295M; 6 L-410 *Turbolet*; 2 Yak-40 *Codling*; **PAX** 3: 2 A319CJ; 1 CL-601 *Challenger*
- TRG 9 L-39ZA *Albatros\**

**HELICOPTERS**

- ATK 17: 7 Mi-24 *Hind D*; 10 Mi-35 *Hind E*
- MRH 5 Mi-17 *Hip H*
- TPT 30: **Medium** 20: 4 Mi-8 *Hip*; 16 Mi-171Sh; **Light** 10 PZL W3A *Sokol*

**AD • SAM**

- SP 9K35 *Strela-10* (SA-13 *Gopher*)
- MANPAD RBS-70; 9K32 *Strela-2†* (SA-7 *Grail*) (available for trg RBS-70 gunners)

**MSL**

- AAM • IR AIM-9M *Sidewinder*; ARH AIM-120C-5 AMRAAM

**BOMBS**

- Laser-guided: GBU *Paveway*

**Other Forces****FORCES BY ROLE****SPECIAL FORCES**

- 1 SF gp

**MANOEUVRE****Other**

- 1 (presidential) gd bde (2 bn)
- 1 (honour guard) gd bn (2 coy)

**COMBAT SUPPORT**

- 1 int gp
- 1 (central) MP comd
- 3 (regional) MP comd
- 1 (protection service) MP comd

**Paramilitary 3,100****Border Guards 3,000****Internal Security Forces 100****Cyber**

In 2011 the National Security Authority was established as the country's leading cyber-security body. The National

Cyber Security Centre and Government CERT (as part of the NSA) and the Cyber Security Council were established on the basis of this. A New Law on Cyber Security entered into force in January 2015. Moreover, a new edition of the National Cyber Security Strategy and the Action Plan for 2015 to 2020 were published. The National Cyber Security Strategy states that the country will look 'to increase national capacities for active cyber defence and cyber attack countermeasures'. The defence ministry develops its own cyber-defence capabilities according to specific tasks based on NATO or EU documents and the requirements of the National Action Plan. The defence-ministry security director also leads on cyber security.

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1992), Art. 39, 43

**Decision on deployment of troops abroad:** External deployments require approval by parliament. As an exception, such as in urgent cases, the government can decide on such a deployment for up to 60 days with the aim of fulfilling international treaty obligations concerning collective defence

**AFGHANISTAN**

NATO • *Operation Resolute Support 236*

UN • UNAMA 1 obs

**ARMENIA/AZERBAIJAN**

OSCE • Minsk Conference 1

**BOSNIA-HERZEGOVINA**

EU • EUFOR • *Operation Althea 2*

OSCE • Bosnia and Herzegovina 1

**CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 2 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 3 obs

**EGYPT**

MFO 15; 1 C-295M

**MALI**

EU • EUTM Mali 38

**SERBIA**

NATO • KFOR 11

OSCE • Kosovo 1

UN • UNMIK 2 obs

**SYRIA/ISRAEL**

UN • UNDOF 3

**UKRAINE**

OSCE • Ukraine 18

## Denmark DNK

Danish Krone kr		2014	2015	2016
GDP	kr	1.92tr	1.96tr	
	US\$	342bn	291bn	
<i>per capita</i>	US\$	60,947	51,424	
Growth	%	1.1	1.6	
Inflation	%	0.6	0.5	
Def exp [a]	kr	22.8bn		
	US\$	4.06bn		
Def bdgt [b]	kr	26.3bn	23.2bn	
	US\$	4.68bn	3.45bn	

US\$1=kr 5.61 6.74

[a] NATO definition

[b] Includes military pensions

Population 5,581,503

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.6%	3.3%	3.4%	3.0%	22.6%	8.4%
Female	8.2%	3.1%	3.3%	3.0%	22.8%	10.3%

## Capabilities

Danish military capabilities remain compact but effective despite pressures on spending and deployments. Denmark contributed six aircraft to the Baltic Air Policing mission in Estonia. Denmark and Sweden signed an agreement in early 2015 for further cooperation in air and naval operations in the region. Improved Danish ties to NATO, NORDEFCO and other neighbours marks an increasing trend among many of the Baltic states. A wider defence agreement, aimed at deterring Russia, was signed in April 2015 between Denmark, Finland, Iceland, Norway and Sweden. Following a new government taking office in May 2015, it was announced that the selection process for the air force's replacement of its F-16AM/BM fleet would conclude by 2016, with aircraft deliveries starting in 2020. The withdrawal of Saab from the competition in 2014 has reduced the field to the F/A-18, F-35A and Eurofighter *Typhoon*.

**ACTIVE 17,200** (Army 7,950 Navy 3,000 Air 3,150 Joint 3,100)

*Conscript liability* 4–12 months, most voluntary

**RESERVES 53,500** (Army 40,800 Navy 4,500 Air Force 5,300 Service Corps 2,900)

## ORGANISATIONS BY SERVICE

**Army 6,950; 1,000 conscript (total 7,950)**

Div and bde HQ are responsible for trg only; if necessary, can be transformed into operational formations

### FORCES BY ROLE

#### COMMAND

- 1 div HQ
- 2 bde HQ

## MANOEUVRE

### Reconnaissance

- 1 recce bn
- 1 ISR bn

### Armoured

- 1 tk bn

### Mechanised

- 5 armd inf bn

## COMBAT SUPPORT

- 1 SP arty bn
- 1 cbt engr bn
- 1 EOD bn
- 1 MP bn
- 1 sigs regt (1 sigs bn, 1 EW coy)

## COMBAT SERVICE SUPPORT

- 1 construction bn
- 1 log regt (1 spt bn, 1 log bn, 1 maint bn, 1 med bn)

## EQUIPMENT BY TYPE

MBT 55 *Leopard* 2A4/5

RECCE 113: 22 *Eagle* 1; 91 *Eagle* IV

AIFV 45 CV9030 Mk II

APC 494

APC (T) 343 M113 (incl variants); (196 more in store awaiting disposal)

APC (W) 111 *Piranha* III (incl variants)

PPV 40 *Cougar*

ARTY 44

SP 155mm 24 M109

MRL 227mm (12 MLRS in store awaiting disposal)

MOR • TOWED 120mm 20 Soltam K6B1

AT

MSL • MANPATS TOW

RCL 84mm 349 *Carl Gustav*

AD • SAM • MANPAD FIM-92A *Stinger*

RADAR • LAND ARTHUR

ARV 11 *Bergepanzer 2*

VLB 10 *Biber*

MW 14 910-MCV-2

**Navy 2,850; 150 conscript (total 3,000)**

## EQUIPMENT BY TYPE

### PRINCIPAL SURFACE COMBATANTS 7

DESTROYERS • DDGHM 3 *Iver Huitfeldt* with 4 quad Inchr with RGM-84 *Harpoon* Block II AShM, 1 32-cell Mk41 VLS with SM-2 IIIA SAM, 2 12-cell Mk56 VLS with RIM-162 SAM, 2 twin 324mm TT with MU90 LWT, 2 76mm guns (capacity 1 med hel)

FRIGATES • FFH 4 *Thetis* with 2 twin Inchr with *Stinger* SAM, 1 76mm gun (capacity 1 *Super Lynx* Mk90B)

### PATROL AND COASTAL COMBATANTS 9

PSO 2 *Knud Rasmussen* with 1 76mm gun, 1 hel landing platform

PCC 7: 1 *Agdlek*; 6 *Diana*

### MINE WARFARE • MINE COUNTERMEASURES 6

MCI 4 MSF MK-I

MSD 2 *Holm*

### LOGISTICS AND SUPPORT 23

ABU 2 (primarily used for MARPOL duties)

AE 1 *Sleipner*

**AG 2** *Absalon* (flexible support ships) with 2 octuple VLS with RGM-84 Block 2 *Harpoon* 2 ASHM, 4 twin Inchr with *Stinger* SAM, 3 12-cell Mk 56 VLS with RIM-162B *Sea Sparrow* SAM, 2 twin 324mm TT, 2 *Millennium* CIWS, 1 127mm gun (capacity 2 AW101 *Merlin*; 2 LCP, 7 MBT or 40 vehicles; 130 troops)

**AGE 1** *Dana*

**AGS 3** *Ska 11*

**AGSC 2** *Holm*

**AKL 2** *Seatruck*

**AX 1** *Søløven* (used as diving trainer)

**AXL 2** *Holm*

**AXS 2** *Svanen*

**YPL 3**

**YTL 2**

## Air Force 3,050; 100 conscript (total 3,150)

Flying hours 165 hrs/yr

### Tactical Air Comd

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

2 sqn with F-16AM/BM *Fighting Falcon*

##### ANTI-SUBMARINE WARFARE

1 sqn with *Super Lynx* Mk90B

##### SEARCH & RESCUE/TRANSPORT HELICOPTER

1 sqn with AW101 *Merlin*

1 sqn with AS550 *Fennec* (ISR)

##### TRANSPORT

1 sqn with C-130J-30 *Hercules*; CL-604 *Challenger* (MP/VIP)

##### TRAINING

1 unit with MFI-17 *Supporter* (T-17)

#### EQUIPMENT BY TYPE

##### AIRCRAFT 44 combat capable

**FTR 44:** 34 F-16AM *Fighting Falcon*; 10 F-16BM *Fighting Falcon* (30 operational)

**TPT 7:** **Medium** 4 C-130J-30 *Hercules*; **PAX** 3 CL-604 *Challenger* (MP/VIP)

**TRG 27** MFI-17 *Supporter* (T-17)

##### HELICOPTERS

**ASW 8:** 7 *Super Lynx* Mk90B; 1 MH-60R *Seahawk*

**MRH 8** AS550 *Fennec* (ISR) (4 more non-operational)

**TPT • Medium** 14 AW101 *Merlin* (8 SAR; 6 Tpt)

##### MSL

**AAM • IR** AIM-9L *Sidewinder*; **IIR** AIM-9X *Sidewinder* II; **ARH** AIM-120 **AMRAAM**

**ASM** AGM-65 *Maverick*

##### BOMBS

**Laser-guided** EGBU-12/GBU-24 *Paveway* II/III

**INS/GPS guided** GBU-31 **JDAM**

### Control and Air Defence Group

1 Control and Reporting Centre, 1 Mobile Control and Reporting Centre. 4 Radar sites.

### Special Operations Command

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF unit

1 diving unit

### Reserves

**Home Guard (Army)** 40,800 reservists (to age 50)

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

2 regt cbt gp (3 mot inf bn, 1 arty bn)

5 (local) def region (up to 2 mot inf bn)

**Home Guard (Navy)** 4,500 reservists (to age 50)

organised into 30 Home Guard units

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 31

**PB 31:** 18 MHV800; 1 MHV850; 12 MHV900

**Home Guard (Air Force)** 5,300 reservists (to age 50)

**Home Guard (Service Corps)** 2,900 reservists

### Cyber

Denmark has a national CERT and released a National Strategy for Cyber and Information Security in December 2014. Within the army, the 3rd Electronic Warfare Company is in charge of exploiting and disrupting enemy communications. A Centre for Cyber Security was established in 2012, within the defence-intelligence service, and has principal tasks of detecting, notifying and countering cyber attacks. Additionally, the Danish Defence Agreement 2013–17 noted funding allocations directed to 'provide a capacity that can execute defensive and offensive military operations in cyberspace'. Danish press reports in early 2015 indicated that Denmark was moving ahead with plans to establish this capability.

### DEPLOYMENT

#### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1849)

**Decision on deployment of troops abroad:** On approval by the parliament (Art. 19 II)

#### AFGHANISTAN

NATO • *Operation Resolute Support* 160

#### GULF OF ADEN & SOMALI BASIN

NATO • *Operation Ocean Shield* 1 AG; 1 CL-604 (MP)

#### LIBERIA

UN • UNMIL 2; 2 obs

#### MALI

UN • MINUSMA 19 obs

#### MIDDLE EAST

UN • UNTSO 11 obs

#### SERBIA

NATO • KFOR 35

#### SOUTH SUDAN

UN • UNMISS 11; 3 obs

#### UKRAINE

OSCE • Ukraine 14

## Estonia EST

Euro €		2014	2015	2016
GDP	€	20bn	20.6bn	
	US\$	26.5bn	22.9bn	
<i>per capita</i>	US\$	20,090	17,425	
Growth	%	2.9	2.0	
Inflation	%	0.5	0.2	
Def Exp [a]	€	386m		
	US\$	513m		
Def bdgt [b]	€	384m	402m	
	US\$	510m	447m	
FMA (US)	US\$	2.4m	1.5m	2m
US\$1=€		0.75	0.90	

[a] NATO definition

[b] Includes military pensions

Population 1,265,420

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.2%	2.2%	2.8%	3.9%	23.1%	6.4%
Female	7.8%	2.1%	2.6%	3.6%	24.6%	12.7%

## Capabilities

There has been an increased focus on national defence since the conflict began in eastern Ukraine, and an additional air base was provided by Estonia in 2014 for NATO's ongoing Baltic Air Policing mission. A draft budget for 2016 maintained an increased level of defence spending. A large proportion of investment in 2016 will go towards the procurement of CV90 armoured vehicles from the Netherlands. Infrastructure investment will further increase the country's NATO integration. Large-scale exercises in 2015 saw 13,000 reservists mobilised alongside another 1,000 NATO troops but Estonia has urged for a permanent deployment of 5,000 NATO personnel in addition to the air-policing mission. Conscription was reintroduced in 2015, with a basic eight-month term of service or 11 months for those who become junior NCOs or reserve officers, or who 'pass signals or IT training, or serve on ships of the Navy'.

**ACTIVE 5,750** (Army 5,300 Navy 200 Air 250)

**Defence League 12,000**

*Conscript liability* 8 months, officers and some specialists 11 months (Conscripts cannot be deployed)

**RESERVE 30,000** (Joint 30,000)

## ORGANISATIONS BY SERVICE

**Army 2,800; 2,500 conscript** (total 5,300)

4 def region. All units except one inf bn are reserve based

### FORCES BY ROLE

#### MANOEUVRE

##### Reconnaissance

1 recce bn

##### Light

1 (1st) bde (2 inf bn, 1 CSS bn)

3 indep inf bn

### COMBAT SUPPORT

1 arty bn

1 AD bn

1 engr bn

1 sigs bn

### COMBAT SERVICE SUPPORT

1 log bn

## Defence League 12,000

15 Districts

### EQUIPMENT BY TYPE

#### APC 158

APC (W) 151: 56 XA-180 *Sisu*; 80 XA-188 *Sisu*; 15 BTR-80

PPV 7 *Mamba*

#### ARTY 376

TOWED 66: 122mm 42 D-30 (H 63); 155mm 24 FH-70

MOR 310: 81mm 131: 41 B455; 10 NM 95; 80 M252;

120mm 179: 14 2B11; 165 41D

#### AT

MSL • MANPATS *Milan*; IMI MAPATS

RCL 160+; 106mm: 30 M40A1; 84mm *Carl Gustav*; 90mm 130 PV-1110

AD • SAM • MANPAD *Mistral*

## Navy 200

### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 1 *Ristna* (ex-FIN *Rihtniemi*) with 2 RBU 1200 A/S mor

MINE WARFARE • MINE COUNTERMEASURES 4

MCD 1 *Tasuja* (ex-DNK *Lindormen*)

MHC 3 *Admiral Cowan* (ex-UK *Sandown*)

## Air Force 250

Flying hours 120 hrs/year

### FORCES BY ROLE

#### TRANSPORT

1 sqn with An-2 *Colt*

#### TRANSPORT HELICOPTER

1 sqn with R-44 *Raven II*

### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 2 An-2 *Colt*

HELICOPTERS • TPT • Light 4 R-44 *Raven II*

## Paramilitary

### Border Guard

The Estonian Border Guard is subordinate to the Ministry of the Interior. Air support is provided by the Estonian Border Guard Aviation Corps.

### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 22

PCO 1 *Kindral Kurvits*

PCC 1 *Kou* (FIN *Silma*)

PB 9: 1 *Maru* (FIN *Viima*); 8 (other)

PBR 11

AMPHIBIOUS • LANDING CRAFT • LCU 2

LOGISTICS & SUPPORT • AGF 1 *Balsam*

AIRCRAFT • TPT • Light 2 L-410

HELICOPTERS • TPT • 3 AW139



## Cyber

Estonia substantially developed its cyber-security infrastructure after it came under cyber attack in 2007. It adopted a national Cyber Security Strategy in 2008 and in 2009 added a Cyber Security Council to the Security Committee of the Government of the Republic, which supports strategic-level inter-agency cooperation. Tallinn hosts the NATO Cooperative Cyber Security Centre of Excellence (CCDCOE), and the NATO *Locked Shields* cyber exercise takes place annually in Estonia, as has the Cyber Coalition exercise since 2013. A Cyber Security Strategy for 2014–17 advocates greater integration of capability, saying that specialists from the armed forces and the Estonian Defence League will be integral in developing military cyber-defence capabilities. The recently adopted Estonian Defence League Act explicitly integrates its Cyber Defence Unit into the national defence system.

## DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1992)

**Decision on deployment of troops abroad:** By parliament (Art. 128). Also, International Military Cooperation Act stipulates conditions for deployment abroad. For collective-defence purposes, ratification of the North Atlantic Treaty is considered a parliamentary decision that would allow cabinet to deploy troops. The president, chairman of the parliament and chairman of the parliament's State Defence Commission shall be immediately informed of such a decision. For other international operations, a separate parliamentary decision is necessary: the Ministry of Defence prepares a draft legal act and coordinates this with the Ministry of Foreign Affairs and the Ministry of Justice. It also asks the opinion of the chief of defence. The draft is then proposed to cabinet for approval and submission for parliamentary consideration.

### AFGHANISTAN

NATO • *Operation Resolute Support* 4

### LEBANON

UN • UNIFIL 37

### MALI

EU • EUTM Mali 8

UN • MINUSMA 10

### MIDDLE EAST

UN • UNTSO 4 obs

### NORTH SEA

NATO • SNMCMG 1: 1 MHC

### SERBIA

NATO • KFOR 2

### UKRAINE

OSCE • Ukraine 7

## FOREIGN FORCES

Germany NATO Baltic Air Policing 4 Eurofighter *Typhoon*

## Finland FIN

Euro €		2014	2015	2016
GDP	€	205bn	207bn	
	US\$	273bn	231bn	
<i>per capita</i>	US\$	50,016	42,159	
Growth	%	-0.4	0.4	
Inflation	%	1.2	0.02	
Def bdgt [a]	€	2.75bn	2.69bn	
	US\$	3.65bn	2.99bn	
US\$1=€		0.75	0.90	

[a] Excludes military pensions

Population 5,476,922

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.4%	2.8%	3.2%	3.2%	22.9%	8.7%
Female	8.0%	2.7%	3.1%	3.0%	22.5%	11.5%

## Capabilities

Finland's armed forces are primarily focused on territorial defence. As with Finland's Baltic and Scandinavian neighbours, the conflict in eastern Ukraine has led to some concern and a re-sharpened focus on defence matters. Incursions on Baltic airspace by Russian aircraft as well as a suspected submarine incursion in 2015 have also raised concerns in Helsinki. Reservist refresher training was also increased in 2015 to boost normal personnel numbers and the creation of a rapid-reaction force was announced by the Armed Forces Command. The government is to prepare a report on Finnish Security and Defence Policy and will, in connection with this, assess the effects of Finland's possible NATO membership. It will also prepare a defence report defining defence-policy guidelines for the maintenance, development and use of defence capability. Planned acquisitions include Ground Based Air Defence, ISR and cyber capabilities, and the replacement of the F/A-18 fleet.

**ACTIVE 22,200 (Army 16,000 Navy 3,500 Air 2,700) Paramilitary 2,800**

*Conscript liability* 6–9–12 months (12 months for officers, NCOs and soldiers with special duties). Conscript service was reduced by 15 days in early 2013

**RESERVE 354,000 (Army 285,000 Navy 31,000 Air 38,000) Paramilitary 11,500**

25,000 reservists a year do refresher training: total obligation 40 days (75 for NCOs, 100 for officers) between conscript service and age 50 (NCOs and officers to age 60)

## ORGANISATIONS BY SERVICE

**Army 5,000; 11,000 conscript (total 16,000)**

### FORCES BY ROLE

Finland's army maintains a mobilisation strength of about 285,000. In support of this requirement, two conscription cycles, each for about 15,000 conscripts, take place each year. After conscript training, reservist commitment is to

the age of 60. Reservists are usually assigned to units within their local geographical area. All service appointments or deployments outside Finnish borders are voluntary for all members of the armed services. All brigades are reserve based.

### Reserve Organisations

60,000 in manoeuvre forces and 225,000 in territorial forces

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bn

##### MANOEUVRE

###### Armoured

2 armd BG (regt)

###### Mechanised

2 (Karelia & Pori Jaeger) mech bde

###### Light

3 (Jaeger) bde

6 lt inf bde

###### Aviation

1 hel bn

##### COMBAT SUPPORT

1 arty bde

1 AD regt

7 engr regt

3 sigs bn

##### COMBAT SERVICE SUPPORT

Some log unit

#### EQUIPMENT BY TYPE

MBT 120: 100 *Leopard* 2A4; 20 *Leopard* 2A6

AIFV 212: 110 BMP-2; 102 CV90

APC 613

APC (T) 142: 40 MT-LBu; 102 MT-LBV

APC (W) 471: 260 XA-180/185 *Sisu*; 101 XA-202 *Sisu*; 48 XA-203 *Sisu*; 62 AMV (XA-360)

ARTY 647

SP 122mm 36 2S1 (PsH 74)

TOWED 324: 122mm 234 D-30 (H 63); 130mm 36 K 54;

155mm 54 K 83/K 98

MRL 227mm 22 M270 MLRS

MOR 120mm 265: 261 KRH 92; 4 XA-361 AMOS

AT • MSL • MANPATS *Spike*; TOW 2

#### HELICOPTERS

MRH 7: 5 Hughes 500D; 2 Hughes 500E

TPT • Medium 20 NH90 TTH

UAV • ISR • Medium 11 ADS-95 *Ranger*

#### AD

##### SAM

SP 60+: 16 ASRAD (ITO 05); 20 *Crotale* NG (ITO 90); 24

NASAMS II FIN (ITO 12); 9K37 *Buk*-M1 (ITO 96)

MANPAD FIM-92A *Stinger* (ITO 15); RBS 70 (ITO 05/05M)

GUNS 400+: 23mm; 35mm

AEV 6 *Leopard* 2R CEV

ARV 27: 15 MTP-LB; 12 VT-55A

VLB 15+: BLG-60M2; 6 *Leopard* 2L; 9 SISU *Leguan*

MW *Aardvark* Mk 2; KMT T-55; RA-140 DS

### Navy 1,600; 1,900 conscript (total 3,500)

#### FORCES BY ROLE

Naval Command HQ located at Turku; with two subordinate Naval Commands (Gulf of Finland and Archipelago Sea); 1 Naval bde; 3 spt elm (Naval Materiel Cmd, Naval Academy, Naval Research Institute)

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 8

PBG 4 *Rauma* with 6 RBS-15SF3 (15SF) ASHM

PCG 4 *Hamina* with 4 RBS-15 (15SF) ASHM, 1 octuple VLS with *Umkhonto* SAM, 1 57mm gun

##### MINE WARFARE 19

##### MINE COUNTERMEASURES 10

MHSO 3 *Katanpää* (expected FOC 2016/17)

MSI 7: 4 *Kiiski*; 3 *Kuha*

##### MINELAYERS • ML 5:

2 *Hameenmaa* with 1 octuple VLS with *Umkhonto* SAM, 2 RBU 1200 A/S mor, up to 100–120 mines, 1 57mm gun

3 *Pansio* with 50 mines

##### AMPHIBIOUS • LANDING CRAFT 55

LCU 1 *Kampela*

LCP 54

##### LOGISTICS AND SUPPORT 28

AG 4: 1 *Isku*; 1 *Louhi*; 2 *Hylje*

AGB 7 (Board of Navigation control)

AKSL 6: 4 *Hila*; 2 *Valas*

AX 4: 3 *Fabian Wrede*; 1 *Lokki*

YFB 6

YTM 1 *Haukipaa*

### Coastal Defence

#### FORCES BY ROLE

##### MANOEUVRE

###### Amphibious

1 mne bde

##### COMBAT SUPPORT

1 cbt spt bde (1 ASHM bty)

#### EQUIPMENT BY TYPE

ARTY • COASTAL • 130mm 30 K-53tk (static)

AT • MSL • MANPATS *Spike* (used in ASHM role)

MSL • ASHM • 4 RBS-15K ASHM

### Air Force 1,950; 750 conscript (total 2,700)

3 Air Comds: Satakunta (West), Karelia (East), Lapland (North)

Flying hours 90–140 hrs/year

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

3 sqn with F/A-18C/D *Hornet*

##### ISR

1 (survey) sqn with Learjet 35A

##### TRANSPORT

1 flt with C-295M

4 (liaison) flt with PC-12NG

##### TRAINING

1 sqn with *Hawk* Mk50/51A/66\* (air defence and ground attack trg)

1 unit with L-70 *Vinka*

**EQUIPMENT BY TYPE****AIRCRAFT** 107 combat capableFGA 62: 55 F/A-18C *Hornet*; 7 F/A-18D *Hornet*

MP 1 F-27-400M

ELINT 1 C-295M

TPT • **Light** 11: 2 C-295M; 3 Learjet 35A (survey; ECM trg; tgt-tow); 6 PC-12NGTRG 73: 29 *Hawk* Mk50/51A\*; 16 *Hawk* Mk66\*; 28 L-70 *Vinka*MSL • AAM • IR AIM-9 *Sidewinder*; IIR AIM-9X *Sidewinder*; ARH AIM-120 AMRAAM**Paramilitary****Border Guard** 2,800

Ministry of Interior. 4 Border Guard Districts and 2 Coast Guard Districts

**FORCES BY ROLE****MARITIME PATROL**1 sqn with Do-228 (maritime surv); AS332 *Super Puma*; Bell 412 (AB-412) *Twin Huey*; Bell 412EP (AB-412EP) *Twin Huey*; AW119KE *Koala***EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 52PCO 1 *Turva*PCC 3; 2 *Tursas*; 1 *Merikarhu*

PB 48

**AMPHIBIOUS • LANDING CRAFT • LCAC** 7**AIRCRAFT • TPT • Light** 2 Do-228**HELICOPTERS**MRH 5: 4 Bell 412 (AB-412) *Twin Huey*; 1 Bell 412EP (AB-412EP) *Twin Huey*TPT 7: **Medium** 3 AS332 *Super Puma*; **Light** 4 AW119KE *Koala***Reserve** 11,500 reservists on mobilisation**Cyber**

Finland published a national cyber-security strategy in 2013 and published an implementation programme for this in 2014. In accordance with the strategy, the Finnish Defence Forces will create a comprehensive cyber-defence capacity for their statutory tasks; the strategy continues that 'a military cyber-defence capacity encompasses intelligence as well as cyber-attack and cyber-defence capabilities'. Full operational capability is planned by 2020, and the cyber division is organised under the defence forces' C5 Agency.

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Specific legislation:** 'Act on Military Crisis Management, (211/2006).

**Decision on deployment of troops abroad:** The President of the Republic upon proposal by the Council of State (Act on Military Crisis Management (211/2006), paragraph 2). Before making the proposal the Council of State must consult the parliament (Act on Military Crisis Management (211/2006), paragraph 3).

**AFGHANISTAN**NATO • *Operation Resolute Support* 80**BOSNIA-HERZEGOVINA**EU • EUFOR • *Operation Althea* 8**INDIA/PAKISTAN**

UN • UNMOGIP 6 obs

**IRAQ***Operation Inherent Resolve* 49**LEBANON**

UN • UNIFIL 308; elm 1 mech inf bn

**LIBERIA**

UN • UNMIL 1

**MALI**

EU • EUTM Mali 10

UN • MINUSMA 5

**MIDDLE EAST**

UN • UNTSO 17 obs

**SERBIA**

NATO • KFOR 21

OSCE • Kosovo 2

**UGANDA**

EU • EUTM Somalia 7

**UKRAINE**

OSCE • Ukraine 27

**France FRA**

Euro €		2014	2015	2016
GDP	€	2.13tr	2.18tr	
	US\$	2.83tr	2.42tr	
per capita	US\$	44,332	37,728	
Growth	%	0.2	1.2	
Inflation	%	0.6	0.1	
Def exp [a]	€	39.2bn		
	US\$	52.1bn		
Def bdgt [b]	€	39.2bn	42.0bn	
	US\$	52.1bn	46.8bn	

US\$1=€ 0.75 0.90

[a] NATO definition

[b] Includes pensions

**Population** 66,553,766

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	9.5%	3.0%	3.0%	3.1%	22.2%	8.1%
Female	9.1%	2.9%	2.9%	3.0%	22.5%	10.7%

**Capabilities**

French forces have been deployed across multiple theatres and at significant tempo in 2015, both abroad and at home. Exercise deployments in eastern Europe were increased in light of the Ukraine crisis. France continued to execute a range of military operations across the Sahel. It continued to commit forces to Djibouti and the EU anti-piracy operation

in the Indian Ocean, whilst deploying aircraft and trainers in the US-led campaign against ISIS in Iraq and Syria and engaging in a major homeland security operation after terrorist attacks in Paris in January and November. The increased operational tempo since 2013 has driven France to reverse the trend of defence-budget and personnel contractions. President Hollande scaled back planned personnel reductions from 25,000 to 6,500 and added €3.8bn to the defence budget over the 2016–19 period. The budget, ring-fenced since 2013, has been increased. This includes money that will be earmarked for further equipment purchases, including *Tiger* and NH90 helicopters, unspecified special-forces and cyber equipment, offshore-patrol vessels and up to four C-130 transport aircraft (including two tankers) to make up for temporary gaps in A400M helicopter-refuelling and parachute-delivery capabilities, also introducing another tactical-airlift capability. (See pp. 64–66.)

**ACTIVE 208,950 (Army 111,650 Navy 36,050 Air 43,600, Other Staffs 17,650) Paramilitary 103,400**

**RESERVE 27,650 (Army 15,400 Navy 4,850 Air 4,350 Other Staffs 3,050) Paramilitary 40,000**

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## ORGANISATIONS BY SERVICE

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### Strategic Nuclear Forces

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#### Navy 2,200

##### SUBMARINES • STRATEGIC • SSBN 4

- 1 *Le Triomphant* with 16 M45 SLBM with 6 TN-75 nuclear warheads, 4 single 533mm TT with F17 Mod 2 HWT/SM-39 *Exocet* AShM
- 3 *Le Triomphant* with 16 M51 SLBM with 6 TN-75 nuclear warheads, 4 single 533mm TT with F17 Mod 2 HWT/SM-39 *Exocet* AShM

AIRCRAFT • FGA 20 *Rafale* M F3 with ASMP-A msl

#### Air Force 1,800

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##### Air Strategic Forces Command

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###### FORCES BY ROLE

###### STRIKE

- 1 sqn with *Mirage* 2000N with ASMP/ASMP-A msl
- 1 sqn with *Rafale* B with ASMP/ASMP-A msl

###### TANKER

- 1 sqn with C-135FR; KC-135 *Stratotanker*

###### EQUIPMENT BY TYPE

AIRCRAFT 43 combat capable

FGA 43: 23 *Mirage* 2000N; 20 *Rafale* B

TKR/TPT 11 C-135FR

TKR 3 KC-135 *Stratotanker*

#### Paramilitary

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##### Gendarmerie 40

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#### Space

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##### EQUIPMENT BY TYPE

SATELLITES 8

**COMMUNICATIONS 2** *Syracuse-3* (designed to integrate with UK *Skyнет* & ITA *Sicral*)

**ISR 4: 2** *Helios* (2A/2B); 2 *Pleiades*

**EARLY WARNING 2** *Spirale*

#### Army 111,650

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Regt and BG normally bn size

##### FORCES BY ROLE

###### COMMAND

- 2 (task force) HQ

###### MANOEUVRE

###### Reconnaissance

- 1 ISR bde (1 recce regt, 1 UAV regt, 2 EW regt, 1 int bn)

###### Armoured

- 1 (2nd) armd bde (2 armd regt, 2 armd inf regt, 1 SP arty regt, 1 engr regt)

- 1 (7th) armd bde (1 armd regt, 3 armd inf regt, 1 MLRS regt, 1 AD regt, 1 engr regt)

###### Mechanised

- 1 (3rd) lt armd bde (1 armd cav regt, 1 armd inf regt, 1 mech inf regt, 1 SP arty regt, 1 engr regt)

- 1 (6th) lt armd bde (2 armd cav regt, 2 mech inf regt, 1 SP arty regt, 1 engr regt)

- 1 (FRA/GER) mech bde (1 armd cav regt, 1 mech inf regt)

- 1 mech BG (UAE)

- 1 mech regt (Djibouti)

###### Light

- 2 regt (French Guiana)

- 1 regt (New Caledonia)

- 1 coy (Mayotte)

###### Air Manoeuvre

- 1 (11th) AB bde (1 armd cav regt, 4 para regt, 1 arty regt, 1 engr regt, 1 spt regt)

- 1 AB regt (Réunion)

- 1 AB bn (Gabon)

###### Amphibious

- 1 (9th) amph bde (1 armd cav regt, 2 mech inf regt, 1 SP arty regt, 1 engr regt)

###### Mountain

- 1 (27th) mtn bde (1 armd cav regt, 3 mech inf regt, 1 arty regt, 1 engr regt)

###### Aviation

- 3 avn regt

###### Other

- 4 SMA regt (French Guiana, French West Indies & Indian Ocean)

- 3 SMA coy (French Polynesia, Indian Ocean & New Caledonia)

###### COMBAT SUPPORT

- 1 CBRN regt

- 1 engr regt

- 1 sigs bde (5 sigs regt)

###### COMBAT SERVICE SUPPORT

- 1 log bde (5 tpt regt, 1 log regt, 1 med regt)

- 3 trg regt

#### Special Operation Forces 2,200

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##### FORCES BY ROLE

###### SPECIAL FORCES

- 2 SF regt

**MANOEUVRE****Aviation**

1 avn regt

**Reserves 16,000 reservists**

Reservists form 79 UIR (Reserve Intervention Units) of about 75 to 152 troops, for 'Proterre' – combined land projection forces bn, and 23 USR (Reserve Specialised Units) of about 160 troops, in specialised regt.

**EQUIPMENT BY TYPE****MBT** 200 *Leclerc***RECCE** 1,858: 248 AMX-10RC; 100 ERC-90F4 *Sagaie*; 40

VAB Reco NBC; 1,470 VBL M-II

**AIFV** 630 VBCI (incl 110 VCP)**APC** 2,657**APC (T)** 53 BvS-10**APC (W)** 2,586: 2,500 VAB; 60 VAB BOA; 26 VAB NBC**PPV** 18: 14 *Aravis*; 4 *Buffalo***ARTY** 298+**SP 155mm** 114: 37 AU-F-1; 77 CAESAR**TOWED 155mm** 43 TR-F-1**MRL 227mm** 13 M270 MLRS**MOR** 128+: **81mm** LRR 81mm; **120mm** 128 RT-F1**AT • MSL****SP** 325: 30 VAB HOT; 110 VAB *Milan*; 185 VAB *Eryx***MANPATS** *Javelin*; *Milan***AIRCRAFT • TPT • Light** 13: 5 PC-6B *Turbo Porter*; 5 TBM-700; 3 TBM-700B**HELICOPTERS****ATK** 51: 39 *Tiger* HAP; 12 *Tiger* HAD**MRH** 128: 18 AS555UN *Fennec*; 110 SA341F/342M *Gazelle* (all variants)**TPT** 159: **Heavy** 8 H225M *Caracal* (CSAR); **Medium** 116: 26 AS532UL *Cougar*; 15 NH90 TTH; 75 SA330 *Puma*;**Light** 35 H120 *Colibri* (leased)**UAV • ISR • Medium** 20 SDTI (*Sperver*)**AD • SAM • MANPAD** *Mistral***RADAR • LAND** 66: 10 *Cobra*; 56 RASIT/RATAC**AEV** 54 AMX-30EBG**ARV** 48+: 30 AMX-30D; 18 *Leclerc* DNG; VAB-EHC**VLB** 67: 39 EFA; 18 PTA; 10 SPRAT**MW** 20+: AMX-30B/B2; 20 *Minotaur***Navy 36,050****EQUIPMENT BY TYPE****SUBMARINES** 10**STRATEGIC • SSBN** 4:

1 *Le Triomphant* opcon Strategic Nuclear Forces with 16 M45 SLBM with 6 TN-75 nuclear warheads, 4 single 533mm TT with F17 Mod 2 HWT/SM-39 *Exocet* ASHM (currently undergoing modernisation programme to install M51 SLBM; expected completion 2018)

3 *Le Triomphant* opcon Strategic Nuclear Forces with 16 M51 SLBM with 6 TN-75 nuclear warheads, 4 single 533mm TT with F17 Mod 2 HWT/SM-39 *Exocet* ASHM

**TACTICAL • SSN** 6:

6 *Rubis* with 4 single 533mm TT with F-17 HWT/SM-39 *Exocet* ASHM

**PRINCIPAL SURFACE COMBATANTS 23****AIRCRAFT CARRIERS** 1

**CVN** 1 *Charles de Gaulle* with 4 octuple VLS with *Aster* 15 SAM, 2 sextuple *Sadral* Inchr with *Mistral* SAM (capacity 35–40 *Super Etendard/Rafale* M/E-2C *Hawkeye*/AS365 *Dauphin*)

**DESTROYERS • DDGHM** 11:

2 *Cassard* with 2 quad Inchr with MM-40 *Exocet* Block 2 ASHM, 1 Mk13 GMLS with SM-1MR SAM, 2 sextuple *Sadral* Inchr with *Mistral* SAM, 2 single 533mm ASTT with L5 HWT, 1 100mm gun (capacity 1 AS565SA *Panther* ASW hel)

2 *Forbin* with 2 quad Inchr with MM-40 *Exocet* Block 3 ASHM, 1 48-cell VLS with *Aster* 15/*Aster* 30 SAM, 2 twin 324mm ASTT with MU-90, 2 76mm gun (capacity 1 NH90 TTH hel)

1 *Georges Leygues* with 2 twin Inchr with MM-38 *Exocet* ASHM, 1 octuple Inchr with *Crotale* SAM, 2 sextuple *Sadral* Inchr with *Mistral* SAM, 2 single 533mm ASTT with L5 HWT, 1 100mm gun (capacity 2 *Lynx* hel)

2 *Georges Leygues* with 2 quad Inchr with MM-40 *Exocet* ASHM, 1 octuple Inchr with *Crotale* SAM, 2 sextuple *Sadral* Inchr with *Mistral* SAM, 2 single 533mm ASTT with L5 HWT, 1 100mm gun (capacity 2 *Lynx* hel)

3 *Georges Leygues* (mod) with 2 quad Inchr with MM-40 *Exocet* ASHM, 1 octuple Inchr with *Crotale* SAM, 2 twin *Simbad* Inchr with *Mistral* SAM, 2 single 324mm ASTT with MU90 LWT, 1 100mm gun (capacity 2 *Lynx* hel)

1 *Aquitaine* with 2 octuple *Sylver* A70 VLS with MdCN (SCALP Naval) LACM, 2 quad Inchr with MM-40 *Exocet* Block 3 ASHM, 2 octuple *Sylver* A43 VLS with *Aster* 15 SAM, 2 twin B515 324mm ASTT with MU90 LWT, 1 76mm gun (capacity 1 NH90 NFH hel)

**FRIGATES • FFGHM** 11:

6 *Floreal* with 2 single Inchr with MM-38 *Exocet* ASHM, 1 twin *Simbad* Inchr with *Mistral* SAM, 1 100mm gun (capacity 1 AS565SA *Panther* hel)

5 *La Fayette* with 2 quad Inchr with MM-40 *Exocet* Block 3 ASHM, 1 octuple Inchr with *Crotale* SAM, (space for fitting 2 octuple VLS Inchr for *Aster* 15/30), 1 100mm gun (capacity 1 AS565SA *Panther*/SA321 *Super Frelon* hel)

**PATROL AND COASTAL COMBATANTS** 20

**FSM** 9 *D'Estienne d'Orves* with 1 twin *Simbad* Inchr with *Mistral* SAM, 4 single ASTT, 1 100mm gun

**PCC** 7: 4 *L'Audacieuse* (all deployed in the Pacific or Caribbean); 3 *Flamant*

**PCO** 4: 1 *Lapérouse*; 1 *Le Malin*; 1 *Fulmar*; 1 *Gowind* (leased from DCNS until 2016)

**MINE WARFARE • MINE COUNTERMEASURES** 18

**MCS** 7: 3 *Antares* (used as route survey vessels); 4 *Vulcain* (used as mine diving tenders)

**MHO** 11 *Éridan***AMPHIBIOUS****PRINCIPAL AMPHIBIOUS SHIPS** 3

**LHD** 3 *Mistral* with 2 twin *Simbad* Inchr with *Mistral* SAM, (capacity up to 16 NH90/SA330 *Puma*/AS532 *Cougar*/*Tiger* hel; 2 LCAC or 4 LCM; 13 MBTs; 50 AFVs; 450 troops)



**LANDING SHIPS • LST** 2 *Batral* (capacity 12 trucks; 140 troops)

**LANDING CRAFT 40**

LCT 4 EDA-R

LCM 11 CTM

LCVP 25

**LOGISTICS AND SUPPORT 145**

ABU 1 *Telem Mor*

AE 1 *Denti*

AFS 1 *Revi*

AG 4: 1 *Lapérouse* (used as trials ships for mines and divers); 3 *Chamois*

AGE 1 *Corraline*

AGI 1 *Dupuy de Lome*

AGM 1 *Monge*

AGOR 2: 1 *Pourquoi pas?* (used 150 days per year by Ministry of Defence; operated by Ministry of Research and Education otherwise); 1 *Beautemps-beaupré*

AGS 3 *Lapérouse*

AORH 4 *Durance* with 1-3 twin *Simbad* Inchr with *Mistral* SAM (capacity 1 SA319 *Alouette* III/AS365 *Dauphin/Lynx*)

ATA 2 *Malabar*

AXL 12: 8 *Léopard*; 2 *Glycine*; 2 *Engageante*

AXS 4: 2 *La Belle Poule*; 2 other

YAG 2 *Phaéton* (towed array tenders)

YD 5

YDT 10: 1 *Alize*; 9 VIP 21

YFB 2 VTP

YFL 9 V14

YFRT 2 *Athos*

YFU 8

YGS 7 VH8

YTB 3 *Bélier*

YTL 34: 4 RP10; 4 PSS10; 26 PS4

YTM 21: 3 *Maïto*; 16 *Fréhel*; 2 *Esterel*

YTR 5: 3 *Avel Aber*; 2 *Las*

**Naval Aviation 6,500**

Flying hours 180–220 hrs/yr on strike/FGA ac

**FORCES BY ROLE**

**STRIKE/FIGHTER/GROUND ATTACK**

2 sqn with *Rafale* M F3

**FIGHTER/GROUND ATTACK**

1 sqn with *Super Etendard Modernisé*

**ANTI-SURFACE WARFARE**

1 sqn with AS565SA *Panther*

**ANTI-SUBMARINE WARFARE**

2 sqn (forming) with NH90 NFH

1 sqn with *Lynx* Mk4

**MARITIME PATROL**

2 sqn with *Atlantique* 2

1 sqn with *Falcon* 20H *Gardian*

1 sqn with *Falcon* 50MI

**AIRBORNE EARLY WARNING & CONTROL**

1 sqn with E-2C *Hawkeye*

**SEARCH & RESCUE**

1 sqn with AS365N/F *Dauphin* 2 1 sqn with H225 *Super Puma*

**TRAINING**

1 sqn with SA319B *Alouette* III

1 unit with *Falcon* 10 M

1 unit with CAP 10; EMB 121 *Xingu*; MS-880 *Rallye*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 79 combat capable

FGA 60: 39 *Rafale* M F3; 21 *Super Etendard Modernisé*

ASW 12 *Atlantique* 2 (10 more in store)

AEW&C 3 E-2C *Hawkeye*

SAR 3 *Falcon* 50MS

TPT 26: **Light** 11 EMB-121 *Xingu*; **PAX** 15: 6 *Falcon* 10MER; 5 *Falcon* 20H *Gardian*; 4 *Falcon* 50MI

TRG 14: 7 CAP 10; 7 MS-880 *Rallye*\*

**HELICOPTERS**

ASW 35: 20 *Lynx* Mk4; 15 NH90 NFH

MRH 49: 9 AS365N/F/SP *Dauphin* 2; 2 AS365N3; 16 AS565SA *Panther*; 22 SA319B *Alouette* III

TPT • **Medium** 2 H225 *Super Puma*

**MSL**

AAM • IR R-550 *Magic* 2; IIR *Mica* IR; ARH *Mica* RF

AshM AM-39 *Exocet*

ASM ASMP-A; AS-30 *Laser*; AASM

**BOMBS**

Laser-guided: GBU-12 *Paveway* II

**Marines 2,000**

**Commando Units 550**

**FORCES BY ROLE**

**MANOEUVRE**

**Reconnaissance**

1 recce gp

**Amphibious**

2 aslt gp

1 atk swimmer gp

1 raiding gp

**COMBAT SUPPORT**

1 cbt spt gp

**COMBAT SERVICE SUPPORT**

1 spt gp

**Fusiliers-Marin 1,450**

**FORCES BY ROLE**

**MANOEUVRE**

**Other**

2 sy gp

7 sy coy

**Reserves 5,500 reservists**

**Air Force 43,600**

Flying hours 180 hrs/year

**FORCES BY ROLE**

**STRIKE**

1 sqn with *Mirage* 2000N with ASMP/ASMP-A msl

1 sqn with *Rafale* B with ASMP/ASMP-A msl

**SPACE**

1 (satellite obs) sqn

**FIGHTER**

1 sqn with *Mirage* 2000-5

1 sqn with *Mirage* 2000B/C

**FIGHTER/GROUND ATTACK**

- 3 sqn with *Mirage* 2000D
- 1 (composite) sqn with *Mirage* 2000C/D (Djibouti)
- 2 sqn with *Rafale* B/C
- 1 sqn with *Rafale* B/C (UAE)

**ELECTRONIC WARFARE**

- 1 flt with C-160G *Gabriel* (ESM)

**AIRBORNE EARLY WARNING & CONTROL**

- 1 (Surveillance & Control) sqn with E-3F *Sentry*

**SEARCH & RESCUE/TRANSPORT**

- 5 sqn with C-160R *Transall*; CN-235M; DHC-6-300 *Twin Otter*; SA330 *Puma*; AS555 *Fennec* (Djibouti, French Guiana, Gabon, Indian Ocean & New Caledonia)

**TANKER**

- 1 sqn with C-135FR; KC-135 *Stratotanker*

**TANKER/TRANSPORT**

- 2 sqn with C-160R *Transall*

**TRANSPORT**

- 1 sqn with A310-300; A330; A340-200 (on lease)
- 3 sqn with A400M *Atlas*; C-130H/H-30 *Hercules*; C-160R *Transall*
- 2 sqn with CN-235M
- 1 sqn with EMB-121
- 1 sqn with *Falcon* 7X (VIP); *Falcon* 900 (VIP); *Falcon* 2000
- 3 flt with TBM-700A
- 1 (mixed) gp with AS532 *Cougar*; C-160 *Transall*; DHC-6-300 *Twin Otter*

**TRAINING**

- 1 OCU sqn with *Mirage* 2000D
- 1 OCU sqn with *Rafale* B/C F3
- 1 OCU sqn with SA330 *Puma*; AS555 *Fennec*
- 1 OCU unit with C-160 *Transall*
- 1 (aggressor) sqn with *Alpha Jet*\*
- 4 sqn with *Alpha Jet*\*
- 3 sqn with CAP 10; Grob G120A-F; TB-30 *Epsilon*

**TRANSPORT HELICOPTER**

- 2 sqn with AS555 *Fennec*
- 2 sqn with AS332C/L *Super Puma*; SA330 *Puma*; H225M *Caracal*

**ISR UAV**

- 1 sqn with *Harfang*; MQ-9A *Reaper*

**AIR DEFENCE**

- 3 sqn with *Crotale* NG; SAMP/T
- 1 sqn with SAMP/T

**EQUIPMENT BY TYPE****SATELLITES** *see* Space**AIRCRAFT** 281 combat capable

- FTR** 40: 34 *Mirage* 2000-5/2000C; 6 *Mirage* 2000B
- FGA** 177: 58 *Mirage* 2000D; 23 *Mirage* 2000N; 50 *Rafale* B; 46 *Rafale* C
- ELINT** 2 C-160G *Gabriel* (ESM)
- AEW&C** 4 E-3F *Sentry*
- TKR** 3 KC-135 *Stratotanker*
- TKR/TPT** 31: 11 C-135FR 20 C-160R *Transall*
- TPT** 114: **Heavy** 7 A400M *Atlas*; **Medium** 25: 5 C-130H *Hercules*; 9 C-130H-30 *Hercules*; 11 C-160R *Transall*; **Light** 70: 19 CN-235M-100; 8 CN-235M-300; 5 DHC-6-300 *Twin Otter*; 23 EMB-121 *Xingu*; 15 TBM-700; **PAX** 12: 3 A310-300; 1 A330; 2 A340-200 (on lease); 2 *Falcon* 7X; 2 *Falcon* 900 (VIP); 2 *Falcon* 2000

- TRG** 112: 64 *Alpha Jet*\* 5 CAP 10; 18 Grob G120A-F; 25 TB-30 *Epsilon* (incl many in storage)

**HELICOPTERS**

- MRH** 37 AS555 *Fennec*
- TPT** 43: **Heavy** 11 H225M *Caracal*; **Medium** 32: 3 AS332C *Super Puma*; 4 AS332L *Super Puma*; 3 AS532UL *Cougar* (tpt/VIP); 22 SA330B *Puma*

**UAV • ISR • Heavy** 9: 4 *Harfang*; 5 MQ-9A *Reaper***AD**

- SAM** 20: 12 *Crotale* NG; 8 SAMP/T

**GUNS** 20mm 76 T2**SYSTEMS** STRIDA (Control)**MSL**

- AAM • IR** R-550 *Magic* 2; **IIR** *Mica* IR; **SARH** *Super* 530D; **ARH** *Mica* RF
- ASM** ASMP-A; AS-30L; *Apache*; AASM
- LACM** SCALP EG

**BOMBS**

- Laser-guided:** GBU-12 *Paveway* II

**Security and Intervention Brigade****FORCES BY ROLE****SPECIAL FORCES**

- 3 SF gp

**MANOEUVRE****Other**

- 24 protection units
- 30 fire fighting and rescue scn

**Reserves** 4,750 reservists**Paramilitary** 103,400**Gendarmerie** 103,400; 40,000 reservists**EQUIPMENT BY TYPE****LT TK** 28 VBC-90**APC (W)** 153 VBRG-170**ARTY • MOR** 81mm some**PATROL AND COASTAL COMBATANTS** 39

- PB** 39: 4 *Géranium*; 1 *Glaive*; 2 VSC 14; 24 VSCM; 8 EBSLP

**HELICOPTERS • TPT • Light** 60: 25 AS350BA *Ecureuil*;

- 20 H135; 15 H145

**Customs (Direction Générale des Douanes et Droits Indirects)****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 30

- PCO** 2: 1 *Jacques Oudart Fourmentin*; 1 *Kermovan*
- PB** 28: 7 *Plascoa* 2100; 7 *Haize Hegoa*; 2 *Avel Gwalarn*; 1 *Rafale*; 1 *Arafenua*; 1 *Vent d'Amont*; 1 *La Rance*; 8 others

**Coast Guard (Direction des Affaires Maritimes)****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 25

- PCO** 1 *Themis*
- PCC** 1 *Iris*
- PB** 23: 4 *Callisto*; 19 others

**LOGISTICS AND SUPPORT • AG** 7

## Cyber

The French Network and Information Security Agency (ANSSI) was established in 2009 to conduct surveillance on sensitive government networks and respond to cyber attacks. The 2008 French Defence White Paper placed emphasis on cyber threats, calling for programmes in offensive and defensive cyber-war capabilities. In July 2011, the defence ministry produced a classified Joint Cyber Defence Concept. Cyber featured throughout the 2013 white paper and 'for the first time, the armed forces model includes military cyber defence capabilities, in close liaison with intelligence and defensive and offensive planning, in preparation for or support of military operations'. The French Ministry of Defence is in charge of the defence of its networks and information systems. The head of the Cyber Defence Cell also serves as the head of the French cyber operational command. According to the CCDOE, the defence ministry extends 'operational control to cyber capabilities through J6 [comms] at the theatre level, as well as tactical units directly subordinate to the cyber defence department of the Joint Chief of Staff'.

## DEPLOYMENT

### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1958)

**Specific legislation:** 'Order of 7 January 1959'

**Decision on deployment of troops abroad:** De jure: by the minister of defence, under authority of the PM and on agreement in council of ministers ('Order of 7 January 1959', Art. 16, Art. 20-1 of constitution)

### ARABIAN SEA & GULF OF ADEN

*Operation Chammal* 1 DDGHM

### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 1

### BURKINA FASO

*Operation Barkhane* 220

### CENTRAL AFRICAN REPUBLIC

*Operation Sangaris* 900; 1 mech BG; 1 hel det with 2 AS555 *Fennec*; 2 SA330 *Puma*

EU • EUMAM RCA 20

UN • MINUSCA 8

### CHAD

*Operation Barkhane* 1,250; 1 mech inf BG; 1 air unit with 4 *Rafale* F3; 1 C-130H *Hercules*; 1 C-160 *Transall*; 1 C-135FR; 1 hel det with 2 H225M *Caracal*; 2 SA330 *Puma*

### CÔTE D'IVOIRE

600; 1 armd BG; 1 C-160 *Transall*; 1 AS555 *Fennec*

UN • UNOCI 4

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 5

### DJIBOUTI

1,700; 1 (Marine) combined arms regt with (2 recce sqn, 2 inf coy, 1 arty bty, 1 engr coy); 1 hel det with 4 SA330 *Puma*; 2 SA342 *Gazelle*; 1 LCM; 1 FGA sqn with 7 *Mirage* 2000C/D; 1 SAR/tpt sqn with 1 C-160 *Transall*; 1 *Falcon* 50MI; 1 AS555 *Fennec*; 2 SA330 *Puma*

### EGYPT

MFO 2

### FRENCH GUIANA

2,100: 1 (Foreign Legion) inf regt; 1 (Marine) inf regt; 1 SMA regt; 2 PCC; 1 tpt sqn with 1 CN-235M; 6 SA330 *Puma*; 3 AS555 *Fennec*; 3 gendarmerie coy; 1 AS350BA *Ecureuil*

### FRENCH POLYNESIA

900: (incl Centre d'Expérimentation du Pacifique); 1 SMA coy; 1 naval HQ at Papeete; 1 FFGHM; 1 PCO; 1 AFS; 3 *Falcon* 200 *Gardian*; 1 SAR/tpt sqn with 3 CN-235M; 1 AS332 *Super Puma*; 1 AS555 *Fennec*

### FRENCH WEST INDIES

1,000; 1 (Marine) inf coy; 2 SMA regt; 2 FFGHM; 1 PCC; 1 LST; 1 naval base at Fort de France (Martinique); 4 gendarmerie coy; 2 AS350BA *Ecureuil*

### GABON

450; 1 AB bn; 1 SAR/tpt sqn with 1 CN-235M; 1 SA330 *Puma*

### GERMANY

2,000 (incl elm Eurocorps and FRA/GER bde); 1 (FRA/GER) mech bde (1 armd cav regt, 1 mech inf regt)

### GULF OF GUINEA

*Operation Corymbe* 1 LHD

### INDIAN OCEAN

1,650 (incl La Réunion and TAAF); 1 (Marine) para regt; 1 (Foreign Legion) inf coy; 1 SMA regt ; 1 SMA coy; 2 FFGHM; 1 LST; 1 LCM; 1 naval HQ at Port-des-Galets (La Réunion); 1 naval base at Dzaoudzi (Mayotte); 1 SAR/tpt sqn with 2 C-160 *Transall*; 2 AS555 *Fennec*; 5 gendarmerie coy; 1 SA319 *Alouette* III

### IRAQ

*Operation Chammal* 95

### JORDAN

*Operation Chammal* 3 *Mirage* 2000D; 3 *Mirage* 2000N

### LEBANON

UN • UNIFIL 825; 1 inf BG; *Leclerc*; AMX-10P; VBCI; VAB; CAESAR; AU-F1 155mm; *Mistral*

### MALI

*Operation Barkhane* 1,680; 1 mech inf BG; 1 log bn; 1 hel unit with 2 *Tiger*; 2 AS532 *Cougar*; 2 NH90 TTH; 2 SA330 *Puma*; 2 SA342 *Gazelle*

EU • EUTM Mali 15

UN • MINUSMA 24

### MEDITERRANEAN SEA

EU • EU NAVFOR MED: 1 FFGHM

### MIDDLE EAST

UN • UNTSO 1 obs

### MOLDOVA

OSCE • Moldova 1

### NEW CALEDONIA

1,400; 1 (Marine) mech inf regt; 1 SMA coy; 6 ERC-90F1 *Lynx*; 1 FFGHM; 1 PCC; 1 base with 2 *Falcon* 200 *Gardian* at Nouméa; 1 tpt unit with 3 CN-235 MPA; 4 SA330 *Puma*; 1 AS555 *Fennec*; 4 gendarmerie coy; 2 AS350BA *Ecureuil*

**NIGER**

*Operation Barkhane* 350; 1 FGA det with 2 Mirage 2000C; 2 Mirage 2000D; 1 UAV det with 2 *Harfang*; 3 MQ-9A *Reaper*

**NORTH SEA**

NATO • SNMG 1: 1 DDGHM

**SENEGAL**

350; 1 *Falcon* 50MI; 1 C-160 *Transall*

**SERBIA**

NATO • KFOR 2

OSCE • Kosovo 4

**UKRAINE**

OSCE • Ukraine 12

**UNITED ARAB EMIRATES**

750: 1 (Foreign Legion) BG (2 recce coy, 2 inf coy, 1 arty bty, 1 engr coy); 1 FGA sqn with 6 *Rafale* F3; 1 *Atlantique* 2; 1 KC-135F

**WESTERN SAHARA**

UN • MINURSO 7 obs

**FOREIGN FORCES**

Belgium 28 *Alpha Jet* trg ac located at Cazaux/Tours

Germany 400 (GER elm Eurocorps)

Singapore 200; 1 trg sqn with 12 M-346 *Master*

Germany GER				
Euro €		2014	2015	2016
GDP	€	2.92tr	3.03tr	
	US\$	3.87tr	3.37tr	
<i>per capita</i>	US\$	47,774	41,267	
Growth	%	1.6	1.5	
Inflation	%	0.8	0.2	
Def exp [a]	€	34.7bn		
	US\$	46.2bn		
Def bdgt [b]	€	32.4bn	33bn	32.4bn
	US\$	43.1bn	36.7bn	
US\$1=€		0.75	0.90	

[a] NATO definition

[b] Includes military pensions

Population 80,854,408

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	6.6%	2.5%	2.8%	3.2%	24.7%	9.4%
Female	6.3%	2.4%	2.7%	3.1%	24.4%	12.1%

**Capabilities**

Germany's armed services continue to undergo restructuring, as reductions and reforms from 2010 and 2011 are implemented. There have been moves to improve pay and conditions. Led by the defence ministry, Germany is preparing a new white paper on security policy and the future of the armed forces. This will be published in 2016, and is

likely to put greater emphasis on collective defence tasks compared to the previous 2006 edition. Additionally, the government is trying to improve the defence-procurement process, and the planned acquisition of MEADS and the competition to build multi-role combat ships (MKS 180), both announced in June 2015, will be the first major test cases for the new approach to procurement. Germany bought back from industry holdings 100 *Leopard* 2A4 main battle tanks; these will be modernised from 2017. In March 2015, the government announced plans for a defence-spending increase over the period 2016–19. While this was important as a political signal, suggesting the era of defence cuts was over, the impact was likely to be limited, as most of the extra funding was not directed to new investments. Germany, together with Norway and the Netherlands, took responsibility for providing the first rotation of the VJTF in 2015. Germany will serve as the framework nation for VJTF in 2019. A leaked cyber-defence strategy document suggested that the cyber domain was an increasing area of importance for the German armed forces, across the spectrum of defensive and offensive capabilities.

**ACTIVE 178,600 (Army 60,450 Navy 16,150 Air 28,600 Joint Support Service 41,950 Joint Medical Service 19,550 Other 11,900)**

*Conscript liability* Voluntary conscription only. Voluntary conscripts can serve up to 23 months

**RESERVE 31,700 (Army 8,700 Navy 1,400 Air 4,000 Joint Support Service 13,000 Joint Medical Service 4,000 Other 600)**

**ORGANISATIONS BY SERVICE****Space****EQUIPMENT BY TYPE****SATELLITES 7**

COMMUNICATIONS 2 COMSATBw (1 & 2)

ISR 5 SAR-*Lupe*

**Army 60,450****FORCES BY ROLE****MANOEUVRE****Armoured**

1 (1st) armd div (1 (9th) armd bde (1 armd recce bn, 1 armd bn, 1 armd inf bn, 1 mech inf bn, 1 lt inf bn, 1 cbt engr bn, 1 spt bn); 1 (21st) armd bde (1 armd recce bn, 1 armd bn, 1 armd inf bn, 1 lt inf bn, 1 cbt engr bn, 1 spt bn); 1 (41st) mech bde (1 armd recce bn, 2 armd inf bn, 1 lt inf bn, 1 cbt engr bn, 1 sigs bn, 1 spt bn) 1 arty bn; 1 sigs bn)

1 (10th) armd div (1 (12th) armd bde (1 armd recce bn, 1 armd bn, 2 armd inf bn, 1 cbt engr bn, 1 spt bn); 1 (37th) mech bde (1 armd recce bn, 1 armd bn, 2 armd inf bn, 1 engr bn, 1 spt bn); 1 (23rd) mtn inf bde (1 recce bn, 3 mtn inf bn, 1 cbt engr bn, 1 spt bn); 1 arty bn; 1 arty trg bn; 1 sy bn)

**Light**

2 lt inf bn (GER/FRA bde)

**Air Manoeuvre**

1 (rapid reaction) AB div (1 SOF bde (2 SOF bn); 1 AB

bde (2 recce coy, 2 para regt, 2 cbt engr coy); 1 atk hel regt; 2 tpt hel regt; 1 sigs coy)

#### COMBAT SUPPORT

1 arty bn (GER/FRA bde)  
1 cbt engr coy (GER/FRA bde)

#### COMBAT SERVICE SUPPORT

1 spt bn (GER/FRA bde)

#### EQUIPMENT BY TYPE

**MBT** 306 *Leopard 2A6/A7*

**RECCE** 199: 166 *Fennek* (incl 14 engr recce, 14 fires spt); 8 Tpz-1 *Fuchs* CBRN; 25 *Wiesel* (16 recce; 9 engr)

**AIFV** 492: 390 *Marder 1A2/A3/A4/A5*; 15 *Puma* (test); 87 *Wiesel* (with 20mm gun)

**APC** 1,406

**APC (T)** 453: 194 Bv-206D/S; 259 M113 (inc variants)

**APC (W)** 776: 245 *Boxer* (inc variants); 531 TPz-1 *Fuchs* (inc variants)

**PPV** 177 *Dingo 2*

**ARTY** 223

**SP 155mm** 99 PzH 2000

**MRL 227mm** 38 MLRS

**MOR 120mm** 86 *Tampella*

**AT • MSL**

**SP** 64 *Wiesel* (TOW)

**MANPATS** *Milan*

#### HELICOPTERS

**ATK** 37 *Tiger*

**MRH/ISR** 83 Bo-105M/P1/P1A1 (with HOT)

**TPT** 100: **Medium** 37 NH90; **Light** 63: 49 Bell 205 (UH-1D *Iroquois*); 14 H135

**UAV • ISR** 84: **Medium** 32 KZO; **Light** 52 LUNA

**RADARS** 82: 9 *Cobra*; 61 RASIT (veh, arty); 12 RATAAC (veh, arty)

**AEV** 49 *Dachs*

**ARV** 97: 56 ARV *Leopard 1*; 41 ARV 3 *Büffel*

**VLB** 47: 22 *Biber*; 25 M3

**MW** 29+: 15 *Keiler*; 14 Minelayer 5821; *Skorpion* Mine-launcher

### Navy 16,150

#### EQUIPMENT BY TYPE

**SUBMARINES • TACTICAL • SSK** 5:

5 Type-212A with 6 single 533mm TT with 12 A4 *Seehecht* DM2 HWT (1 further vessel ISD 2015)

**PRINCIPAL SURFACE COMBATANTS** 15

**DESTROYERS • DDGHM** 7:

4 *Brandenburg* with 2 twin Inchr with MM-38 *Exocet* AShM, 1 16-cell Mk41 VLS with RIM-7M/P, 2 Mk49 GMLS with RIM-116 RAM SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 76mm gun (capacity 2 *Sea Lynx* Mk88A hel)

3 *Sachsen* with 2 quad Mk141 Inchr with RGM-84F *Harpoon* AShM, 1 32-cell Mk41 VLS with SM-2MR/RIM-162B ESSM SAM, 2 21-cell Mk49 GMLS with RIM-116 RAM SAM, 2 triple Mk32 324mm ASTT with MU90 LWT, 1 76mm gun (capacity; 2 *Sea Lynx* Mk88A hel)

**FRIGATES** 8

**FFGHM** 3 *Bremen* with 2 quad Mk141 Inchr with RGM-84A/C *Harpoon* AShM, 1 octuple Mk29 GMLS with

RIM-7M/P *Sea Sparrow* SAM, 2 Mk49 GMLS with RIM-116 RAM SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 76mm gun (capacity 2 *Sea Lynx* Mk88A hel)

**FFGM** 5 *Braunschweig* (K130) with 2 twin Inchr with RBS-15 AShM, 2 Mk49 GMLS each with RIM-116 RAM SAM, 1 76mm gun, 1 hel landing platform

**PATROL AND COASTAL COMBATANTS • PCGM** 6

6 *Gepard* with 2 twin Inchr with MM-38 *Exocet* AShM, 1 Mk49 GMLS with RIM-116 RAM SAM, 1 76mm gun

**MINE WARFARE • MINE COUNTERMEASURES** 34

**MHO** 12: 10 *Frankenthal* (2 used as diving support); 2 *Kulmbach*

**MSO** 3 *Ensdorf*

**MSD** 18 *Seehund*

**AMPHIBIOUS** 2

**LCU** 2 Type-520

**LOGISTICS AND SUPPORT** 53

**AFH** 3 *Berlin* Type-702 (capacity 2 *Sea King* Mk41 hel; 2 RAMs)

**AG** 5: 2 *Schwedeneck* Type-748; 3 *Stollergrund* Type-745

**AGI** 3 *Oste* Type-423

**AGOR** 1 *Planet* Type-751

**AO** 2 *Walchensee* Type-703

**AOR** 6 *Elbe* Type-404 (2 specified for PFM support; 1 specified for SSK support; 3 specified for MHC/MSC support)

**AOT** 2 *Spessart* Type-704

**APB** 3: 1 *Knurrhahn*; 2 *Ohre*

**ATR** 1 *Helgoland*

**AXS** 1 *Gorch Fock*

**YAG** 2 (used as trials ships)

**YDT** 4 *Wangerooe*

**YFD** 5

**YFRT** 4 *Todendorf* Type-905

**YPC** 2 *Bottsand*

**YTB** 1 *Fehmarn*

**YTM** 8 *Vogelsand*

### Naval Aviation 2,000

#### EQUIPMENT BY TYPE

**AIRCRAFT** 8 combat capable

**ASW** 8 AP-3C *Orion*

**TPT • Light** 2 Do-228 (pollution control)

#### HELICOPTERS

**ASW** 22 *Lynx* Mk88A with *Sea Skua*

**SAR** 21 *Sea King* Mk41

**MSL** AShM *Sea Skua*

### Naval Special Forces Command

#### FORCES BY ROLE

**MANOEUVRE**

**Other**

1 coastal def bn

### Air Force 28,600

Flying hours 140 hrs/year (plus 40 hrs high-fidelity simulator)

#### FORCES BY ROLE

**FIGHTER**

2 wg (2 sqn with Eurofighter *Typhoon*)



**FIGHTER/GROUND ATTACK**

- 1 wg (2 sqn with *Tornado* IDS)
- 1 wg (2 sqn with Eurofighter *Typhoon*)

**ISR**

- 1 wg (1 ISR sqn with *Tornado* ECR/IDS; 1 UAV sqn (ISAF only) with *Heron*)

**TANKER/TRANSPORT**

- 1 (special air mission) wg (3 sqn with A310 MRTT; A319; A340; AS532U2 *Cougar* II; Global 5000)

**TRANSPORT**

- 2 wg (total: 3 sqn with C-160D *Transall*)
- 1 wg (1 sqn (forming) with A400M *Atlas*)

**TRAINING**

- 1 sqn located at Holloman AFB (US) with *Tornado* IDS
- 1 unit (ENJJPT) located at Sheppard AFB (US) with T-6 *Texan* II; T-38A
- 1 hel unit located at Fassberg

**TRANSPORT HELICOPTER**

- 1 tpt hel wg (3 sqn with CH-53G/GA/GE/GS *Stallion*; 1 sqn with H145M)

**AIR DEFENCE**

- 1 wg (3 SAM gp) with MIM-104F *Patriot* PAC-3
- 1 AD gp with ASRAD *Ozelot*; C-RAM MANTIS
- 1 AD trg unit located at Fort Bliss (US) with ASRAD *Ozelot*; C-RAM MANTIS; *Patriot*
- 3 (tac air ctrl) radar gp

**EQUIPMENT BY TYPE**

- AIRCRAFT** 235 combat capable
- FTR** 129 Eurofighter *Typhoon*
- FGA** 86 *Tornado* IDS
- EW/FGA** 20 *Tornado* ECR\*
- TKR/TPT** 4 A310 MRTT
- TPT** 63: **Heavy** 1 A400M *Atlas*; **Medium** 53 C-160D *Transall*; **PAX** 9: 1 A310; 2 A340 (VIP); 2 A319; 4 Global 5000
- TRG** 109: 69 T-6 *Texan* TII, 40 T-38A

**HELICOPTERS**

- CSAR** 20 CH-53GS/GE *Stallion*
- MRH** 15 H145M
- TPT** 67: **Heavy** 64 CH-53G/GA *Stallion*; **Medium** 3 AS532U2 *Cougar* II (VIP)

**UAV • ISR • Heavy Heron****AD • SAM**

- SP** 10 ASRAD *Ozelot* (with FIM-92A *Stinger*)
- TOWED** 14: 12 MIM-104F *Patriot* PAC-3, 2 C-RAM MANTIS

**MSL**

- AAM • IR** AIM-9L/Li *Sidewinder*; **IIR** IRIS-T; **ARH** AIM 120A/B AMRAAM
- LACM** KEPD 350 *Taurus*
- ARM** AGM-88B HARM

**BOMBS • LGB: GBU-24 Paveway III, GBU-54 JDAM****Joint Support Services 41,950****FORCES BY ROLE****COMBAT SUPPORT**

- 4 EW bn
- 3 MP regt
- 2 NBC bn
- 6 sigs bn

**COMBAT SERVICE SUPPORT**

- 6 log bn

**Joint Medical Services 19,550****FORCES BY ROLE****COMBAT SERVICE SUPPORT**

- 3 med regt
- 3 fd hospital

**Paramilitary****Coast Guard 500****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 12**

- PCO** 6: 3 *Bad Bramstedt*; 1 *Bredstedt*; 2 *Sassnitz*
- PB** 6: 5 *Prignitz*; 1 *Rettin*

**Cyber**

Germany issued a Cyber Security Strategy in February 2011. The National Cyber Security Council, an inter-ministerial body at state-secretary level, analyses cyber-related issues. A National Cyber Response Centre was set up at the Federal Office for Information Security on 1 April 2011. The Bundeswehr CERT team maintains an updated picture of the IT security situation and continually analyses and assesses the threats and risks posed to the Bundeswehr IT system. The Bundeswehr IT System Centre, the central management facility for the entire Bundeswehr IT system, maintains an overall situation picture of the IT system that also monitors risks and hazards in order to identify operating anomalies possibly caused by cyber attacks. A Computer Network Operation unit has been formed within the Strategic Reconnaissance Command and achieved IOC in late December 2011. Due to the continuously rising importance of cyber and information space for the Bundeswehr, previously distributed capabilities in the Joint Support Service will be restructured and consolidated. The defence ministry has announced recently that an information-space service, an organisational element in the defence ministry and a subordinate Cyber and Information Space Command (CIRC) will be formed.

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Constitution:** Codified constitution ('Basic Law', 1949)

**Specific legislation:** 'Parlamentsbeteiligungsgesetz' (2005)

**Decision on deployment of troops abroad:** a) By parliament: prior consent for anticipated military involvement; simplified consent procedure for deployments of limited intensity or extension; subsequent consent admitted in cases requiring immediate action or deployments aimed at rescuing persons from danger, provided parliamentary discussion would have endangered life; b) by government: preparation, planning and humanitarian aid and assistance provided by the armed forces where weapons are carried for self-defence, provided it is not expected that military personnel will be involved in armed engagements; other deployments short of an involvement or anticipated involvement in armed engagements.

**AFGHANISTAN**

**NATO • Operation Resolute Support** 850; 1 bde HQ; *Heron*

**UAV**

**UN • UNAMA** 3 obs

**ALBANIA**

OSCE • Albania 1

**BOSNIA-HERZEGOVINA**

OSCE • Bosnia and Herzegovina 4

**DJIBOUTI**EU • *Operation Atalanta* 1 AP-3C *Orion***ESTONIA**NATO • Baltic Air Policing 4 Eurofighter *Typhoon***FRANCE**

400 (incl GER elm Eurocorps)

**GULF OF ADEN & INDIAN OCEAN**EU • *Operation Atalanta* 1 FFGM**IRAQ**

100 (trg spt)

**LEBANON**

UN • UNIFIL 117; 1 FFGM

**LIBERIA**

UN • UNMIL 2 obs

**MALI**

EU • EUTM Mali 209

UN • MINUSMA 9

**MEDITERRANEAN SEA**

EU • EU NAVFOR MED 1 DDGHM; 1 AFH

NATO • SNMG 2: 1 FFGHM

NATO • SNMCMG 2: 1 MHO

**MOLDOVA**

OSCE • Moldova 1

**NORTH SEA**

NATO • SNMCMG 1: 1 MHO

**POLAND**

67 (GER elm Corps HQ (multinational))

**SERBIA**

NATO • KFOR 795

OSCE • Kosovo 6

**SOUTH SUDAN**

UN • UNMISS 7; 11 obs

**SUDAN**

UN • UNAMID 8

**TURKEY**NATO • *Active Fence*: 2 AD bty with MIM-104F *Patriot* PAC-3**UGANDA**

EU • EUTM Somalia 8

**UKRAINE**

OSCE • Ukraine 25

**UNITED STATES**

Trg units with 40 T-38 *Talon*; 69 T-6A *Texan* II at Goodyear AFB (AZ)/Sheppard AFB (TX); 1 trg sqn with 14 *Tornado* IDS at Holloman AFB (NM); NAS Pensacola (FL); Fort Rucker (AL); Missile trg at Fort Bliss (TX)

**UZBEKISTAN**

NATO • ISAF 25

**WESTERN SAHARA**

UN • MINURSO 4 obs

**FOREIGN FORCES**

Canada NATO 226

France 2,000; 1 (FRA/GER) mech bde (1 armd cav rgt, 1 mech inf regt)

United Kingdom 9,920; 1 armd bde

**United States**US Africa Command: **Army**; 1 HQ at Stuttgart

US European Command: 40,450; 1 combined service HQ (EUCOM) at Stuttgart-Vaihingen

**Army** 25,100; 1 HQ (US Army Europe (USAREUR) at Heidelberg; 1 SF gp; 1 cav SBCT; 1 armd recce bn; 1 arty bn; 1 (hvy cbt avn) hel bde; 1 int bde; 1 MP bde; 1 sigs bde; 1 spt bde; 1 (APS) armd bde eqpt set; M1 *Abrams*; M2/M3 *Bradley*; *Stryker*; M109; M119A2; M777; M270 MLRS; AH-64 *Apache*; CH-47 *Chinook*; UH-60 *Black Hawk* Navy 500

**USAF** 13,900; 1 HQ (US Airforce Europe (USAFE)) at Ramstein AB; 1 HQ (3rd Air Force) at Ramstein AB; 1 ftr wg at Spangdahlem AB with 1 ftr sqn with 24 F-16CJ *Fighting Falcon*; 1 airlift wg at Ramstein AB with 16 C-130J-30 *Hercules*; 2 C-20 *Gulfstream*; 9 C-21 *Learjet*; 1 C-40B

USMC 950

**Greece GRC**

Euro €	2014	2015	2016
<b>GDP</b>	€ 179bn	173bn	
	US\$ 238bn	193bn	
<i>per capita</i>	US\$ 21,648	17,657	
<b>Growth</b>	% 0.8	-2.3	
<b>Inflation</b>	% -1.5	-0.4	
<b>Def exp [a]</b>	€ 3.94bn		
	US\$ 5.23bn		
<b>Def bdgt [b]</b>	€ 4.28bn	4.25bn	
	US\$ 5.69bn	4.73bn	

US\$1=€ 0.75 0.90

[a] NATO definition

[b] Includes military pensions and peacekeeping operations allocations

**Population** 10,775,643

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	7.2%	2.4%	2.6%	2.9%	24.9%	8.9%
<b>Female</b>	6.8%	2.3%	2.5%	2.9%	25.2%	11.4%

**Capabilities**

Greece's armed forces have traditionally been well funded, given territorial defence tasks and a requirement to support Cyprus. The effects of the financial crisis hampered the

procurement of new equipment, and the forces saw cuts to military salaries, and reductions in training and exercises. While a US\$1bn package for defence upgrades was approved in mid-2014, the new government has yet to issue defence documentation. Mid-life modernisation of the *Hydra*-class frigates is expected in the near term, to extend operational life and survivability, while there is continued interest in FREMM frigates. The stored P-3B *Orions* are being modernised, which will add to Greece's capability for land-based maritime patrol, and the airborne ASW and ASuW roles.

**ACTIVE 142,950 (Army 93,500 Navy 17,100 Air 20,750 Joint 11,600) Paramilitary 4,000**

*Conscript liability* Up to 9 months in all services

**RESERVE 220,500 (Army 181,500 Navy 5,000 Air 34,000)**

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## ORGANISATIONS BY SERVICE

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**Army 48,500; 45,000 conscripts (total 93,500)**

Units are manned at 3 different levels – Cat A 85% fully ready, Cat B 60% ready in 24 hours, Cat C 20% ready in 48 hours (requiring reserve mobilisation). 3 military regions

### FORCES BY ROLE

#### COMMAND

- 3 corps HQ (incl NDC-GR)
- 1 armd div HQ
- 3 mech inf div HQ
- 1 inf div HQ

#### SPECIAL FORCES

- 1 SF comd
- 1 cdo/para bde

#### MANOEUVRE

##### Reconnaissance

- 4 recce bn
- Armoured**
- 4 armd bde (2 armd bn, 1 mech inf bn, 1 SP arty bn)
- Mechanised**
- 9 mech inf bde (1 armd bn, 2 mech bn, 1 SP arty bn)

##### Light

- 1 inf div
- 3 inf bde (1 armd bn, 3 inf regt, 1 arty regt)
- Air Manoeuvre**
- 1 air mob bde
- 1 air aslt bde

##### Amphibious

- 1 mne bde
- Aviation**
- 1 avn bde (1 hel regt with (2 atk hel bn), 2 tpt hel bn, 4 hel bn)

#### COMBAT SUPPORT

- 1 arty regt (1 arty bn, 2 MRL bn)
- 3 AD bn (2 with I-HAWK, 1 with *Tor* M1)
- 3 engr regt
- 2 engr bn
- 1 EW regt
- 10 sigs bn

#### COMBAT SERVICE SUPPORT

- 1 log corps HQ
- 1 log div (3 log bde)

#### EQUIPMENT BY TYPE

**MBT** 1,354: 170 *Leopard* 2A6HEL; 183 *Leopard* 2A4; 526 *Leopard* 1A4/5; 100 M60A1/A3; 375 M48A5

**RECCE** 229 VBL

**AIFV** 398 BMP-1

**APC** 2,562

**APC (T)** 2,551: 86 *Leonidas* Mk1/2; 2,252 M113A1/A2; 213 M577

**PPV** 11 *Maxxpro*

**ARTY** 3,607

**SP** 587: **155mm** 442: 418 M109A1B/A2/A3GEA1/A5; 24 PzH 2000; **203mm** 145 M110A2

**TOWED** 553: **105mm** 347: 329 M101; 18 M-56; **155mm** 206 M114

**MRL** 147: **122mm** 111 RM-70; **227mm** 36 MLRS (incl ATACMS)

**MOR** 2,320: **81mm** 1,700; **107mm** 620 M30 (incl 231 SP)

#### AT

##### MSL

**SP** 600: 196 HMMWV with 9K135 *Kornet-E* (AT-14 *Spriggan*); 42 HMMWV with *Milan*; 362 M901

**MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); *Milan*; TOW

**RCL** 3,927:

**SP** 106mm 581 M40A1

**MANPATS** 84mm *Carl Gustav*; 90mm EM-67

**AIRCRAFT • TPT • Light** 20: 1 Beech 200 *King Air* (C-12C) 2 Beech 200 *King Air* (C-12R/AP *Huron*); 17 Cessna 185 (U-17A/B)

#### HELICOPTERS

**ATK** 29: 19 AH-64A *Apache*; 10 AH-64D *Apache*

**TPT** 134: **Heavy** 15: 9 CH-47D *Chinook*; 6 CH-47SD *Chinook*; **Medium** 11 NH90 TTH; **Light** 108: 94 Bell 205 (UH-1H *Iroquois*); 14 Bell 206 (AB-206) *Jet Ranger*

**UAV • ISR • Medium** 4 *Sperwer*

#### AD

**SAM** 614

**SP** 113: 21 9K331 *Tor-M1* (SA-15 *Gauntlet*); 38 9K33 *Osa-M* (SA-8B *Gecko*); 54 ASRAD HMMWV

**TOWED** 42 MIM-23B I-HAWK

**MANPAD** FIM-92A *Stinger*

**GUNS • TOWED** 727: **20mm** 204 Rh 202; **23mm** 523 ZU-23-2

**RADAR • LAND** 76: 3 ARTHUR, 5 AN/TPQ-36 *Firefinder* (arty, mor); 8 AN/TPQ-37(V)3; 40 BOR-A; 20 MARGOT ARV 262: 12 *Büffel*; 43 *Leopard* 1; 94 M88A1; 112 M578

**VLB** 12+: 12 *Leopard* 1; *Leguan*

**MW** *Giant Viper*

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## National Guard 33,000 reservists

Internal security role

### FORCES BY ROLE

#### MANOEUVRE

##### Light

1 inf div

##### Air Manoeuvre

1 para regt

**Aviation**

1 avn bn

**COMBAT SUPPORT**

8 arty bn

4 AD bn

**Navy 15,250; 1,850 conscript; (total 17,100)****EQUIPMENT BY TYPE****SUBMARINES • TACTICAL • SSK 8:**

4 *Poseidon* (GER Type-209/1200) (of which 1 modernised with AIP technology) with 8 single 533mm TT with SUT HWT

3 *Glavkos* (GER Type-209/1100) with 8 single 533mm TT with UGM-84C *Harpoon* ASHm/SUT HWT

1 *Papanikolis* (GER Type-214) with 8 single 533mm TT with UGM-84C *Harpoon* ASHm/SUT HWT (5 additional vessels expected)

**PRINCIPAL SURFACE COMBATANTS 13****FRIGATES • FFGHM 13:**

4 *Elli* Batch I (ex-NLD *Kortenaer* Batch 2) with 2 quad Mk141 Inchr with RGM-84A/C *Harpoon* ASHm, 1 octuple Mk29 GMLS with RIM-7M/P *Sea Sparrow* SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 *Phalanx* CIWS, 1 76mm gun (capacity 2 Bell 212 (AB-212) hel)

2 *Elli* Batch II (ex-NLD *Kortenaer* Batch 2) with 2 quad Mk141 Inchr with RGM-84A/C *Harpoon* ASHm, 1 octuple Mk29 GMLS with RIM-7M/P *Sea Sparrow* SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 *Phalanx* CIWS, 2 76mm gun (capacity 2 Bell 212 (AB-212) hel)

3 *Elli* Batch III (ex-NLD *Kortenaer* Batch 2) with 2 quad Mk141 Inchr with RGM-84A/C *Harpoon* ASHm, 1 octuple Mk29 Inchr with RIM-7M/P *Sea Sparrow* SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 *Phalanx* CIWS, 1 76mm gun (capacity 2 Bell 212 (AB-212) hel)

4 *Hydra* (GER MEKO 200) with 2 quad Inchr with RGM-84G *Harpoon* ASHm, 1 16-cell Mk48 Mod 5 VLS with RIM-162 ESSM SAM, 2 triple 324mm ASTT each with Mk46 LWT, 2 *Phalanx* CIWS, 1 127mm gun (capacity 1 S-70B *Seahawk* ASW hel)

**PATROL AND COASTAL COMBATANTS 33**

**CORVETTES • FSGM 5** *Roussen* (*Super Vita*) with 2 quad Inchr with MM-40 *Exocet* Block 2 ASHm, 1 21-cell Mk49 GMLS with RIM-116 RAM SAM, 1 76mm gun (3 additional vessels in build)

**PCFG 12:**

4 *Kavaloudis* (FRA *La Combattante* IIIB) with 6 single Inchr with RB 12 *Penguin* ASHm, 2 single 533mm TT with SST-4 HWT, 2 76mm gun

1 *Kavaloudis* (FRA *La Combattante* IIIB) with 2 twin Inchr with RGM-84C *Harpoon* ASHm, 2 single 533mm TT with SST-4 HWT, 2 76mm gun

4 *Laskos* (FRA *La Combattante* III) with 4 MM-38 *Exocet* ASHm, 2 single 533mm TT with SST-4 HWT, 2 76mm gun

1 *Votsis* (ex-GER *Tiger*) with 2 twin Mk-141 Inchr with RGM-84C *Harpoon* ASHm, 1 76mm gun

2 *Votsis* (ex-GER *Tiger*) with 2 twin MM-38 *Exocet* ASHm, 1 76mm gun

**PCO 8:**2 *Armatolos* (DNK *Osprey*) with 1 76mm gun2 *Kasos* with 1 76mm gun4 *Machitis* with 1 76mm gun**PB 8:** 4 *Andromeda* (NOR *Nasty*); 2 *Stamou*; 2 *Tolmi***MINE COUNTERMEASURES 4****MHO 4:** 2 *Evropi* (ex-UK *Hunt*); 2 *Eoniki* (ex-US *Osprey*)**AMPHIBIOUS****LANDING SHIPS • LST 5:**5 *Chios* (capacity 4 LCVP; 300 troops) with 1 76mm gun, 1 hel landing platform**LANDING CRAFT 14**

LCU 4

LCA 7

**LCAC 3** *Kefallinia* (*Zubr*) with 2 AK630 CIWS, (capacity either 3 MBT or 10 APC (T); 230 troops)**LOGISTICS AND SUPPORT 49****ABU 2****AG 2** *Pandora***AGOR 1** *Pytheas***AGS 2:** 1 *Stravon*; 1 *Naftilos***AOR 2** *Axios* (ex-GER *Lunenburg*)**AORH 1** *Prometheus* (ITA *Etna*) with 1 *Phalanx* CIWS**AOT 4** *Ouranos***AWT 6** *Kerkini***AXS 5****YFU 4****YNT 1** *Thetis***YPT 3** *Evrotas***YTM 16****Naval Aviation****FORCES BY ROLE****ANTI-SUBMARINE WARFARE**1 div with S-70B *Seahawk*; Bell 212 (AB-212) ASW**EQUIPMENT BY TYPE****AIRCRAFT • ASW** (5 P-3B *Orion* in store undergoing modernisation)**HELICOPTERS****ASW 19:** 8 Bell 212 (AB-212) ASW; 11 S-70B *Seahawk***MSL****ASM AGM-119** *Penguin*, **AGM-114** *Hellfire***Air Force 18,650; 2,100 conscripts (total 20,750)****Tactical Air Force****FORCES BY ROLE****FIGHTER/GROUND ATTACK**2 sqn with F-4E *Phantom* II3 sqn with F-16CG/DG Block 30/50 *Fighting Falcon*3 sqn with F-16CG/DG Block 52+ *Fighting Falcon*1 sqn with F-16C/D Block 52+ ADV *Fighting Falcon*1 sqn with *Mirage* 2000-5EG/BG Mk21 sqn with *Mirage* 2000EG/BG**ISR**1 sqn with RF-4E *Phantom* II**AIRBORNE EARLY WARNING**1 sqn with EMB-145H *Erieye***EQUIPMENT BY TYPE****AIRCRAFT** 242 combat capable

FGA 232: 34 F-4E *Phantom II*; 69 F-16CG/DG Block 30/50 *Fighting Falcon*; 55 F-16CG/DG Block 52+; 30 F-16 C/D Block 52+ ADV *Fighting Falcon*; 20 *Mirage 2000-5EG Mk2*; 5 *Mirage 2000-5BG Mk2*; 17 *Mirage 2000EG*; 2 *Mirage 2000BG*

ISR 7 RF-4E *Phantom II*\*

AEW 4 EMB-145AEW (EMB-145H) *Erieye*

#### MSL

AAM • IR AIM-9L/P *Sidewinder*; R-550 *Magic 2 IIR IRIS-T*; *Mica IR*; ARH AIM-120B/C AMRAAM; *Mica RF*

ASM AGM-65A/B/G *Maverick*; AGM-154C JSOW

LACM SCALP EG

AshM AM-39 *Exocet*

ARM AGM-88 HARM

#### BOMBS

Conventional Mk81; Mk82; Mk83; Mk84

Electro-optical guided: GBU-8B HOBOS

Laser-guided: GBU-10/12/16 *Paveway II*; GBU-24 *Paveway III*

INS/GPS-guided GBU-31 JDAM

### Air Defence

#### FORCES BY ROLE

##### AIR DEFENCE

6 sqn/bty with MIM-104A/B/D *Patriot/Patriot PAC-1 SOJC/Patriot PAC-2 GEM*

2 sqn/bty with S-300PMU-1 (SA-10C *Grumble*)

12 bty with *Skyguard/RIM-7 Sparrow/guns*; *Crotale NG/GR*; *Tor-M1 (SA-15 Gauntlet)*

#### EQUIPMENT BY TYPE

##### AD

SAM • TOWED 61+: 36 *Patriot*; 12 S-300 PMU-1 (SA-10C *Grumble*); 9 *Crotale NG/GR*; 4 9K331 *Tor-M1 (SA-15 Gauntlet)*; some *Skyguard/Sparrow*

GUNS 35+ 35mm

### Air Support Command

#### FORCES BY ROLE

##### SEARCH & RESCUE/TRANSPORT HELICOPTER

1 sqn with AS332C *Super Puma (SAR/CSAR)*

1 sqn with AW109; Bell 205A (AB-205A) (SAR); Bell 212 (AB-212 - VIP, tpt)

##### TRANSPORT

1 sqn with C-27J *Spartan*

1 sqn with C-130B/H *Hercules*

1 sqn with EMB-135BJ *Legacy*; ERJ-135LR; Gulfstream V

##### FIRE FIGHTING

2 sqn with CL-215; CL-415

1 sqn with M-18 *Dromader*

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT 26: Medium 23: 8 C-27J *Spartan*; 5 C-130B *Hercules*; 10 C-130H *Hercules*; Light 2: 1 EMB-135BJ *Legacy*; 1 ERJ-135LR; PAX 1 Gulfstream V

FF 42: 12 CL-215; 7 CL-415; 21 M-18 *Dromader*

##### HELICOPTERS

TPT 31: Medium 12 AS332C *Super Puma*; Light 19: 12 Bell 205A (AB-205A) (SAR); 4 Bell 212 (AB-212) (VIP, Tpt); 3 AW109

### Air Training Command

#### FORCES BY ROLE

##### TRAINING

2 sqn with T-2C/E *Buckeye*

2 sqn with T-6A/B *Texan II*

1 sqn with T-41D

#### EQUIPMENT BY TYPE

AIRCRAFT • TRG 93: 30 T-2C/E *Buckeye*; 20 T-6A *Texan II*; 25 T-6B *Texan II*; 18 T-41D

### Paramilitary • Coast Guard and Customs 4,000

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 122: PCC 3; PBF 54; PB 65

LOGISTICS AND SUPPORT • YPC 4

AIRCRAFT • TPT • Light 4: 2 Cessna 172RG *Cutlass*; 2 TB-20 *Trinidad*

### Cyber

A new Joint Cyber Command in the Hellenic National Defence General Staff was established in 2014, replacing the existing Cyber Defence Directorate. The National Policy on Cyber Defence is under development and expected to be complete by the end of 2016.

### DEPLOYMENT

#### Legal provisions for foreign deployment:

Constitution: Codified constitution (1975/1986/2001)

Specific legislation: 'Law 2295/95' (1995)

Decision on deployment of troops abroad: By the Government Council on Foreign Affairs and Defence

#### AFGHANISTAN

NATO • Operation *Resolute Support 4*

#### BOSNIA-HERZEGOVINA

EU • EUFOR • Operation *Althea 1*

#### CYPRUS

Army 950 (ELDYK army); €200 (officers/NCO seconded to Greek-Cypriot National Guard) (total 1,150);

1 mech bde (1 armd bn, 2 mech inf bn, 1 arty bn); 61 M48A5 MOLF MBT; 80 *Leonidas* APC; 12 M114 arty; 6 M110A2 arty

#### LEBANON

UN • UNIFIL 51; 1 PCFG

#### MALI

EU • EUTM Mali 2

#### SERBIA

NATO • KFOR 119; 1 inf coy

OSCE • Kosovo 4

#### UKRAINE

OSCE • Ukraine 13

### FOREIGN FORCES

United States US European Command: 380; 1 naval base at Makri; 1 naval base at Soudha Bay; 1 air base at Iraklion



## Hungary HUN

Hungarian Forint f		2014	2015	2016
<b>GDP</b>	f	31.9tr	33.7tr	
	US\$	137bn	118bn	
<i>per capita</i>	US\$	13,870	12,021	
<b>Growth</b>	%	3.6	3.0	
<b>Inflation</b>	%	-0.2	0.3	
<b>Def exp [a]</b>	f	280bn		
	US\$	1.2bn		
<b>Def bdgt [b]</b>	f	234bn	250bn	299bn
	US\$	1.01bn	879m	
<b>FMA (US)</b>	US\$	0.45m		
<b>US\$1=f</b>		232.60	284.46	

[a] NATO definition

[b] Excludes military pensions

**Population** 9,897,541

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	7.6%	2.7%	3.2%	3.2%	24.1%	6.8%
<b>Female</b>	7.2%	2.5%	3.0%	3.1%	25.1%	11.4%

## Capabilities

Territorial defence and the ability to participate in NATO and other international operations were central tenets of the 2012 National Military Strategy. This included the medium-term aim of having forces capable of taking part in high-intensity operations. While the air force operates the *Gripen* combat aircraft under lease, and the country is also host to the multinational C-17 strategic-airlift unit, elements of its land-systems inventory remain centred on ageing Soviet-era equipment. Hungary temporarily grounded its *Gripen* fleet after two accidents in the first half of 2015. In September, the country took over NATO air-policing duties in the Baltics for four months. Hungary contributes some 700 troops to the Polish-led Visegrad Battle Group, which will be on standby for EU operations in the first half of 2016. Key acquisition plans include vehicle modernisation, EOD and CBRN capability development, and air-defence modernisation. In October 2015, NATO agreed to set up a NATO Force Integration Unit, a small headquarters, in Hungary.

**ACTIVE 26,500** (Army 10,300 Air 5,900 Joint 10,300)  
Paramilitary 12,000

**RESERVE 44,000** (Army 35,200 Air 8,800)

## ORGANISATIONS BY SERVICE

Hungary's armed forces have reorganised into a joint force.

**Land Component 10,300** (incl riverine element)

### FORCES BY ROLE

#### SPECIAL FORCES

1 SF bn

### MANOEUVRE

#### Mechanised

1 (5th) mech inf bde (1 armd recce bn; 3 mech inf bn, 1 cbt engr coy, 1 sigs coy, 1 log bn)

1 (25th) mech inf bde (1 tk bn; 1 mech inf bn, 1 AB bn, 1 arty bn, 1 AT bn, 1 log bn)

### COMBAT SUPPORT

1 engr regt

1 EOD/rvn regt

1 CBRN bn

1 sigs regt

### COMBAT SERVICE SUPPORT

1 log regt

### EQUIPMENT BY TYPE

**MBT 30** T-72

**RECCE 24+**: 24 K90 CBRN Recce; PSZH-IV CBRN Recce

**AIFV 120** BTR-80A

**APC (W) 260** BTR-80

**ARTY 69**

**TOWED 152mm** 18 D-20

**MOR 51: 82mm** 50 120mm 1 M-43

**AT • MSL • MANPATS 9K111 Fagot** (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*)

**PATROL AND COASTAL COMBATANTS • PBR 2** AEV  
**BAT-2**

**ARV BMP-1** VPV; T-54/T-55; VT-55A

**VLB** BLG-60; MTU; TMM

## Air Component 5,900

Flying hours 50 hrs/yr

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with *Gripen* C/D

#### TRANSPORT

1 sqn with An-26 *Curl*

#### TRAINING

1 sqn with Yak-52

#### ATTACK HELICOPTER

1 sqn with Mi-24 *Hind*

#### TRANSPORT HELICOPTER

1 sqn with Mi-8 *Hip*; Mi-17 *Hip* H

#### AIR DEFENCE

1 regt (9 bty with *Mistral*; 3 bty with 2K12 *Kub* (SA-6 *Gainful*))

1 radar regt

### EQUIPMENT BY TYPE

**AIRCRAFT 13** combat capable

**FGA 13**: 12 *Gripen* C; 1 *Gripen* D

**TPT • Light** 4 An-26 *Curl*

**TRG 8** Yak-52

#### HELICOPTERS

**ATK 11**: 3 Mi-24D *Hind* D; 6 Mi-24V *Hind* E; 2 Mi-24P *Hind* F

**MRH 7** Mi-17 *Hip* H

**TPT • Medium** 13 Mi-8 *Hip*

#### AD • SAM

**SP 16** 2K12 *Kub* (SA-6 *Gainful*)

**MANPAD** *Mistral*

**RADAR**: 3 RAT-31DL, 6 P-18: 6 SZT-68UM; 14 P-37

#### MSL

**AAM • IR** AIM-9 *Sidewinder*; R-73 (AA-11 *Archer*)

SARH R-27 (AA-10 *Alamo A*); ARH AIM-120C AMRAAM  
 ASM AGM-65 *Maverick*; 3M11 *Falanga* (AT-2 *Swatter*);  
 9K114 *Shturm-V* (AT-6 *Spiral*)

## Paramilitary 12,000

### Border Guards 12,000 (to reduce)

Ministry of Interior

#### FORCES BY ROLE

##### MANOEUVRE

##### Other

1 (Budapest) paramilitary district (7 rapid reaction coy)

11 (regt/district) paramilitary regt

#### EQUIPMENT BY TYPE

APC (W) 68 BTR-80

## Cyber

The National Cyber Security Strategy, coordinating cyber security at the governmental level, is led by the prime minister's office. There is also a National Cyber Defence Forum and a Hungarian Cyber Defence Management Authority within the National Security Authority. In 2013, the defence ministry developed a Military Cyber Defence concept. A Computer Incident Response Capability (MilCIRC) and Military Computer Emergency Response Team (MilCERT) have also been set up.

## DEPLOYMENT

**Legal provisions for foreign deployment:**

**Legislation:** Fundamental Law (2011)

**Decision on deployment of troops abroad:** Government decides on cross-border troop movements or employment, in the case of NATO (Paragraph 2.) For operations not based on NATO or EU decisions, the Fundamental Law gives parliament the prerogative to decide on the employment of Hungarian armed forces or foreign forces in, or from, Hungarian territory.

### AFGHANISTAN

NATO • *Operation Resolute Support* 97

### BOSNIA-HERZEGOVINA

EU • *Operation Althea* 164; 1 inf coy

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 2; 2 obs

### CYPRUS

UN • UNFICYP 77; 1 inf pl

### IRAQ

*Operation Inherent Resolve* 116

### LEBANON

UN • UNIFIL 4

### LITHUANIA

NATO • Baltic Air Policing; 4 *Gripen C*

### MALI

EU • EUTM Mali 5

### SERBIA

NATO • KFOR 357; 1 inf coy (KTM)

OSCE • Kosovo 4

### UGANDA

EU • EUTM Somalia 4

### UKRAINE

OSCE • Ukraine 30

### WESTERN SAHARA

UN • MINURSO 7 obs

## Iceland ISL

Icelandic Krona Kr		2014	2015	2016
GDP	Kr	1.99tr	2.19tr	
	US\$	17bn	16.7bn	
<i>per capita</i>	US\$	52,315	51,068	
Growth	%	1.8	4.8	
Inflation	%	2.0	2.1	
Sy Bdgt [a]	Kr	4.51bn		
	US\$	39m		
US\$1=Kr		116.77	130.88	

[a] Coast Guard budget

Population 331,918

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	10.4%	3.4%	3.7%	3.6%	22.5%	6.4%
Female	10.0%	3.3%	3.6%	3.5%	22.2%	7.4%

## Capabilities

Iceland is a NATO member but maintains only a coast-guard service and no armed forces. Iceland hosts NATO and regional partners for the Icelandic Air Policing mission, exercises, transits and naval task groups.

## ACTIVE NIL Paramilitary 200

## ORGANISATIONS BY SERVICE

### Paramilitary

#### Iceland Coast Guard 200

##### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 3

PSOH: 2 *Aegir*

PSO 1 *Thor*

##### LOGISTICS AND SUPPORT • AGS 1 *Baldur*

AIRCRAFT • TPT • Light 1 DHC-8-300

##### HELICOPTERS

TPT • Medium 3 AS332L1 *Super Puma*

## FOREIGN FORCES

NATO • Iceland Air Policing: Aircraft and personnel from various NATO members on a rotating basis.

## Ireland IRL

Euro €		2014	2015	2016
GDP	€	189bn	205bn	
	US\$	251bn	227bn	
<i>per capita</i>	US\$	54,411	48,940	
Growth	%	5.2	4.8	
Inflation	%	0.3	0.2	
Def Exp [a]	€	893m		
	US\$	1.18bn		
Def bdgt [a]	€	899m	893m	
	US\$	1.19bn	993m	

US\$1=€ 0.75 0.90

[a] Includes military pensions and capital expenditure

Population 4,892,305

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	11.0%	3.1%	3.0%	3.3%	23.9%	5.8%
Female	10.5%	2.9%	2.9%	3.3%	23.6%	6.8%

## Capabilities

The armed forces' core missions remain defending the state against armed aggression, though the 2015 white paper broadened the scope of the national-security risk assessment beyond traditional military and paramilitary threats. The new assessment lists inter- and intra-state conflict, cyber attacks, terrorism, emergencies and natural disaster as well as espionage and transnational organised crime as priority threats. Ireland maintains substantial EOD capabilities in its forces while continuing its support for multinational peacekeeping operations in Lebanon and the Golan Heights. Ireland contributed to European maritime security through its Fishery Monitoring Centre and the deployment of an OPV to rescue refugees in the Mediterranean. Expeditionary forces will be strengthened with an upgrade programme for APCs, the procurement of small numbers of armoured logistics vehicles and enhancements to special-operations forces. The planned replacement of existing maritime-patrol aircraft with larger and more capable platforms will increase the Air Corps' ISR capabilities.

**ACTIVE 9,100** (Army 7,350 Navy 1,000 Air 750)

**RESERVE 2,600** (Army 2,350 Navy 220 Air 30)

## ORGANISATIONS BY SERVICE

## Army 7,350

## FORCES BY ROLE

## SPECIAL FORCES

1 ranger coy

## MANOEUVRE

**Reconnaissance**

1 armd recce sqn

**Mechanised**

1 mech inf coy

## Light

1 inf bde (1 cav recce sqn, 4 inf bn, 1 arty regt (3 fd arty bty, 1 AD bty), 1 fd engr coy, 1 sigs coy, 1 MP coy, 1 tpt coy)

1 inf bde (1 cav recce sqn, 3 inf bn, 1 arty regt (3 fd arty bty, 1 AD bty), 1 fd engr coy, 1 sigs coy, 1 MP coy, 1 tpt coy)

## EQUIPMENT BY TYPE

LT TK 14 *Scorpion*

RECCE 15 *Piranha IIIH*

APC 94

APC (W) 67: 65 *Piranha III*; 2 XA-180 *Sisu*

PPV 27 RG-32M

ARTY 519

TOWED 24: 105mm 24 L118 Light Gun

MOR 495: 81mm 400; 120mm 95

AT

MSL • MANPATS *Javelin*

RCL 84mm *Carl Gustav*

AD

SAM • MANPAD 7 RBS-70

GUNS • TOWED 40mm 32 L/70 each with 8 *Flycatcher*

MW *Aardvark Mk 2*

Reserves 2,200 reservists

## FORCES BY ROLE

## MANOEUVRE

**Reconnaissance**

1 (integrated) armd recce sqn

4 (integrated) cav tp

**Mechanised**

1 (integrated) mech inf coy

**Light**

23 (integrated) inf coy

## COMBAT SUPPORT

4 (integrated) arty bty

2 engr pl

2 MP pl

## COMBAT SERVICE SUPPORT

2 med det

4 tpt pl

## Naval Service 1,000

## EQUIPMENT BY TYPE

## PATROL AND COASTAL COMBATANTS 8

PSOH 1 *Eithne* with 1 57mm gun

PSO 4: 2 *Roisin* with 1 76mm gun; 2 *Samuel Beckett* with 1 76mm gun

PCO 3: 1 *Emer*; 2 *Orla* (ex-UK *Peacock*) with 1 76mm gun

## LOGISTICS AND SUPPORT 6

AXS 2

YFL 3

YTM 1

## Air Corps 750

2 ops wg; 2 spt wg; 1 trg wg; 1 comms and info sqn

## EQUIPMENT BY TYPE

## AIRCRAFT

MP 2 CN-235 MPA

TPT 7: **Light** 6: 5 Cessna FR-172H; 1 Learjet 45 (VIP);

PAX 1 Gulfstream GIV

TRG 7 PC-9M

#### HELICOPTERS:

MRH 6 AW139

TPT • Light 2 H135 (incl trg/medevac; 1 non-operational)

## Cyber

The Department of Communications, Energy and Natural Resources has lead responsibilities relating to cyber security, and established a National Cyber Security Centre (NCSC) to assist in identifying and protecting Ireland from cyber attacks. The department has produced a Cyber Security Strategy 2015–17, which says that ‘the Defence Forces maintains a capability in the area of cyber security for the purpose of protecting its own networks and users’.

## DEPLOYMENT

### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1937)

**Specific legislation:** ‘Defence (Amendment) Act’ 2006

**Decision on deployment of troops abroad:** requires

a) the authorisation of the operation by the UNSC or UNGA; b) the approval of the Irish government; and c) the approval of parliament, in accordance with Irish law.

There is no requirement for parliamentary approval for dispatch as part of an international force where that force is unarmed or where the contingent does not exceed twelve members. Government approval is necessary for the deployment of Irish personnel for training, participation in exercises abroad; monitoring, observation, advisory or reconnaissance missions; and humanitarian operations in response to actual or potential disasters or emergencies.

### AFGHANISTAN

NATO • *Operation Resolute Support* 7

### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 7

OSCE • Bosnia and Herzegovina 4

### CÔTE D’IVOIRE

UN • UNOCI 2 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 4

### LEBANON

UN • UNIFIL 196; elm 1 mech inf bn

### MALI

EU • EUTM Mali 8

### MIDDLE EAST

UN • UNTSO 13 obs

### SERBIA

NATO • KFOR 12

OSCE • Kosovo 4

### SYRIA/ISRAEL

UN • UNDOF 156; 1 inf coy

### UGANDA

EU • EUTM Somalia 10

### UKRAINE

OSCE • Ukraine 13

### WESTERN SAHARA

UN • MINURSO 3 obs

Italy ITA				
Euro €		2014	2015	2016
GDP	€	1.62tr	1.63tr	
	US\$	2.15tr	1.82tr	
<i>per capita</i>	US\$	35,335	29,847	
Growth	%	-0.4	0.8	
Inflation	%	0.2	0.2	
Def exp [a]	€	18.4bn		
	US\$	24.5bn		
Def bdgt [b]	€	18.4bn	19.4bn	18.9bn
	US\$	24.5bn	21.6bn	
US\$1=€		0.75	0.90	

[a] NATO definition  
[b] Includes military pensions

Population 61,680,122

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.0%	2.4%	2.5%	2.7%	24.5%	9.1%
Female	6.7%	2.3%	2.5%	2.8%	25.3%	12.1%

## Capabilities

Italy published a new White Paper on International Security and Defence in April 2015. It set general principles and procedures. There is to be a ‘Force Review’ of the Italian armed forces, its structures, manpower and command structure, long-term force organisation and equipment. Resulting plans will be set out in a subsequent strategic defence review that was expected in late 2015. Italy continues to support NATO operations in Afghanistan, maintaining a training and advisory presence in Herat. Maritime deployments have been aimed at countering terrorism and human trafficking and search-and-rescue in the Mediterranean. It is the lead nation in the new EUNAVFOR-Med force, which is headquartered in Rome. The country also joined NATO exercises and air-policing missions. Much key procurement of indigenous weapons and equipment is funded by the country’s Industry Ministry. Army procurement plans include FH-70 howitzers, digitisation upgrades and procurement of the *Centauro* 2 AIFVs currently under development. The expected retirement of most of the naval fleet over the next ten years has triggered a long-term replacement plan.

**ACTIVE 174,500** (Army 102,200 Navy 30,400 Air 41,900) Paramilitary 182,350

**RESERVES 18,300** (Army 13,400 Navy 4,900)

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**ORGANISATIONS BY SERVICE**


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**Space****EQUIPMENT BY TYPE****SATELLITES 8**

**COMMUNICATIONS 4:** 1 *Athena-Fidus*; 3 *Sicral*  
**ISR 4** *Cosmo (Skymed)*

**Army 102,200**

Regt are bn sized

**FORCES BY ROLE****COMMAND**

1 (NRDC-IT) corps HQ (1 spt bde, 1 sigs regt, 1 spt regt)

**MANOEUVRE****Mechanised**

1 (*Friuli*) div (1 (*Ariete*) armd bde (1 cav regt, 2 tk regt, 1 mech inf regt, 1 SP arty regt, 1 cbt engr regt, 1 log regt); 1 (*Pozzuolo del Friuli*) cav bde (1 cav regt, 1 air mob regt, 1 amph regt, 1 arty regt, 1 cbt engr regt, 1 log regt, 2 avn regt)

1 (*Acqui*) div (1 (*Pinerolo*) mech bde (3 mech inf regt, 1 SP arty regt, 1 cbt engr regt); 1 (*Granatieri*) mech bde (1 cav regt, 1 mech inf regt); 1 (*Garibaldi Bersaglieri*) mech bde (1 cav regt, 1 tk regt, 2 mech inf regt, 1 SP arty regt, 1 cbt engr regt); 1 (*Aosta*) mech bde (1 cav regt, 3 mech inf regt, 1 SP arty regt, 1 cbt engr regt); 1 (*Sassari*) lt mech bde (3 mech inf regt, 1 cbt engr regt))

**Mountain**

1 (*Tridentina*) mtn div (2 mtn bde (1 cav regt, 3 mtn inf regt, 1 arty regt, 1 mtn cbt engr regt, 1 spt bn, 1 log regt))

**Air Manoeuvr**

1 (*Folgore*) AB bde (1 cav regt, 3 para regt, 1 arty regt, 1 cbt engr regt, 1 log regt)

**Aviation**

1 avn bde (3 avn regt)

**COMBAT SUPPORT**

1 arty comd (3 arty regt, 1 NBC regt)  
 1 AD comd (2 SAM regt, 1 ADA regt)  
 1 engr comd (2 engr regt, 1 ptn br regt, 1 CIMIC regt)  
 1 EW/sigs comd (1 EW/ISR bde (1 EW regt, 1 int regt, 1 STA regt); 1 sigs bde with (7 sigs regt))

**COMBAT SERVICE SUPPORT**

1 log comd (2 log regt, 1 med unit)

**EQUIPMENT BY TYPE**

**MBT 160 C1** *Ariete*

**RECCE 273:** 259 B-1 *Centauro*; 14 VAB-RECO NBC

**AIFV 355:** 200 VCC-80 *Dardo*; 155 VBM 8×8 *Freccia*

**APC 906**

**APC (T) 361:** 246 Bv-206; 115 M113 (incl variants)

**APC (W) 529** *Puma*

**PPV 16:** 6 *Buffalo*; 10 *Cougar*

**AAV 16:** 14 AAVP-7; 1 AAVC-7; 1 AAVR-7

**ARTY 971**

**SP 155mm 192:** 124 M109L; 68 PzH 2000

**TOWED 155mm 163** FH-70

**MRL 227mm 21** MLRS

**MOR 595:** **81mm 270:** 212 Brandt; 58 Expal **120mm 325:** 183 Brandt; 142 RT-F1

**AT**

**MSL • MANPATS** *Spike*; *Milan*

**RCL 80mm** *Folgore*

**AIRCRAFT • TPT • Light 6:** 3 Do-228 (ACTL-1); 3 P-180 *Avanti*

**HELICOPTERS**

**ATK 43** AW129CBT *Mangusta*

**MRH 15** Bell 412 (AB-412) *Twin Huey*

**TPT 131: Heavy 19:** 13 CH-47C *Chinook*; 6 CH-47F *Chinook*; **Medium 31** NH90 TTH; **Light 81:** 6 AW109; 34 Bell 205 (AB-205); 26 Bell 206 *Jet Ranger* (AB-206); 15 Bell 212 (AB-212)

**AD****SAM**

**TOWED 48:** 16 SAMP-T; 32 *Skyguard/Aspide*

**MANPAD FIM-92A** *Stinger*

**GUNS • SP 25mm 64** SIDAM

**AEV 40** *Leopard 1*; M113

**ARV 137** *Leopard 1*

**VLB 64** *Biber*

**MW 3** *Miniflail*

**Navy 30,400****EQUIPMENT BY TYPE****SUBMARINES • TACTICAL • SSK 6:**

4 *Pelosi* (imp *Sauro*, 3rd and 4th series) with 6 single 533mm TT with Type-A-184 HWT

2 *Salvatore Todaro* (Type-U212A) with 6 single 533mm TT with Type-A-184 HWT/DM2A4 HWT (2 additional vessels under construction)

**PRINCIPAL SURFACE COMBATANTS 19**

**AIRCRAFT CARRIERS • CVS 1** *Cavour* with 4 octuple VLS with *Aster 15* SAM, 2 76mm guns (capacity mixed air group of 20 AV-8B *Harrier II*; AW101 *Merlin*; NH90; Bell 212)

**DESTROYERS • DDGHM 8:**

2 *Andrea Doria* with 2 quad Inchr with *Otomat* Mk2A AShM, 1 48-cell VLS with *Aster 15/Aster 30* SAM, 2 single 324mm ASTT with MU90 LWT, 3 76mm guns (capacity 1 AW101 *Merlin*/NH90 hel)

2 *Luigi Durand de la Penne* (ex-*Animoso*) with 2 quad Inchr with *Otomat* Mk 2A AShM/*Milas A/S*, 1 Mk13 GMLS with SM-1MR SAM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 127mm gun, 3 76mm guns (capacity 1 NH90 or 2 Bell 212 (AB-212) hel)

1 *Bergamini* (GP) with 2 quad Inchr with *Otomat* Mk2A AShM, 1 16-cell VLS with *Aster 15/Aster 30* SAM, 2 triple 324mm ASTT with MU90 LWT, 1 127mm gun, 1 76mm gun (capacity 2 AW101/NH90 hel)

3 *Bergamini* (ASW) with 2 quad Inchr with *Otomat* Mk2A AShM, 1 16-cell VLS with *Aster 15/Aster 30* SAM, 2 triple 324mm ASTT with MU90 LWT, 2 76mm gun (capacity 2 AW101/NH90 hel)

**FRIGATES • FFGHM 10:**

2 *Artigliere* with 8 single Inchr with *Otomat* Mk 2 AShM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 1 127mm gun, (capacity 1 Bell 212 (AB-212) hel)

8 *Maestrale* with 4 single Inchr with *Otomat* Mk2 AShM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2



triple 324mm ASTT with Mk46 LWT, 1 127mm gun (capacity 1 NH90 or 2 Bell 212 (AB-212) hel)

**PATROL AND COASTAL COMBATANTS 19****CORVETTES 5**

**FSM** 4 *Minerva* with 1 octuple *Albatros* Inchr with *Aspide* SAM, 1 76mm gun

**FS** 1 *Minerva* with 1 76mm gun

**PSOH 6:**

4 *Comandante Cigala Fuligosi* with 1 76mm gun (capacity 1 Bell 212 (AB-212)/NH90 hel)

2 *Comandante Cigala Fuligosi* (capacity 1 Bell 212 (AB-212) or NH90 hel)

**PCO** 4 *Cassiopea* with 1 76mm gun (capacity 1 Bell 212 (AB-212) hel)

**PB** 4 *Esploratore*

**MINE WARFARE • MINE COUNTERMEASURES 10**

**MHO** 10: 8 *Gaeta*; 2 *Lerici*

**AMPHIBIOUS****PRINCIPAL AMPHIBIOUS SHIPS 4**

**LHA** 1 *G. Garibaldi* with 2 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple 324mm ASTT with Mk46 LWT (capacity mixed air group of 18 AV-8B *Harrier* II; AW101 *Merlin*; NH90; Bell 212)

**LPD 3:**

2 *San Giorgio* with 1 76mm gun (capacity 3-4 AW101/NH90/Bell 212; 3 LCM 2 LCVP; 30 trucks; 36 APC (T); 350 troops)

1 *San Giusto* with 1 76mm gun (capacity 2 AW101 *Merlin*/NH90/Bell 212; 3 LCM 2 LCVP; 30 trucks; 36 APC (T); 350 troops)

**LANDING CRAFT** 24: 15 LCVP; 9 LCM

**LOGISTICS AND SUPPORT 106**

**ABU** 5 *Ponza*

**AFD** 9

**AGE** 2: 1 *Vincenzo Martellota*; 1 *Raffaele Rosseti*

**AGI** 1 *Elettra*

**AGOR** 1 *Leonardo* (coastal)

**AGS** 3: 1 *Ammiraglio Magnaghi* with 1 hel landing platform; 2 *Aretusa* (coastal)

**AKSL** 6 *Gorgona*

**AORH** 3: 1 *Etna* with 1 76mm gun (capacity 1 AW101/NH90/Bell 212 hel); 2 *Stromboli* with 1 76mm gun (capacity 1 AW101/NH90 hel)

**AOT** 7 *Depoli*

**ARSH** 1 *Anteo* (capacity 1 Bell 212 (AB-212) hel)

**ATS** 6 *Ciclope*

**AWT** 7: 1 *Bormida*; 2 *Simeto*; 4 *Panarea*

**AXL** 3 *Aragosta*

**AXS** 8: 1 *Amerigo Vespucci*; 1 *Palinuro*; 1 *Italia*; 5 *Caroly*

**YDT** 2 *Pedretti*

**YFT** 1 *Aragosta*

**YFU** 2 Men 215

**YPT** 1 Men 212

**YTB** 10: 1 *Ercole*; 9 *Porto*

**YTM** 28

**Naval Aviation 2,200****FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with AV-8B *Harrier* II; TAV-8B *Harrier* II

**ANTI-SUBMARINE WARFARE/TRANSPORT**

5 sqn with AW101 ASW *Merlin*; Bell 212 ASW (AB-212AS); Bell 212 (AB-212); NH90 NFH

**MARITIME PATROL**

1 flt with P-180

**AIRBORNE EARLY WARNING & CONTROL**

1 flt with AW101 AEW *Merlin*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 16 combat capable

**FGA** 16: 14 AV-8B *Harrier* II; 2 TAV-8B *Harrier* II

**MP** 3 P-180

**HELICOPTERS**

**ASW** 39: 10 AW101 ASW *Merlin*; 12 Bell 212 ASW; 17 NH90 NFH

**AEW** 4 AW101 AEW *Merlin*

**TPT** 14: **Medium** 8 AW101 *Merlin*; **Light** 6 Bell 212 (AB-212)

**MSL**

**AAM** • **IR** AIM-9L *Sidewinder*; **ARH** AIM-120 AMRAAM

**ASM** AGM-65 *Maverick*

**AShM** *Marte* Mk 2/S

**Marines 3,000****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 mne regt (1 SF coy, 1 mne bn, 1 cbt spt bn, 1 log bn)

1 (boarding) mne regt (2 mne bn)

1 landing craft gp

**Other**

1 sy regt (3 sy bn)

**COMBAT SERVICE SUPPORT**

1 log regt (1 log bn)

**EQUIPMENT BY TYPE**

**APC (T)** 24 VCC-1

**AAV** 19: 15 AAVP-7; 3 AAVC-7; 1 AAVR-7

**ARTY** • **MOR** 23: **81mm** 13 Brandt; **120mm** 10 Brandt

**AT** • **MSL** • **MANPATS** *Milan*; *Spike*

**AD** • **SAM** • **MANPAD** FIM-92A *Stinger*

**ARV** 1 AAV-7RAI

**Air Force 41,900****FORCES BY ROLE****FIGHTER**

4 sqn with Eurofighter *Typhoon*

**FIGHTER/GROUND ATTACK**

2 sqn with AMX *Ghibli*

1 (SEAD/EW) sqn with *Tornado* ECR

2 sqn with *Tornado* IDS

**FIGHTER/GROUND ATTACK/ISR**

1 sqn with AMX *Ghibli*

**MARITIME PATROL**

1 sqn (opcon Navy) with BR1150 *Atlantic*

**TANKER/TRANSPORT**

1 sqn with KC-767A

**COMBAT SEARCH & RESCUE**

1 sqn with AB-212 ICO

**SEARCH & RESCUE**

1 wg with AW139 (HH-139A); Bell 212 (HH-212); HH-3F *Pelican*

**TRANSPORT**

- 2 (VIP) sqn with A319CJ; AW139 (VH-139A); *Falcon 50*;  
*Falcon 900 Easy*; *Falcon 900EX*; SH-3D *Sea King*  
 2 sqn with C-130J/C-130J-30/KC-130J *Hercules*  
 1 sqn with C-27J *Spartan*  
 1 (calibration) sqn with P-180 *Avanti*

**TRAINING**

- 1 sqn with Eurofighter *Typhoon*  
 1 sqn with MB-339PAN (aerobatic team)  
 1 sqn with MD-500D/E (NH-500D/E)  
 1 sqn with *Tornado*  
 1 sqn with AMX-T *Ghibli*  
 1 sqn with MB-339A  
 1 sqn with MB-339CD\*  
 1 sqn with SF-260EA

**ISR UAV**

- 1 sqn with MQ-9A *Reaper*; RQ-1B *Predator*

**AIR DEFENCE**

- 2 bty with *Spada*

**EQUIPMENT BY TYPE****AIRCRAFT** 244 combat capable

- FTR 71 Eurofighter *Typhoon*  
 FGA 124: 53 *Tornado* IDS; 63 AMX *Ghibli*; 8 AMX-T *Ghibli*  
 FGA/EW 15 *Tornado* ECR\*  
 ASW 6 BR1150 *Atlantici*  
 SIGINT 1 AML Gulfstream III  
 TKR/TPT 6: 4 KC-767A; 2 KC-130J *Hercules*  
 TPT 66: **Medium** 31: 9 C-130J *Hercules*; 10 C-130J-30  
*Hercules*; 12 C-27J *Spartan*; **Light** 25: 15 P-180 *Avanti*; 10  
 S-208 (liaison); **PAX** 10: 3 A319CJ; 2 *Falcon 50* (VIP); 2  
*Falcon 900 Easy*; 3 *Falcon 900EX* (VIP)  
 TRG 103: 3 M-346; 21 MB-339A; 28 MB-339CD\*; 21 MB-  
 339PAN (aerobatics); 30 SF-260EA

**HELICOPTERS**

- MRH 58: 10 AW139 (HH-139A/VH-139A); 2 MD-500D  
 (NH-500D); 46 MD-500E (NH-500E)  
 CSAR 1 AW101 (HH-101A)  
 SAR 12 HH-3F *Pelican*  
 TPT 31: **Medium** 2 SH-3D *Sea King* (liaison/VIP); **Light** 29  
 Bell 212 (HH-212)/AB-212 ICO

**UAV • ISR • Heavy** 11: 6 MQ-9A *Reaper*; 5 RQ-1B *Predator***AD • SAM • TOWED** *Spada***MSL**

- AAM • IR AIM-9L *Sidewinder*; IIR IRIS-T; ARH AIM-  
 120 AMRAAM  
 ARM AGM-88 HARM  
 LACM SCALP EG/*Storm Shadow*

**BOMBS**

- Laser-guided/GPS: Enhanced *Paveway II*; Enhanced  
*Paveway III*

**Joint Special Forces Command (COFS)****Army****FORCES BY ROLE****SPECIAL FORCES**

- 1 SF regt (9th *Assalto paracadutisti*)  
 1 STA regt  
 1 ranger regt (4th *Alpini paracadutisti*)

**COMBAT SUPPORT**

- 1 psyops regt

**TRANSPORT HELICOPTER**

- 1 spec ops hel regt

**Navy (COMSUBIN)****FORCES BY ROLE****SPECIAL FORCES**

- 1 SF gp (GOI)  
 1 diving gp (GOS)

**Air Force****FORCES BY ROLE****SPECIAL FORCES**

- 1 wg (sqn) (17th *Stormo Incursori*)

**Paramilitary****Carabinieri****FORCES BY ROLE****SPECIAL FORCES**

- 1 spec ops gp (GIS)

**Paramilitary 182,350****Carabinieri 103,750**

The Carabinieri are organisationally under the MoD. They are a separate service in the Italian Armed Forces as well as a police force with judicial competence.

**Mobile and Specialised Branch****FORCES BY ROLE****MANOEUVRE****Aviation**

- 1 hel gp

**Other**

- 1 (mobile) paramilitary div (1 bde (1st) with (1 horsed cav regt, 11 mobile bn); 1 bde (2nd) with (1 (1st) AB regt, 2 (7th & 13th) mobile regt))

**EQUIPMENT BY TYPE****APC • APC (T)** 3 VCC-2**AIRCRAFT • TPT • Light:** 1 P-180 *Avanti***HELICOPTERS**

- MRH 24 Bell 412 (AB-412)

**TPT • Light** 19 AW109**PATROL AND COASTAL COMBATANTS • PB** 69**Customs 68,100**

(Servizio Navale Guardia Di Finanza)

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 179**PCF** 1 *Antonio Zara*

- PBF** 146: 19 *Bigliani*; 24 *Corrubia*; 9 *Mazzei*; 62 V-2000;  
 32 V-5000/V-6000

**PB** 32: 24 *Buratti*; 8 *Meatini***LOGISTICS AND SUPPORT • AX** 1 *Giorgio Cini***Coast Guard 10,500**

(Guardia Costiera – Capitanerie Di Porto)

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 332**PCO** 3: 2 *Dattilo*; 1 *Gregoretto*

- PCC** 32: 3 *Diciotti*; 1 *Saettia*; 22 200-class; 6 400-class

**PB** 297: 21 300-class; 3 454-class; 72 500-class; 12 600-class; 47 700-class; 94 800-class; 48 2000-class  
**AIRCRAFT MP** 6: 3 ATR-42 MP *Surveyor*, 1 P-180GC; 2 PL-166-DL3  
**HELICOPTERS** • **MRH** 11: 7 AW139; 4 Bell 412SP (AB-412SP *Griffin*)

## Cyber

Overall responsibility for cyber security rests with the presidency of the Council of Ministers and the Inter-Ministerial Situation and Planning Group, which includes, among others, representatives from the defence, interior and foreign-affairs ministries. A Joint Integrated Concept on Computer Network Operations was approved in 2009 and, in 2014, a Joint Interagency Concept on Cyberwarfare. The National Strategic Framework for Cyberspace Security, released in 2013, says that the defence ministry 'plans, executes and sustains Computer Network Operations (CNO) in the cyber domain in order to prevent, localize and defend (actively and in-depth), oppose and neutralise all threats and/or hostile actions in the cyber domain'.

## DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1949)

**Decision on deployment of troops abroad:** By the government upon approval by the parliament

### AFGHANISTAN

**NATO** • *Operation Resolute Support* 740; 1 mtn inf bde HQ; 1 mtn inf regt(-); 1 avn bn(-); AW129 *Mangusta*; CH-47; NH90  
**UN** • UNAMA 2 obs

### ALBANIA

**OSCE** • Albania 3

### BOSNIA-HERZEGOVINA

**OSCE** • Bosnia and Herzegovina 7

### EGYPT

**MFO** 78; 3 coastal patrol unit

### GULF OF ADEN & INDIAN OCEAN

**EU** • *Operation Atalanta* 1 DDGHM

### IRAQ

*Operation Inherent Resolve* 120

### KUWAIT

4 *Tornado*; 2 MQ-9A *Reaper*; 1 KC-767A

### LEBANON

**UN** • UNIFIL 1,188; 1 mtn inf bde HQ; 1 mech inf bn; 1 hel bn; 1 engr coy; 1 sigs coy

### MALI

**EU** • EUTM Mali 15  
**UN** • MINUSMA 2

### MALTA

25; 2 Bell 212 (HH-212)

### MEDITERRANEAN SEA

**EU** • EU NAVFOR MED: 1 CVS  
**NATO** • SNMG 2: 1 FFGHM

### SERBIA

**NATO** • KFOR 542; 1 recce BG HQ; 1 Carabinieri unit

**OSCE** • Kosovo 13

### UGANDA

**EU** • EUTM Somalia 98

### UKRAINE

**OSCE** • Ukraine 20

## FOREIGN FORCES

**United States** US European Command: 11,360

**Army** 3,900; 1 AB IBCT(-)

**Navy** 3,600; 1 HQ (US Navy Europe (USNAVEUR)) at Naples; 1 HQ (6th Fleet) at Gaeta; 1 MP Sqn with 9 P-3C *Orion* at Sigonella

**USAF** 3,850; 1 ftr wg with 2 ftr sqn with 21 F-16C/D *Fighting Falcon* at Aviano

**USMC** 10

## Latvia LVA

Latvian Lat L		2014	2015	2016
<b>GDP</b>	L	24.1bn	25bn	
	US\$	32bn	27.8bn	
<i>per capita</i>	US\$	15,730	13,729	
<b>Growth</b>	%	2.4	2.2	
<b>Inflation</b>	%	0.7	0.4	
<b>Def exp [a]</b>	L	221m		
	US\$	294m		
<b>Def bdgt [b]</b>	L	221m	238m	350m
	US\$	294m	265m	
<b>FMA (US)</b>	US\$	2.25m	1.5m	2m
<b>US\$1=L</b>		0.75	0.90	

[a] NATO definition

[b] Includes military pensions

**Population** 1,986,705

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	7.6%	2.3%	3.1%	3.8%	23.0%	6.2%
<b>Female</b>	7.2%	2.1%	3.0%	3.7%	25.2%	12.8%

## Capabilities

In common with other Baltic states, Latvia has been concerned by the rising tensions over the conflict in eastern Ukraine, though unlike its neighbours has not reintroduced conscription. The small Latvian armed forces are largely structured around ground forces, focused on supporting NATO deployments and partnering with neighbours. Investment in armoured vehicles has delivered new capabilities to the Latvian Army in the shape of 123 second-hand British *Scimitar* and *Sampson* CVR (T)s; deliveries of these began in 2015. Latvia has also purchased anti-tank weapons and logistics vehicles as part of a wider investment in the army. The purchase of new air-surveillance radars in October 2015 was seen as a step towards modernising vital capabilities to assist wider NATO operations in the

region. Cooperation with neighbours may yield savings in procurement if mutual requirements can be identified, such as air-defence systems that Latvia and Lithuania agreed to pursue together in July 2015. Latvia was central to a series of Baltic-wide exercises involving NATO partners, including the US 1st Cavalry Division.

**ACTIVE 5,310** (Army 1,250 Navy 550 Air 310 Joint Staff 2,600 National Guard 600)

**RESERVE 7,850** (National Guard 7,850)

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## ORGANISATIONS BY SERVICE

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**Joint 2,600**

### FORCES BY ROLE

#### SPECIAL FORCES

1 SF unit

#### COMBAT SUPPORT

1 MP bn

**Army 1,250**

### FORCES BY ROLE

#### MANOEUVRE

##### Light

1 inf bde (2 inf bn, 1 cbt spt bn HQ, 1 CSS bn HQ)

**National Guard 600; 7,850 part-time (8,450 total)**

### FORCES BY ROLE

#### MANOEUVRE

##### Light

11 inf bn

#### COMBAT SUPPORT

1 arty bn

1 AD bn

1 engr bn

1 NBC bn

#### COMBAT SERVICE SUPPORT

3 spt bn

### EQUIPMENT BY TYPE

**MBT** 3 T-55 (trg)

**RECCE** 1 *Scimitar*

**APC** 11

**APC (T)** 3 FV103 *Spartan* (incl 1 amb & 1 CP)

**PPV** 8 *Cougar* (on loan from US)

**ARTY** 76

**TOWED 100mm** 23 K-53

**MOR** 53: 81mm 28 L16; 120mm 25 M120

**AT**

**MANPATS** *Spike-LR*

**RCL** 84mm *Carl Gustav*

**GUNS** 90mm 130

**AD**

**SAM** • MANPAD RBS-70

**GUNS** • TOWED 40mm 24 L/70

**Navy 550** (incl Coast Guard)

Naval Forces Flotilla separated into an MCM squadron and a patrol-boat squadron. LVA, EST and LTU have set up a

joint naval unit, BALTRON, with bases at Liepaja, Riga, Ventspils (LVA), Tallinn (EST), Klaipeda (LTU). Each nation contributes 1–2 MCMVs

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 5

**PB** 5 *Skrunda* (GER *Swath*)

**MINE WARFARE • MINE COUNTERMEASURES** 6

**MHO** 5 *Imanta* (ex-NLD *Alkmaar/Tripartite*)

**MCCS** 1 *Vidar* (ex-NOR)

**LOGISTICS AND SUPPORT** 1

**AXL** 1 *Varonis* (comd and spt ship, ex-NLD)

### Coast Guard

Under command of the Latvian Naval Forces.

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS**

**PB** 6: 1 *Astra*; 5 KBV 236 (ex-SWE)

**Air Force 310**

Main tasks are airspace control and defence, maritime and land SAR and air transportation.

### FORCES BY ROLE

#### TRANSPORT

1 (mixed) tpt sqn with An-2 *Colt*; Mi-17 *Hip* H; PZL Mi-2 *Hoplite*

#### AIR DEFENCE

1 AD bn

1 radar sqn (radar/air ctrl)

**AIRCRAFT** • TPT • **Light** 4 An-2 *Colt*

**HELICOPTERS** MRH 4 Mi-17 *Hip* H

**TPT** • **Light** 2 PZL Mi-2 *Hoplite*

### Paramilitary

#### State Border Guard

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS**

**PB** 3: 1 *Valpas* (ex-FIN); 1 *Lokki* (ex-FIN); 1 *Randa*

### Cyber

The Cyber Security Strategy of Latvia was published in 2014. A Cyber Defence Unit is under development within the National Guard. The Unit will support CERT.LV and armed-forces teams in preventing ICT security incidents and managing consequences in crisis situations.

### DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1922)

**Specific legislation:** 'Law on Participation of the National Armed Forces of Latvia in International Operations' (1995) (Annex of 21 Jan 2009 allows Latvian armed forces to take part in quick response units formed by NATO/EU)

**Decision on deployment of troops abroad:** a) By parliament (Section 5 I of the 1995 'Law on Participation', in combination with Art. 73 of constitution); b) by cabinet, for rescue or humanitarian operations (Section 5 II of the 1995 law) or military exercises in non-NATO states (Section 9 of the 1995 law); c) by defence minister for rescue and

humanitarian-aid operations in NATO/EU states. Latvian units can be transferred under the control of an international organisation or another country to conduct international operations for a limited time frame only in compliance with and under conditions defined by a parliamentary decree.

#### AFGHANISTAN

NATO • *Operation Resolute Support* 25

#### MALI

EU • EUTM Mali 3

#### NORTH SEA

NATO • SNMCMG 1: 1 MHO

#### SERBIA

OSCE • Kosovo 1

#### UKRAINE

OSCE • Ukraine 9

Lithuania LTU						
Euro €		2014	2015	2016		
GDP	€	36.3bn	37.5bn			
	US\$	48.3bn	41.8bn			
<i>per capita</i>	US\$	16,467	14,318			
Growth	%	3.0	1.8			
Inflation	%	0.2	-0.4			
Def exp [a]	€	1.11bn				
	US\$	1.48bn				
Def bdgt [b]	€	1.11bn	1.5bn			
	US\$	1.48bn	1.67bn			
FMA (US)	US\$	2.55m	1.5m	2m		
US\$1=€		0.75	0.90			
[a] NATO definition						
[b] Includes military pensions						
Population		2,884,433				
Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.6%	2.9%	3.3%	3.5%	22.3%	6.5%
Female	7.3%	2.7%	3.1%	3.3%	24.9%	12.7%

### Capabilities

Lithuania's military is primarily designed for limited territorial defence and cooperation with NATO partners. As with the other small Baltic states, Lithuania has expressed concern over events in eastern Ukraine since early 2014. Reassurance from NATO took the form of bolstered air-policing deployments to the region and a number of exercises involving regional forces. Vilnius authorised the implementation of a rapid-reaction force in response to the hybrid tactics observed in Ukraine. This was followed in February 2015 by the reinstatement for a period of five years of compulsory military service, a move that will see 3,000 personnel aged 19–27 serve for nine months. Additional spending and a number of recent procurements will give the army more capability; the delivery of 21 PzH2000 self-propelled howitzers from Germany began in September 2015 and an order for *Grom* MANPADs should be complete

by 2021. Lithuania and Latvia reached an agreement in July 2015 to jointly pursue a new air-defence system.

**ACTIVE 16,400 (Army 10,850 Navy 650 Air 1,100 Other 3,800) Paramilitary 11,300**

*Conscript liability* 9 months

**RESERVE 6,700 (Army 6,700)**

### ORGANISATIONS BY SERVICE

**Army 6,000; 4,800 active reserves (total 10,800)**

#### FORCES BY ROLE

##### MANOEUVRE

###### Mechanised

1 mech bde (3 mech inf bn, 1 arty bn)

###### Light

3 mot inf bn

##### COMBAT SUPPORT

1 engr bn

##### COMBAT SERVICE SUPPORT

1 trg regt

#### EQUIPMENT BY TYPE

APC • APC (T) 234 M113A1

ARTY 48

TOWED 105mm 18 M101

MOR 120mm 30: 5 2B11; 10 M/41D; 15 M113 with Tampella

AT • MSL

SP 10 M1025A2 HMMWV with *Javelin*

MANPATS *Javelin*

RCL 84mm *Carl Gustav*

AD • SAM • MANPAD GROM; RBS-70; *Stinger*

AEV 8 MT-LB

ARV 4 M113

#### Reserves

**National Defence Voluntary Forces 4,850 active reservists**

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

6 (territorial) def unit

### Navy 650

LVA, EST and LTU established a joint naval unit, BALTRON, with bases at Liepaja, Riga, Ventpils (LVA), Tallinn (EST), Klaipeda (LTU)

#### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS 4**

PCC 3 *Zematis* (ex-DNK *Flyvefisken*) with 1 76mm gun

PB 1 *Storm* (ex-NOR) with 1 76mm gun

**MINE WARFARE • MINE COUNTERMEASURES 4**

MHC 3: 1 *Siduvlis* (ex-GER *Lindau*); 2 *Skulvis* (ex-UK *Hunt*)

MCCS 1 *Jotvingis* (ex-NOR *Vidar*)

**LOGISTICS AND SUPPORT 3**

AAR 1 *Sakiai*

YTL 2

### Air Force 1,100

Flying hours 120 hrs/year



**FORCES BY ROLE****AIR DEFENCE**

1 AD bn

**EQUIPMENT BY TYPE****AIRCRAFT**TPT 5: **Medium** 3 C-27J *Spartan*; **Light** 2 L-410 *Turbolet*TRG 1 L-39ZA *Albatros***HELICOPTERS**MRH 1 AS365M3 *Dauphin* (SAR)TPT • **Medium** 8 Mi-8 *Hip* (tpt/SAR)AD • SAM • MANPAD FIM-92A *Stinger*; RBS-70**Special Operation Force****FORCES BY ROLE****SPECIAL FORCES**

1 SF gp (1 CT unit; 1 Jaeger bn, 1 cbt diver unit)

**Logistics Support Command 1,400****FORCES BY ROLE****COMBAT SERVICE SUPPORT**

1 log bn

**Training and Doctrine Command 800****FORCES BY ROLE****COMBAT SERVICE SUPPORT**

1 trg regt

**Other Units 1,600****FORCES BY ROLE****COMBAT SUPPORT**

1 MP bn

**Paramilitary 11,300****Riflemen Union 7,800****State Border Guard Service 3,500**

Ministry of Interior

**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PB 3: 1

*Lokki* (ex-FIN); 1 KBV 041 (ex-SWE); 1 KBV 101 (ex-SWE)

AMPHIBIOUS • LANDING CRAFT • UCAC 2

*Christina* (*Griffon* 2000)AIRCRAFT • TPT • **Light** 1 Cessna 172RGHELICOPTERS • TPT • **Light** 5: 1 BK117 (SAR); 2 H120*Colibri*; 2 H135**Cyber**

A Cyber Security Strategy was adopted in April 2013. In December 2014 parliament adopted a new law on cyber security (LCS) with the aim to strengthen national cyber-defence capabilities. The defence ministry has been put in charge of national cyber-security policy. To support this new function, a Cyber Security and Information Technology Department (CSITD) was established within the ministry. To better support national bodies implementing cyber-security measures (notably those focusing on state information resources (SIR), and critical information infrastructure (CII)), the defence ministry's Communications and Information Systems Service changed to become the Cyber

Security and Telecommunications Service. Again under the defence ministry, this is authorised to act as the National Cyber Security Centre (NCSC). It has a number of responsibilities, including, but not limited to, monitoring military and other institutions' networks; performing penetration testing of critical information systems or government networks; tasking national entities to improve their cyber security; or disconnecting infected systems for 48 hours from the internet or national networks without a court order.

**DEPLOYMENT****Legal provisions for foreign deployment:****Constitution:** Codified constitution (1992)

**Decision on deployment of troops abroad:** By parliament (Art. 67, 138, 142). According to legislation, the defence minister has the authority to establish the exact amount or size of contingent to be deployed, and the duration of the deployment, not exceeding the limits set out by the parliament.

**AFGHANISTAN**NATO • *Operation Resolute Support* 70**MALI**

EU • EUTM Mali 4

**NORTH SEA**

NATO • SNMCMG 1: 1 MHC

**SERBIA**

NATO • KFOR 1

**UKRAINE**

OSCE • Ukraine 3

**FOREIGN FORCES**Hungary NATO Baltic Air Policing 4 *Gripen* C**Luxembourg LUX**

Euro €	2014	2015	2016
<b>GDP</b>	€ 49.4bn	52.1bn	
	US\$ 65.7bn	57.9bn	
<b>per capita</b>	US\$ 119,488	103,187	
<b>Growth</b>	% 5.6	4.4	
<b>Inflation</b>	% 0.7	0.3	
<b>Def exp [a]</b>	€ 194m		
	US\$ 258m		
<b>Def bdgt</b>	€ 189m	193m	
	US\$ 251m	215m	
<b>US\$1=€</b>	0.75	0.90	

[a] NATO definition

**Population** 570,252

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	8.7%	3.1%	3.2%	3.5%	25.0%	6.6%
<b>Female</b>	8.2%	2.9%	3.1%	3.4%	23.9%	8.3%

## Capabilities

Luxembourg maintains limited army and air capabilities in order to participate in collective European security and crisis management. Personnel are embedded within European headquarters and there are mentoring teams in international operations in the Central African Republic and Mali. Luxembourg contributes a contractor-operated *Merlin* IIIC maritime-patrol aircraft to the EU counter-human-trafficking operation in the Mediterranean. It is also part of the A330 Multi-Role Tanker programme and is expected to receive an A400M medium strategic-transport aircraft in 2019. The Belgian and Dutch air forces are responsible for policing Luxembourg's airspace following an April 2015 agreement.

**ACTIVE 900 (Army 900) Paramilitary 610**

## ORGANISATIONS BY SERVICE

### Army 900

#### FORCES BY ROLE

##### MANOEUVRE

##### Reconnaissance

2 recce coy (1 to Eurocorps/BEL div, 1 to NATO pool of deployable forces)

##### Light

1 lt inf bn

#### EQUIPMENT BY TYPE

APC • PPV 48 *Dingo* II

ARTY • MOR 81mm 6

AT • MSL • MANPATS TOW

### Paramilitary 610

#### Gendarmerie 610

## DEPLOYMENT

Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1868)

**Specific legislation:** 'Loi du 27 juillet 1992 relatif à la participation du Grand-Duché de Luxembourg à des opérations pour le maintien de la paix (OMP) dans le cadre d'organisations internationales'.

**Decision on deployment of troops abroad:** By government after formal consultation of relevant parliamentary committees and the Council of State (Art. 1–2 of the 1992 law).

#### AFGHANISTAN

NATO • *Operation Resolute Support* 1

#### MALI

EU • EUTM Mali 1

#### SERBIA

NATO • KFOR 25

## Macedonia, Former Yugoslav Republic FYROM

Macedonian Denar d		2014	2015	2016
GDP	d	526bn	549bn	
	US\$	11.3bn	10.1bn	
<i>per capita</i>	US\$	5,481	4,867	
Growth	%	3.8	3.2	
Inflation	%	-0.1	0.1	
Def bdgt	d	5.87bn	5.65bn	
	US\$	127m	104m	
FMA (US)	US\$	3.6m	4m	3.6m
US\$1=d		46.36	54.44	

Population 2,096,015

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.1%	3.5%	3.6%	3.9%	24.3%	5.5%
Female	8.4%	3.3%	3.4%	3.7%	24.1%	7.3%

## Capabilities

Macedonia maintains a small, joint force focused on the army, with a modest maritime and air wing. Ambitious reform plans spelt out in the 2003 Defence Concept, and reiterated in the 2005 Defence White Paper, have so far only partly been realised, though the armed forces have been reorganised. The 2003 Defence Concept called for armed forces to support territorial integrity, regional stability, peace-support missions and deployed operations. The country continues to aspire to NATO membership, and joined the NATO Membership Action Plan in 1999, but this aspiration is hindered by a number of factors including an impasse with Greece over the state's name. Exercises have taken place with US and Polish forces. The armed forces were briefly deployed in 2015 amid a state of emergency in the wake of the refugee crisis.

**ACTIVE 8,000 (Joint 8,000)**

**RESERVE 4,850**

## ORGANISATIONS BY SERVICE

### Joint Operational Command 8,000

#### Army

#### FORCES BY ROLE

##### SPECIAL FORCES

1 (Special Purpose) SF regt (1 SF bn, 1 Ranger bn)

##### MANOEUVRE

##### Armoured

1 tk bn

##### Mechanised

1 mech inf bde

##### COMBAT SUPPORT

1 (mixed) arty regt

1 AD coy

1 engr bn

1 MP bn

1 NBC coy  
1 sigs bn

## Logistic Support Command

### FORCES BY ROLE

#### COMBAT SUPPORT

1 engr bn (1 active coy)

#### COMBAT SERVICE SUPPORT

3 log bn

### Reserves

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 inf bde

#### EQUIPMENT BY TYPE

MBT 31 T-72A

RECCE 10 BRDM-2

AIFV 11: 10 BMP-2; 1 BMP-2K

APC 200

APC (T) 47: 9 *Leonidas*; 28 M113; 10 MT-LB

APC (W) 153: 57 BTR-70; 12 BTR-80; 84 TM-170 *Hermelin*

ARTY 126

TOWED 70: 105mm 14 M-56; 122mm 56 M-30 M-1938

MRL 17: 122mm 6 BM-21; 128mm 11

MOR 39: 120mm 39

AT

MSL • MANPATS *Milan*

RCL 57mm; 82mm M60A

AD

SAM

SP 8 9K35 *Strela-10* (SA-13 *Gopher*)

MANPAD 9K310 *Igla-1* (SA-16 *Gimlet*)

GUNS 40mm 36 L20

## Marine Wing

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 2 *Botica*

## Air Wing

Air Wg is directly under Joint Operational Cmd

#### FORCES BY ROLE

##### TRANSPORT

1 (VIP) sqn with An-2 *Colt*

##### TRAINING

1 sqn with Bell 205 (UH-1H *Iroquois*)

1 sqn with Z-242

##### ATTACK HELICOPTER

1 sqn with Mi-24K *Hind G2*; Mi-24V *Hind E*

##### TRANSPORT HELICOPTER

1 sqn with Mi-8MTV *Hip*; Mi-17 *Hip H*

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT • Light 1 An-2 *Colt*

TRG 5 Z-242

##### HELICOPTERS

ATK 4 Mi-24V *Hind E* (10: 2 Mi-24K *Hind G2*; 8 Mi-24V *Hind E* in store)

MRH 6: 4 Mi-8MTV *Hip*; 2 Mi-17 *Hip H*

TPT • Light 2 Bell 205 (UH-1H *Iroquois*)

## Paramilitary

Police 7,600 (some 5,000 armed)

incl 2 SF units

#### EQUIPMENT BY TYPE

APC BTR APC (W)/M113 APC (T)

#### HELICOPTERS 3

MRH 1 Bell 412EP *Twin Huey*

TPT • Light 2: 1 Bell 206B (AB-206B) *Jet Ranger II*; 1

Bell 212 (AB-212)

## DEPLOYMENT

Legal provisions for foreign deployment of armed forces:

**Constitution:** Codified constitution (1991)

**Specific legislation:** 'Defence Law' (2005)

**Decision on deployment of troops abroad:** a) by the government if deployment is for humanitarian missions or military exercises; b) by the parliament if for peacekeeping operations ('Defence Law', Art. 41).

### AFGHANISTAN

NATO • *Operation Resolute Support* 39

### ALBANIA

OSCE • Albania 1

### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 11

### LEBANON

UN • UNIFIL 1

### SERBIA

OSCE • Kosovo 19

### UKRAINE

OSCE • Ukraine 16

## Malta MLT

Maltese Lira ML		2014	2015	2016
GDP	ML	7.91bn	8.26bn	
	US\$	10.5bn	9.19bn	
<i>per capita</i>	US\$	24,716	21,540	
Growth	%	3.5	3.4	
Inflation	%	0.8	1.0	
Def bdtg [a]	ML	45m	50m	52m
	US\$	60m	56m	
US\$1=ML		0.75	0.90	

[a] Excludes military pensions

Population 413,965

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.7%	3.0%	3.3%	3.5%	24.0%	8.3%
Female	7.3%	2.8%	3.1%	3.3%	23.4%	10.2%

## Capabilities

The armed forces consist of a limited number of army personnel supported by small naval and air units. Mari-

time search-and-rescue operations are conducted with patrol boats, Beech *King Air* aircraft and AW139 helicopters, with plans to procure a third such aircraft. Participation in various European training missions as well as the EUNAVFOR-Med counter-human-trafficking operation resulted in the government announcing a modest increase in personnel numbers.

**ACTIVE 1,950** (Armed Forces 1,950)

**RESERVE 180** (Emergency Volunteer Reserve Force 120 Individual Reserve 60)

## ORGANISATIONS BY SERVICE

### Armed Forces of Malta 1,950

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 (1st) inf regt (3 inf coy, 1 AD/cbt spt coy)

##### COMBAT SUPPORT

1 (3rd) cbt spt regt (1 cbt engr sqn, 1 EOD sqn, 1 maint sqn)

1 (4th) cbt spt regt (1 CIS coy, 1 sy coy (Revenue Security Corps))

### Maritime Squadron

Organised into 5 divisions: offshore patrol; inshore patrol; rapid deployment and training; marine engineering; and logistics.

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 8

PCO 1 *Emer*

PCC 1 *Diciotti*

PB 6: 4 *Austral 21m*; 2 *Marine Protector*

##### LOGISTICS AND SUPPORT 2

AAR 2 *Cantieri Vittoria*

### Air Wing

1 base party, 1 flt ops div; 1 maint div; 1 integrated log div; 1 rescue section

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT • **Light** 4: 2 Beech 200 *King Air* (maritime patrol); 2

BN-2B *Islander*

TRG 3 *Bulldog* T MK1

##### HELICOPTERS

MRH 5: 2 AW139 (SAR); 3 SA316B *Alouette III*

## DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1964)

**Decision on deployment of troops abroad:** The government decides on a case-by-case basis on the deployment of Maltese military personnel abroad (Malta Armed Forces Act, Chapter 220 of the Laws of Malta).

## FOREIGN FORCES

Italy 25; 2 Bell 212 (HH-212) hel

## Montenegro MNE

Euro €		2014	2015	2016
<b>GDP</b>	€	3.43bn	3.58bn	
	US\$	4.55bn	3.99bn	
<i>per capita</i>	US\$	7,292	6,373	
<b>Growth</b>	%	1.5	3.2	
<b>Inflation</b>	%	-0.7	1.7	
<b>Def bdgt [a]</b>	€	59m	60m	
	US\$	78m	67m	
<b>FMA (US)</b>	US\$	1.2m	1.2m	1m
<b>US\$1=€</b>		0.75	0.90	

[a] Includes military pensions

**Population** 647,073

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	7.4%	2.0%	2.7%	4.0%	27.9%	5.7%
<b>Female</b>	7.7%	2.6%	2.9%	3.6%	24.7%	8.7%

## Capabilities

Montenegro's armed forces are small and primarily organised around the army, with few air and naval assets. The force is supported by a significant paramilitary organisation. Capability remains focused on internal security and limited support to international peacekeeping. Montenegro is committed to joining NATO and has begun reforms in order to facilitate this. Some indications suggest Montenegro is a candidate for accession during NATO's July 2016 summit in Warsaw and the NATO Military committee visited the country in October 2015 as part of this assessment. However, reforms have been slow, with only a small part of the defence budget spent on modernisation.

**ACTIVE 2,080** (Army 1,500 Navy 350 Air Force 230)  
Paramilitary 10,100

## ORGANISATIONS BY SERVICE

### Army 1,500

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bde

##### MANOEUVRE

###### Reconnaissance

1 recce coy

###### Light

1 mot inf bde (1 SF coy, 2 inf regt (1 inf bn, 1 mtn bn), 1 arty bty, 1 cbt spt coy, 1 CBRN pl, 1 sig pl)

##### COMBAT SUPPORT

1 engr coy

3 sigs pl

1 MP coy

#### EQUIPMENT BY TYPE

APC (W) 8 BOV-VP M-86

ARTY 149

TOWED 122mm 12 D-30

**MRL 128mm** 18 M-63/M-94 *Plamen*  
**MOR 119:** 82mm 76; 120mm 43

**AT**

SP 8 BOV-1  
**MSL • MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K114 *Shturm* (AT-6 *Spiral*)

**Navy 350**

1 Naval Cmd HQ with 4 operational naval units (patrol boat; coastal surveillance; maritime detachment; and SAR) with additional sigs, log and trg units with a separate Coast Guard element. Some listed units are in the process of decommissioning.

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 5**

**PSO** 1 *Kotor* with 1 twin 76mm gun (1 further vessel in reserve)

**PCFG** 2 *Rade Končar* with 2 single Inchr with P-15 *Termit* (SS-N-2B *Styx*) AShM (missiles disarmed)

**PB** 2 *Mirna* (Type-140) (Police units)

**AMPHIBIOUS • LANDING CRAFT 5**

**LCU** 5: 3 (Type-21); 2 (Type-22)

**LOGISTICS AND SUPPORT 3**

**AOTL** 1 *Drina*; **AET** 1 *Lubin*; **AXS** 1 *Jadran*

**Air Force 230**

Golubovci (Podgorica) air base under army command.

**FORCES BY ROLE****TRAINING**

1 (mixed) sqn with G-4 *Super Galeb*; Utva-75 (none operational)

**TRANSPORT HELICOPTER**

1 sqn with SA341/SA342L *Gazelle*

**EQUIPMENT BY TYPE**

**AIRCRAFT • TRG** (4 G-4 *Super Galeb* non-operational; 4 Utva-75 non-operational)

**HELICOPTERS**

**MRH** 7 SA341/SA342L *Gazelle* (8 more non-operational)

**TPT • Medium** (1 Mi-8T awaiting museum storage)

**Paramilitary €10,100**

**Montenegrin Ministry of Interior Personnel**  
 €6,000

**Special Police Units** €4,100

**DEPLOYMENT**

**Legal provisions for foreign deployment:**

**Constitution:** Constitution (2007)

**Decision on deployment of troops abroad:** The Assembly, on the proposal of the Council for Defence and Security, decide on the use of Montenegrin armed forces in international forces (Article 82, item 8).

**AFGHANISTAN**

**NATO • Operation Resolute Support** 17

**ALBANIA**

**OSCE • Albania** 2

**SERBIA**

**OSCE • Kosovo** 1

**UKRAINE**

**OSCE • Ukraine** 1

**Multinational Organisations****Capabilities**

The following represent shared capabilities held by contributors collectively rather than as part of national inventories.

**ORGANISATIONS BY SERVICE****NATO AEW&C Force**

Based at Geilenkirchen (GER). 12 original participating countries (BEL, CAN, DNK, GER, GRC, ITA, NLD, NOR, PRT, TUR, USA) have been subsequently joined by 5 more (CZE, ESP, HUN, POL, ROM).

**FORCES BY ROLE****AIRBORNE EARLY WARNING & CONTROL**

1 sqn with B-757 (trg); E-3A *Sentry* (NATO standard)

**EQUIPMENT BY TYPE****AIRCRAFT**

**AEW&C** 16 E-3A *Sentry* (NATO standard)

**TPT • PAX** 1 B-757 (trg)

**Strategic Airlift Capability**

Heavy Airlift Wing based at Papa air base (HUN). 12 participating countries (BLG, EST, FIN, HUN, LTU, NLD, NOR, POL, ROM, SVN, SWE, USA)

**EQUIPMENT BY TYPE****AIRCRAFT**

**TPT • Heavy** 3 C-17A *Globemaster*

**Strategic Airlift Interim Solution**

Intended to provide strategic-airlift capacity pending the delivery of A400M aircraft by leasing An-124s. 14 participating countries (BEL, CZE, FIN, FRA, GER, GRC, HUN, LUX, NOR, POL, SVK, SVN, SWE, UK)

**EQUIPMENT BY TYPE****AIRCRAFT**

**TPT • Heavy** 2 An-124-100 (4 more available on 6–9 days notice)



Netherlands NLD				
Euro €		2014	2015	2016
GDP	€	663bn	675bn	
	US\$	881bn	751bn	
<i>per capita</i>	US\$	52,225	44,333	
Growth	%	1.0	1.8	
Inflation	%	0.3	1.0	
Def exp [a]	€	7.79bn		
	US\$	10.3bn		
Def bdgt [b]	€	8.03bn	8bn	8.23bn
	US\$	10.7bn	8.9bn	
US\$1=€		0.75	0.90	

[a] NATO definition  
[b] Includes military pensions

Population 16,947,904

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	8.6%	3.0%	3.2%	3.2%	23.4%	8.1%
Female	8.2%	2.9%	3.1%	3.1%	23.4%	9.9%

## Capabilities

The Netherlands made an early contribution to NATO's Readiness Action Plan and took a leading role in the first Very High Readiness Joint Task Force. It also signed an air-policing agreement with Belgium and Luxembourg. Outside Europe, the Dutch armed forces supported stabilisation operations in Mali and humanitarian-relief efforts in West Africa and Nepal. The Netherlands also participated in EU counter-piracy and counter-human-trafficking operations in Somalia and the Mediterranean. Amsterdam has reversed the downward trend in defence expenditure and an increased budget allocation will allow for consolidation of Dutch rapid-reaction and expeditionary capabilities. The army will continue to replace tracked armoured vehicles with lighter wheeled platforms and is to purchase *Excalibur* precision artillery shells. Its air-mobile brigade is increasingly integrated into the German *Schnelle Kräfte* rapid-deployment division. The navy has received a new joint logistic support ship. The air force is focusing on upgrading its CH-47 helicopter fleet and pilot training on future F-35 combat aircraft, while initial operational capability of soon-to-be-delivered RQ-9 *Reaper* MALE UAVs is expected in late 2016.

**ACTIVE 36,050** (Army 18,850 Navy 9,150 Air 8,050)  
Military Constabulary 5,850

**RESERVE 3,200** (Army 2,700 Navy 80 Air 420)  
Military Constabulary 80

Reserve liability to age 35 for soldiers/sailors, 40 for NCOs, 45 for officers

## ORGANISATIONS BY SERVICE

**Army 18,850**

## FORCES BY ROLE

### COMMAND

elm 1 (GER/NLD) Corps HQ

### SPECIAL FORCES

4 SF coy

### MANOEUVRE

#### Reconnaissance

1 ISR bn (2 armd recce sqn, 1 EW coy, 2 int sqn, 1 UAV bty)

#### Mechanised

1 (43rd) mech bde (1 armd recce sqn, 2 armd inf bn, 1 engr bn, 1 maint coy, 1 medical coy)

1 (13th) Lt mech bde (1 armd recce sqn, 2 mech inf bn, 1 engr bn, 1 maint coy, 1 medical coy)

#### Air Manoeuvre

1 (11th) air mob bde (3 air mob inf bn, 1 mor coy, 1 AD coy, 1 engr coy, 1 med coy, 1 supply coy, 1 maint coy)

### COMBAT SUPPORT

1 arty bn (3 arty bty)

1 AD comd (1 AD sqn; 3 AD bty)

1 CIMIC bn

1 engr bn

2 EOD coy

1 (CIS) sigs bn

1 CBRN coy

### COMBAT SERVICE SUPPORT

1 med bn

5 fd hospital

3 maint coy

2 tpt bn

## Reserves 2,700 reservists

### National Command

Cadre bde and corps tps completed by call-up of reservists (incl Territorial Comd)

## FORCES BY ROLE

### MANOEUVRE

#### Light

3 inf bn (could be mobilised for territorial def)

### EQUIPMENT BY TYPE

RECCE 305: 296 *Fennek*; 9 Tpz-1 *Fuchs* CBRN

AIFV 184 CV9035N

APC 229

APC (W) 169: 85 *Boxer* (8 driver trg; 52 amb; 25 CP); 14 M577A1; 70 XA-188

PPV 85 *Bushmaster* IMV

ARTY 61:

SP 155mm 18 PzH 2000

MOR 43: 81mm 27 L16/M1; 120mm 16 Brandt

AT

MSL

SP 40 *Fennek* MRAT

MANPATS *Spike*-MR (*Gil*)

AD • SAM

SP 36: 18 *Fennek* with FIM-92A *Stinger*; 18 MB with FIM-92A *Stinger*

TOWED 20 MIM-104D/F *Patriot* PAC-2 GEM/PAC-3 (TMD Capable)

MANPAD FIM-92A *Stinger*

RADAR • LAND 6+: 6 AN/TPQ-36 *Firefinder* (arty, mor); WALS; *Squire*

AEV 30: 10 *Kodiak*; 20 *Leopard* 1  
 ARV 77: 25 *Büffel*; 52 *Leopard* 1  
 VLB 8 *Leopard* 1  
 MW Bozena

## Navy 9,150 (incl Marines)

### EQUIPMENT BY TYPE

#### SUBMARINES • TACTICAL • SSK 4:

4 *Walrus* with 4 single 533mm TT with Mk48 *Sea Arrow* HWT (equipped for UGM-84C *Harpoon* AShM, but none embarked)

#### PRINCIPAL SURFACE COMBATANTS 6

##### DESTROYERS • DDGHM 4:

3 *Zeven Provinciën* with 2 quad Mk141 Inchr with RGM-84F *Harpoon* AShM, 1 40-cell Mk41 VLS with SM-2MR/ESSM SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS, 1 127mm gun, (capacity 1 NH90 hel)

1 *Zeven Provinciën* with 2 quad Mk141 Inchr with RGM-84F *Harpoon* AShM, 1 40-cell Mk41 VLS with SM-2MR/ESSM SAM, 2 twin 324mm ASTT with Mk46 LWT, 2 *Goalkeeper* CIWS, 1 127mm gun, (capacity 1 NH90 hel)

##### FRIGATES • FFGHM 2:

2 *Karel Doorman* with 2 quad Mk141 Inchr with RGM-84A/C *Harpoon* AShM, 1 16-cell Mk48 VLS with RIM-7P *Sea Sparrow* SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS, 1 76mm gun, (capacity 1 NH90 hel)

#### PATROL AND COASTAL COMBATANTS

PSOH 4 *Holland* with 1 76mm gun (capacity 1 NH90 hel)

#### MINE WARFARE • MINE COUNTERMEASURES

MHO 6 *Alkmaar* (*Tripartite*)

#### AMPHIBIOUS

##### PRINCIPAL AMPHIBIOUS SHIPS • LPD 2:

1 *Rotterdam* with 2 *Goalkeeper* CIWS, (capacity 6 NH90/AS532 *Cougar* hel; either 6 LCVP or 2 LCU and 3 LCVP; either 170 APC or 33 MBT; 538 troops)

1 *Johan de Witt* with 2 *Goalkeeper* CIWS, (capacity 6 NH90 hel or 4 AS532 *Cougar* hel; either 6 LCVP or 2 LCU and 3 LCVP; either 170 APC or 33 MBT; 700 troops)

##### LANDING CRAFT 17

LCU 5 Mk9

LCVP 12 Mk5

#### LOGISTICS AND SUPPORT 31

AFSH 1 *Karel Doorman* with 2 *Goalkeeper* CIWS, (capacity 6 NH90/AS532 *Cougar* or 2 CH-47F *Chinook* hel; 2 LCVP)

AGS 2 *Snellius*

AK 1 *Pelikaan*

AOT 1 *Patria*

ASL 1 *Mercuur*

AXL 1 *Van Kingsbergen*

AXS 1 *Urania*

YDT 5: 4 *Cerberus*; 1 *Soemba*

YFL 6

YTM 5 *Linge*

YTL 7 *Breezand*

## Marines 2,650

### FORCES BY ROLE

#### SPECIAL FORCES

1 SF gp (1 SF sqn, 1 CT sqn)

#### MANOEUVRE

**Amphibious**

2 mne bn

1 amph aslt gp

#### COMBAT SERVICE SUPPORT

1 spt gp (coy)

### EQUIPMENT BY TYPE

APC (T) 160: 87 Bv-206D; 73 BvS-10 *Viking*

ARTY • MOR 81mm 12 L16/M1

AT • MSL • MANPATS *Spike*-MR (*Gil*)

RL 84mm *Pantserfaust* III Dynarange 2000

AD • SAM • MANPAD FIM-92A *Stinger*

ARV 4 BvS-10; 4 *Leopard* 1

MED 4 BvS-10

## Air Force 8,050

Flying hours 180 hrs/year

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

3 sqn with F-16AM/BM *Fighting Falcon*

#### ANTI-SUBMARINE WARFARE/SEARCH & RESCUE

1 sqn with NH90 NFH

#### TANKER/TRANSPORT

1 sqn with C-130H/H-30 *Hercules*

1 sqn with KDC-10; Gulfstream IV

#### TRAINING

1 OEU sqn with F-35A *Lightning* II

1 sqn with PC-7 *Turbo Trainer*

1 hel sqn with AH-64D *Apache*; CH-47D *Chinook* (based at Fort Hood, TX)

#### ATTACK HELICOPTER

1 sqn with AH-64D *Apache*

#### TRANSPORT HELICOPTER

1 sqn with AS532U2 *Cougar* II

1 sqn with CH-47D/F *Chinook*

### EQUIPMENT BY TYPE

AIRCRAFT 63 combat capable

FTR 61 F-16AM/BM *Fighting Falcon*

FGA 2 F-35A *Lightning* II (in test)

TKR 2 KDC-10

TPT 5: **Medium** 4: 2 C-130H *Hercules*; 2 C-130H-30 *Hercules*; **PAX** 1 Gulfstream IV

TRG 13 PC-7 *Turbo Trainer*

#### HELICOPTERS

ATK 28 AH-64D *Apache*

ASW 18 NH90 NFH/TTH

MRH 4 SA316 *Alouette* III (to be withdrawn 2016)

TPT 25: **Heavy** 17: 11 CH-47D *Chinook*; 6 CH-47F *Chinook*;

**Medium** 8 AS532U2 *Cougar* II

#### MSL

AAM • IR AIM-9L/M/N *Sidewinder*; ARH AIM-120B

AMRAAM

ASM AGM-114K *Hellfire*; AGM-65D/G *Maverick*

#### BOMBS

Laser-guided GBU-10/GBU-12 *Paveway* II; GBU-24 *Paveway* III (all supported by LANTIRN)

## Paramilitary

### Royal Military Constabulary 5,900

Subordinate to the Ministry of Defence, but performs most of its work under the authority of other ministries.

#### FORCES BY ROLE

##### MANOEUVRE

##### Other

6 paramilitary district (total: 25 paramilitary 'bde')

#### EQUIPMENT BY TYPE

AIFV 24 YPR-765

## Cyber

The Defence Cyber Strategy was updated in early 2015. A Defence Cyber Command (DCC) was launched in September 2014 within the army, but comprising personnel from all the armed services. The DCC will be responsible for the cyber security of the defence organisation and its partners. It will consist of three segments: the Defence Cyber Expertise Centre, serving as a defence-ministry cyber-knowledge-gathering, assurance and dissemination institute; the Cyber Operations Division, providing cyber specialists to military operational units; and a Technology Division, capable of preparing and performing actual cyber attacks, if and when decided by the appropriate authority. According to the defence ministry, 'the armed forces can attack, manipulate and disable the digital systems of opponents. Potential opponents might be other states, terrorist or other organisations, or hackers.' There is also a Defence Computer Emergency Response Team working within the Joint Information Technology Command (JITC) of the Defence Materiel Organisation. JITC will cooperate with the Dutch intelligence and security service. A Defence Cyber Doctrine is being developed.

## DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1815)

**Decision on deployment of troops abroad:** By the government (Art. 98)

### AFGHANISTAN

NATO • *Operation Resolute Support* 83

### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 6

### GULF OF ADEN & INDIAN OCEAN

EU • *Operation Atalanta* 1 FFGHM

### IRAQ

*Operation Inherent Resolve* 130

### JORDAN

*Operation Inherent Resolve* 4 F-16AM *Fighting Falcon*

### MALI

EU • EUTM Mali 1

UN • MINUSMA 532; 1 SF coy; 1 atk hel sqn; 1 hel sqn; 1 engr coy; 1 int coy

### MIDDLE EAST

UN • UNTSO 12 obs

### NORTH SEA

NATO • SNMCMG 1: 1 MHO

### SERBIA

NATO • KFOR 5

### SOUTH SUDAN

UN • UNMISS 6; 4 obs

### SYRIA/ISRAEL

UN • UNDOF 2

### UGANDA

EU • EUTM Somalia 6

### UKRAINE

OSCE • Ukraine 9

### UNITED STATES

1 hel trg sqn with AH-64D *Apache*; CH-47D *Chinook* based at Fort Hood (TX)

## FOREIGN FORCES

**United Kingdom** Air Force 90

**United States** US European Command: 380

## Norway NOR

Norwegian Kroner kr		2014	2015	2016
GDP	kr	3.15tr	3.16tr	
	US\$	500bn	398bn	
<i>per capita</i>	US\$	96,930	76,266	
Growth	%	2.2	0.9	
Inflation	%	2.0	2.3	
Def exp [a]	kr	46.2bn		
	US\$	7.34bn		
Def bdgt	kr	42.7bn	43.8bn	49.1bn
	US\$	6.78bn	5.51bn	
US\$1=kr		6.30	7.95	

[a] NATO definition

**Population** 5,207,689

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.3%	3.2%	3.4%	3.5%	23.4%	7.4%
Female	8.8%	3.1%	3.3%	3.4%	22.2%	8.9%

## Capabilities

Norway's continuing focus on the High North has been brought into sharper focus as a result of the more challenging relationship with Russia. It sustains small but well-equipped and -trained armed forces – around a third of whom are conscripts at any one time – with territorial defence at the core of its security policy. Planning assumptions are under review, particularly regarding readiness levels, while logistics are being examined. According to the defence minister, 'We see simultane-

ity challenges and delays in readying units for service, and we see reduced endurance.' The government intends to 'increase defence budgets and prioritise operational activity and readiness'. In January 2015, Norwegian conscription became gender neutral. Equipment recapitalisation is ongoing, reflecting the level of defence expenditure. The first of 16 AW101 SAR helicopters will enter service in 2017. The first of the 52 F-35As it intends to buy will also arrive in-country in 2017, with an initial service capability pencilled in for 2019.

### **ACTIVE 23,550 (Army 8,350 Navy 3,800 Air 3,450 Central Support 7,500 Home Guard 450)**

*Conscript liability* 18 months maximum. Conscripts first serve 12 months from 19–21, and then up to 4–5 refresher training periods until age 35, 44, 55 or 60 depending on rank and function. Active numbers include conscripts on initial service. Conscription extended to women in 2015.

### **RESERVE 45,940 (Army 270 Navy 320 Central Support 350 Home Guard 45,000)**

Readiness varies from a few hours to several days

## **ORGANISATIONS BY SERVICE**

### **Army 3,600; 4,750 conscript (total 8,350)**

The mechanised brigade – Brigade North – trains new personnel of all categories and provides units for international operations. At any time around one-third of the brigade will be trained and ready to conduct operations. The brigade includes one high-readiness mechanised battalion (Telemark Battalion) with combat support and combat service support units on high readiness.

#### **FORCES BY ROLE**

##### **MANOEUVRE**

###### **Reconnaissance**

1 (Border Guard) lt bn (3 coy (HQ/garrison, border control & trg))

###### **Mechanised**

1 mech inf bde (1 ISR bn, 2 mech inf bn, 1 lt inf bn, 1 arty bn, 1 engr bn, 1 MP coy, 1 CIS bn, 1 spt bn, 1 med bn)

###### **Light**

1 lt inf bn (His Majesty The King's Guards)

##### **EQUIPMENT BY TYPE**

**MBT** 52 *Leopard* 2A4

**RECCE** TPz-1 *Fuchs* NBC

**AIFV** 116 CV9030N

**APC** 410

**APC (T)** 315 M113 (incl variants)

**APC (W)** 75 XA-186 *Sisu*/XA-200 *Sisu*

**PPV** 20 *Dingo* II

**ARTY** 204

**SP 155mm** 18 M109A3GN

**MOR** 186:

**SP 81mm** 36: 24 M106A1; 12 M125A2

**81mm** 150 L-16

**AT**

**MANPATS** *Javelin*

**RCL 84mm** *Carl Gustav*

**RADAR • LAND** 12 ARTHUR

**AEV** 22 *Alois*

**ARV** 9+: 3 M88A1; M578; 6 *Leopard* 1

**VLB** 35: 26 *Leguan*; 9 *Leopard* 1

**MW** 9 910 MCV-2

### **Navy 2,150; 1,650 conscripts (total 3,800)**

Joint Command – Norwegian National Joint Headquarters. The Royal Norwegian Navy is organised into four elements under the command of the chief of staff of the Navy: the naval units '*Kysteskadren*', the schools '*Sjoforsvarets Skoler*', the naval bases and the coast guard '*Kystvakten*'.

#### **FORCES BY ROLE**

##### **MANOEUVRE**

###### **Reconnaissance**

1 ISR coy (Coastal Rangers)

##### **COMBAT SUPPORT**

1 EOD pl

##### **EQUIPMENT BY TYPE**

**SUBMARINES • TACTICAL • SSK** 6 *Ulla* with 8 single 533mm TT with A3 *Seal* DM2 HWT

##### **PRINCIPAL SURFACE COMBATANTS 5**

**DESTROYERS • DDGHM** 5 *Fridtjof Nansen* with *Aegis* C2 (mod), 2 quad Inchr with NSM AShM, 1 8-cell Mk41 VLS with ESSM SAM, 2 twin 324mm ASTT with *Sting Ray* LWT, 1 76mm gun, (capacity 1 NH90 hel)

##### **PATROL AND COASTAL COMBATANTS • PCFGM 6**

*Skjold* with 8 single Inchr with NSM AShM, 1 twin *Simbad* Inchr with *Mistral* SAM, 1 76mm gun

##### **MINE WARFARE • MINE COUNTERMEASURES 6:**

**MSC** 3 *Alta* with 1 twin *Simbad* Inchr with *Mistral* SAM

**MHC** 3 *Oksoy* with 1 twin *Simbad* Inchr with *Mistral* SAM

##### **AMPHIBIOUS • LANDING CRAFT • LCP** 16 S90N

##### **LOGISTICS AND SUPPORT 20**

**AGI** 1 *Marjata* with 1 hel landing platform

**AGDS** 1 *Tyr*

**AGS** 6: 1 *HU Sverdrup II*; 4 *Oljevern*; 1 *Geoffjord*

**ATS** 1 *Valkyrien*

**AXL** 5: 2 *Hessa*; 2 *Kvarnen*; 1 *Reine*

**YAC** 1 *Norge*

**YDT** 5

### **Coast Guard**

##### **EQUIPMENT BY TYPE**

##### **PATROL AND COASTAL COMBATANTS 15**

**PSO** 8: 3 *Barentshav*; 1 *Svalbard* with 1 57mm gun, 1 hel landing platform; 1 *Harstad*; 3 *Nordkapp* with 1 57mm gun, 1 hel landing platform

**PCO** 7: 1 *Aalesund*; 5 *Nornen*; 1 *Reine*

### **Air Force 2,150; 1,300 conscript (total 3,450)**

Joint Command – Norwegian National HQ

Flying hours 180 hrs/year

#### **FORCES BY ROLE**

##### **FIGHTER/GROUND ATTACK**

3 sqn with F-16AM/BM *Fighting Falcon*

##### **MARITIME PATROL**

1 sqn with P-3C *Orion*; P-3N *Orion* (pilot trg)

##### **ELECTRONIC WARFARE**

1 sqn with *Falcon* 20C (EW, Flight Inspection Service)

**SEARCH & RESCUE**

1 sqn with *Sea King* Mk43B

**TRANSPORT**

1 sqn with C-130J-30 *Hercules*

**TRAINING**

1 sqn with MFI-15 SAAB *Safari*

**TRANSPORT HELICOPTER**

2 sqn with Bell 412SP *Twin Huey*

1 sqn with NH90 (forming)

**AIR DEFENCE**

1 bty(+) with NASAMS II

**EQUIPMENT BY TYPE****AIRCRAFT** 63 combat capable

**FTR** 57: 47 F-16AM *Fighting Falcon*; 10 F-16BM *Fighting Falcon*

**ASW** 6: 4 P-3C *Orion*; 2 P-3N *Orion* (pilot trg)

**EW** 3 *Falcon* 20C

**TPT • Medium** 4 C-130J-30 *Hercules*

**TRG** 16 MFI-15 *Safari*

**HELICOPTERS**

**ASW** 3 NH90 NFH (delivery schedule of all 14 revised to an FOC of 2017)

**SAR** 12 *Sea King* Mk43B

**MRH** 18: 6 Bell 412HP; 12 Bell 412SP

**AD**

**SAM • TOWED** NASAMS II

**MSL**

**AAM • IR** AIM-9L *Sidewinder*; **IIR** AIM-9X *Sidewinder* II; **IRIS-T**; **ARH** AIM-120B AMRAAM

**BOMBS**

**Laser-guided** EGBU-12 *Paveway* II

**INS/GPS guided** JDAM

**Special Operations Command (NORSOCOM)****FORCES BY ROLE****SPECIAL FORCES**

1 (army) SF comd (2 SF gp)

1 (navy) SF comd (1 SF gp)

**Central Support, Administration and Command** 6,500; 1,000 conscripts (total 7,500)

Central Support, Administration and Command includes military personnel in all joint elements and they are responsible for logistics and CIS in support of all forces in Norway and abroad.

**Home Guard** 550 (45,000 reserves)

The Home Guard is a separate organisation, but closely cooperates with all services. The Home Guard can be mobilised on very short notice for local security operations.

**Land Home Guard** 41,150 with reserves

11 Home Guard Districts with mobile Rapid Reaction Forces (3,000 troops in total) as well as reinforcements and follow-on forces (38,150 troops in total).

**Naval Home Guard** 1,900 with reserves

Consisting of Rapid Reaction Forces (500 troops), and 17 'Naval Home Guard Areas'. A number of civilian vessels can be requisitioned as required.

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS • PB** 11: 4

*Harek*; 2 *Gyda*; 5 *Alusafe* 1290

**Air Home Guard** 1,450 with reserves

Provides force protection and security detachments for air bases.

**Cyber**

The defence ministry is responsible for defending military networks and national coordination in armed conflict. The 2012 Cyber Security Strategy for Norway contained cross-governmental guidelines for cyber defence. Norwegian Armed Forces Cyber Defence supports the armed forces with establishing, operating and protecting networks. It is responsible for defending military networks against cyber attack. It also supports the Norwegian Armed Forces at home and abroad with the establishment, operation, development and protection of communications systems, and is responsible for defending military networks against cyber attacks as well as developing Network Based Defence.

**DEPLOYMENT****Legal provisions for foreign deployment: Constitution:**

Codified constitution (1814)

**Decision on deployment of troops abroad:** By royal prerogative exercised by the government (Art. 25, 26).

**AFGHANISTAN**

NATO • *Operation Resolute Support* 56

**CYPRUS**

UN • UNFICYP 2

**EGYPT**

MFO 3

**IRAQ**

*Operation Inherent Resolve* 50

**MALI**

UN • MINUSMA 21

**MIDDLE EAST**

UN • UNTSO 12 obs

**NORTH SEA**

NATO • SNMG 1: 1 DDGHM

NATO • SNMCMG 1: 1 MHC

**SERBIA**

NATO • KFOR 2

**SOUTH SUDAN**

UN • UNMISS 12; 5 obs

**UKRAINE**

OSCE • Ukraine 9

**FOREIGN FORCES**

**United States** US European Command: 1 (APS) 155mm SP Arty bn eqpt set



## Poland POL

Polish Zloty zł		2014	2015	2016
GDP	zł	1.73tr	1.79tr	
	US\$	548bn	481bn	
<i>per capita</i>	US\$	14,411	12,662	
Growth	%	3.4	3.5	
Inflation	%	-0.03	-0.8	
Def exp [a]	zł	31.9bn		
	US\$	10.1bn		
Def bdgt [b]	zł	32bn	38.3bn	
	US\$	10.2bn	10.3bn	
FMA (US)	US\$	14m	9m	6m
US\$1=zł		3.16	3.72	

[a] NATO definition

[b] Includes military pensions

Population 38,562,189

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.6%	2.7%	3.3%	3.7%	25.1%	6.1%
Female	7.1%	2.5%	3.1%	3.6%	25.7%	9.5%

## Capabilities

Territorial defence and membership of the NATO Alliance are two central pillars of Poland's defence policy. The armed forces are recapitalising equipment inventories, a process given more urgency by concern over events in Ukraine. In September 2014, a plan was approved to raise defence spending to 2% of GDP, with this process due to start in 2016. Poland has stressed regional cooperation initiatives, and a technical agreement to form a long-planned joint brigade with Lithuania and Ukraine has been put in place. Warsaw also established a fund to bolster the defence-modernisation ambitions of neighbours, including Visegrad partners the Czech Republic, Hungary and Slovakia. The fund will facilitate loans for armaments programmes and will also serve to strengthen the position of Polish defence firms in regional markets. Poland decided in 2015 to acquire the *Patriot* air-defence system and procure the Airbus-made H225 helicopter to modernise its rotary-wing fleet. A new technical modernisation programme with a ten-year time horizon is expected in 2016. (See pp. 66-72.)

**ACTIVE 99,300 (Army 48,200 Navy 7,700 Air Force 16,600 Special Forces 3,000 Joint 23,800) Paramilitary 73,400**

## ORGANISATIONS BY SERVICE

### Army 48,200

Transition to lighter forces is continuing but is hampered by lack of funds.

#### FORCES BY ROLE

##### COMMAND

- 1 (2nd) mech corps HQ
- elm 1 (MNC NE) corps HQ

## MANOEUVRE

### Reconnaissance

3 recce regt

### Armoured

1 (11th) armd cav div (2 armd bde, 1 mech bde, 1 arty regt)

### Mechanised

1 (12th) div (2 mech bde, 1 (coastal) mech bde, 1 arty regt)

1 (16th) div (2 armd bde, 2 mech bde, 1 arty regt)

1 (21st) mech bde (1 armd bn, 3 mech bn, 1 arty bn, 1 AD bn, 1 engr bn)

### Air Manoeuvre

1 (6th) air aslt bde (3 air aslt bn)

1 (25th) air cav bde (3 air cav bn, 2 tpt hel bn, 1 (casevac) med unit)

### Aviation

1 (1st) avn bde (2 atk hel sqn with Mi-24D/V *Hind* D/E, 1 CSAR sqn with Mi-24V *Hind* E; PZL W-3PL *Gluszec*; 2 ISR hel sqn with Mi-2URP; 2 hel sqn with Mi-2)

## COMBAT SUPPORT

2 engr regt

1 ptn br regt

2 chem regt

3 AD regt

## EQUIPMENT BY TYPE

**MBT** 971: 142 *Leopard* 2A4; 91 *Leopard* 2A5; 233 PT-91 *Twardy*; 505 T-72/T-72M1D/T-72M1

**RECCE** 366: 237 BRDM-2; 37 BWR; 92 WD R-5

**AIFV** 1,838: 1,268 BMP-1; 570 *Rosomak*

**APC • PPV** 115: 40 *Cougar* (on loan from US); 45 M-ATV; 30 *Maxxpro*

**ARTY** 767

**SP** 403: **122mm** 292 2S1; **152mm** 111 M-77 *Dana*

**MRL** **122mm** 180: 75 BM-21; 30 RM-70; 75 WR-40 *Langusta*

**MOR** 184: **98mm** 89 M-98; **120mm** 95 M120

**AT • MSL • MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); *Spike*-LR

## AD

### SAM

**SP** 84: 20 2K12 *Kub* (SA-6 *Gainful*); 64 9K33 *Osa*-AK (SA-8 *Gecko*)

**MANPAD** 9K32 *Strela-2*† (SA-7 *Grail*); GROM

### GUNS

**SP** **23mm** 28: 8 ZSU-23-4; 20 ZSU-23-4MP *Biala*

**TOWED** **23mm** 324; 252 ZU-23-2; 72 ZUR-23-2KG/PG

**RADAR • LAND** 3 LIWIEC (veh, arty)

## HELICOPTERS

**ATK** 28 Mi-24D/V *Hind* D/E

**MRH** 60: 7 Mi-8MT *Hip*; 3 Mi-17 *Hip* H; 1 Mi-17AE *Hip* (aeromedical); 5 Mi-17-1V *Hip*; 16 PZL Mi-2URP *Hoplite*;

24 PZL W-3W/WA *Sokol*; 4 PZL W-3PL *Gluszec* (CSAR)

**TPT** 34: **Medium** 7 Mi-8T *Hip*; **Light** 27: 25 PZL Mi-2 *Hoplite*; 2 PZL W-3AE *Sokol* (aeromedical)

**AEV** IWT; MT-LB

**ARV** 65+: 10 *Leopard* 1; 15 MT-LB; TRI; WPT-TOPAS; 40 WZT-3

**VLB** 52: 4 *Biber*; 48 BLG67M2

**MW** 18: 14 *Bozena*; 4 *Kalina* SUM

**Navy 7,700****EQUIPMENT BY TYPE****SUBMARINES • TACTICAL 5****SSK 5:**

- 4 *Sokol* (ex-NOR Type-207) with 8 single 533mm TT
- 1 *Orzel* (ex-FSU *Kilo*) with 6 single 533mm TT each with T-53/T-65 HWT

**PRINCIPAL SURFACE COMBATANTS 2**

- FRIGATES • FFGHM 2** *Pulaski* (ex-US *Oliver Hazard Perry*) with 1 Mk13 GMLS with RGM-84D/F *Harpoon* ASHM/SM-1MR SAM, 2 triple 324mm ASTT with MU90 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 2 SH-2G *Super Seasprite* ASW hel) (1 vessel used as training ship)

**PATROL AND COASTAL COMBATANTS 4**

- CORVETTES • FSM 1** *Kaszub* with 2 quad Inchr with 9K32 *Strela-2* (SA-N-5 *Grail*) SAM, 2 twin 533mm ASTT with SET-53 HWT, 2 RBU 6000 *Smerch 2* A/S mor, 1 76mm gun

**PCFGM 3:**

- 3 *Orkan* (ex-GDR *Sassnitz*) with 1 quad Inchr with RBS-15 Mk3 ASHM, 1 quad Inchr (manual aiming) with *Strela-2* (SA-N-5 *Grail*) SAM, 1 AK630 CIWS, 1 76mm gun

**MINE WARFARE • MINE COUNTERMEASURES 21**

- MCCS 1 *Project 890*
- MHI 4 *Mamry*
- MHO 3 *Krogulec*
- MSI 13 *Goplo*

**AMPHIBIOUS 8**

- LANDING SHIPS • LSM 5** *Lublin* (capacity 9 tanks; 135 troops)
- LANDING CRAFT • LCU 3** *Deba* (capacity 50 troops)

**LOGISTICS AND SUPPORT 38**

- AGI 2 *Moma*
- AGS 8: 2 *Heweliusz*; 6 (coastal)
- AORL 1 *Baltyk*
- AOL 1 *Moskit*
- ARS 4: 2 *Piast*; 2 *Zbyszko*
- ATF 2
- AX 1 *Wodnik* with 1 twin AK230 CIWS
- AXS 1 *Iskra*
- YDG 2 *Mrowka*
- YDT 3
- YFB 7
- YPT 1 *Kormoran*
- YTM 5

**Naval Aviation 1,300****FORCES BY ROLE****ANTI SUBMARINE WARFARE/SEARCH & RESCUE**

- 1 sqn with MI-14PL *Haze A*; MI-14PS *Haze C*
- 1 sqn with PZL W-3RM *Anakonda*; SH-2G *Super Seasprite*

**TRANSPORT**

- 1 sqn with An-28RM; An-28T
- 1 sqn with An-28TD; M-28B; Mi-17 *Hip H*; PZL Mi-2 *Hoplite*; PZL W-3RM

**EQUIPMENT BY TYPE****AIRCRAFT**

- MP 10: 8 An-28RM *Bryza*; 2 An-28T *Bryza*
- TPT • **Light** 4: 2 An-28TD *Bryza*; 2 M-28B *Bryza*

**HELICOPTERS**

- ASW 11: 7 Mi-14PL *Haze*; 4 SH-2G *Super Seasprite*
- MRH 2 Mi-17 *Hip H*
- SAR 8: 2 Mi-14PS *Haze C*; 6 PZL W-3RM *Anakonda*
- TPT • **Light** 4 PZL Mi-2 *Hoplite*

**Coastal Defence****EQUIPMENT BY TYPE**

- MSL • ASHM 6 NSM

**Air Force 16,600**

Flying hours 160 to 200 hrs/year

**FORCES BY ROLE****FIGHTER**

- 2 sqn with MiG-29A/UB *Fulcrum*

**FIGHTER/GROUND ATTACK**

- 3 sqn with F-16C/D Block 52+ *Fighting Falcon*

**FIGHTER/GROUND ATTACK/ISR**

- 2 sqn with Su-22M-4 *Fitter*

**SEARCH AND RESCUE**

- 1 sqn with Mi-2; PZL W-3 *Sokol*

**TRANSPORT**

- 1 sqn with C-130E; PZL M-28 *Bryza*
- 1 sqn with C-295M; PZL M-28 *Bryza*

**TRAINING**

- 1 sqn with PZL-130 *Orlik*
- 1 sqn with TS-11 *Iskra*
- 1 hel sqn with SW-4 *Puszczczyk*

**TRANSPORT HELICOPTER**

- 1 (Spec Ops) sqn with Mi-17 *Hip H*
- 1 (VIP) sqn with Mi-8; W-3WA *Sokol*

**AIR DEFENCE**

- 1 bde with S-125 *Neva SC* (SA-3 *Goa*); S-200C *Vega* (SA-5 *Gammon*)

**EQUIPMENT BY TYPE****AIRCRAFT 98 combat capable**

- FTR 32: 26 MiG-29A *Fulcrum*; 6 MiG-29UB *Fulcrum*
- FGA 66: 36 F-16C Block 52+ *Fighting Falcon*; 12 F-16D Block 52+ *Fighting Falcon*; 12 Su-22M-4 *Fitter*; 6 Su-22UM3K *Fitter*
- TPT 44: **Medium** 5 C-130E *Hercules*; **Light** 39: 16 C-295M; 23 M-28 *Bryza* TD
- TRG 60: 28 PZL-130 *Orlik*; 32 TS-11 *Iskra*

**HELICOPTERS**

- MRH 8 Mi-17 *Hip H*
- TPT 70: **Medium** 30: 9 Mi-8 *Hip*; 11 PZL W-3 *Sokol*; 10 PZL W-3WA *Sokol* (VIP); **Light** 40: 16 PZL Mi-2 *Hoplite*; 24 SW-4 *Puszczczyk* (trg)

**AD • SAM**

- SP 17 S-125 *Neva SC* (SA-3 *Goa*)
- STATIC 1 S-200C *Vega* (SA-5 *Gammon*)

**MSL**

- AAM • IR R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); AIM-9 *Sidewinder*; R-27T (AA-10B *Alamo*); ARH AIM-120C AMRAAM
- ASM AGM-65J/G *Maverick*; Kh-25 (AS-10 *Karen*); Kh-29 (AS-14 *Kedge*)

**Special Forces 3,000****FORCES BY ROLE****SPECIAL FORCES**

3 SF units (GROM, FORMOZA &amp; cdo)

**COMBAT SUPPORT/**

1 cbt spt unit (AGAT)

**COMBAT SERVICE SUPPORT**

1 spt unit (NIL)

**Paramilitary 73,400****Border Guards 14,300**

Ministry of Interior

**Maritime Border Guard 3,700****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 18**PCC 2 *Kaper*PBF 6: 2 *Straznik*; 4 IC16MPB 10: 2 *Wisloka*; 2 *Baltic 24*; 6 others**AMPHIBIOUS • LANDING CRAFT • LCAC 2**  
Griffon 2000TDX**Prevention Units (Police) 59,100**

Anti-terrorist Operations Bureau n.k.

Ministry of Interior

**Cyber**

In January 2015, the National Security Bureau issued a Cyber Security Doctrine. The document discussed national security in the cyber dimension, describing it as a strategic objective. The national cyber environment was also diagnosed, as were internal and external threats, risks and opportunities. The doctrine stipulates the most significant tasks needed in order to build national cyber-security capability. It was reported that the document noted the need to pursue 'active cyberdefence, including offensive actions in cyberspace, and maintaining readiness for cyberwar'.

**DEPLOYMENT****Legal provisions for foreign deployment:**

Constitution: Codified constitution (1997); Act on Principles of Use or External Deployment of the Polish Armed Forces (17/12/1998)

**Decision on deployment of troops abroad:**

- By president on request of prime minister in cases of direct threat (Art. 136);
- In general, specified by ratified international agreement or statute (both must be passed by parliament, Art. 117)

**AFGHANISTAN**NATO • *Operation Resolute Support* 180

UN • UNAMA 1 obs

**ARMENIA/AZERBAIJAN**

OSCE • Minsk Conference 1

**BOSNIA-HERZEGOVINA**EU • EUFOR • *Operation Althea* 39**CENTRAL AFRICAN REPUBLIC**

EU • EUMAM RCA 2

**CÔTE D'IVOIRE**

UN • UNOCI 2 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 2 obs

**LIBERIA**

UN • UNMIL 2 obs

**MALI**

EU • EUTM Mali 20

**MOLDOVA**

OSCE • Moldova 1

**SERBIA**

NATO • KFOR 240; 1 inf coy

OSCE • Kosovo 1

UN • UNMIK 1 obs

**SOUTH SUDAN**

UN • UNMISS 2 obs

**UKRAINE**

OSCE • Ukraine 30

**WESTERN SAHARA**

UN • MINURSO 1 obs

**FOREIGN FORCES**

Germany 67 (elm Corps HQ (multinational))

**Portugal PRT**

Euro €		2014	2015	2016
GDP	€	173bn	178bn	
	US\$	230bn	198bn	
<i>per capita</i>	US\$	22,123	18,984	
Growth	%	0.9	1.6	
Inflation	%	-0.2	0.6	
Def exp [a]	€	2.25bn		
	US\$	2.99bn		
Def bdgt	€	1.94bn	1.96bn	
	US\$	2.58bn	2.18bn	

US\$1=€ 3.30 3.30

[a] NATO definition

Population 10,825,309

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.2%	3.0%	3.1%	3.2%	23.7%	7.7%
Female	7.5%	2.7%	2.7%	2.8%	24.3%	11.2%

**Capabilities**

Homeland defence, supporting NATO Article V and UN, EU and NATO-led operations are core roles for the country's armed forces, along with maritime security. Following on from April 2013's *Defesa 2020* document, Portugal adopted a 2015–26 military-planning law, setting key milestones for platform acquisition and modernisation

programmes over the next decade. The plan envisages a cut to army strength and plans to sell or rent many military properties, as well as the state's shares in the national defence industry. Investment plans support Portugal's ambition to field rapid-reaction and maritime-surveillance capabilities for territorial defence and multinational operations. There are plans to boost land capabilities with a new light armoured vehicle and additional *Pandur* IIs. While budget restrictions delayed the modernisation of the *Vasco Da Gama* frigates, the navy still plans to upgrade its *Bartolomeu Dias* frigates and *Lynx* helicopters. The air force plans to modernise its F-16 combat aircraft and *Hercules* transports. Meanwhile, Portugal demonstrated its commitment to NATO collective defence by deploying F-16s for air-policing missions in Eastern Europe.

**ACTIVE 32,850 (Army 17,800 Navy 8,700 Air 6,350)**  
**Paramilitary 45,250**

**RESERVE 211,950 (Army 210,000 Navy 1,250, Air Force 700)**

Reserve obligation to age 35

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## ORGANISATIONS BY SERVICE

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### Army 17,800

5 territorial comd (2 mil region, 1 mil district, 2 mil zone)

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bn

##### MANOEUVRE

###### Reconnaissance

1 ISR bn

###### Mechanised

1 mech bde (1 cav tp, 1 tk regt, 2 mech inf bn, 1 arty bn,

1 AD bty, 1 engr coy, 1 sigs coy, 1 spt bn)

1 (intervention) bde (1 cav tp, 1 recce regt, 2 mech inf

bn, 1 arty bn, 1 AD bty, 1 engr coy, 1 sigs coy, 1 spt bn)

###### Air Manoeuvre

1 (rapid reaction) bde (1 cav tp, 1 cdo bn, 2 para bn, 1 arty bn, 1 AD bty, 1 engr coy, 1 sigs coy, 1 spt bn)

###### Other

1 (Madeira) inf gp (2 inf bn, 1 AD bty)

1 (Azores) inf gp (1 inf bn, 1 AD bty)

##### COMBAT SUPPORT

1 STA bty

1 AD bn

1 engr bn

1 EOD unit

1 ptn br coy

1 EW coy

2 MP coy

1 CBRN coy

1 psyops unit

1 CIMIC coy (joint)

1 sigs bn

##### COMBAT SERVICE SUPPORT

1 construction coy

1 maint coy

1 log coy

1 tpt coy

1 med unit

## Reserves 210,000

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### FORCES BY ROLE

#### MANOEUVRE

##### Light

3 (territorial) def bde (on mobilisation)

### EQUIPMENT BY TYPE

**MBT** 58: 37 *Leopard* 2A6; 21 M60A3 TTS

**RECCE** 47: 14 V-150 *Chaimite*; 33 ULTRAV M-11

#### APC 421

**APC (T)** 256: 173 M113A1; 32 M113A2; 51 M577A2

**APC (W)** 165: 21 V-200 *Chaimite*; 144 *Pandur* II (all variants)

#### ARTY 327

**SP 155mm** 23: 6 M109A2; 17 M109A5

**TOWED** 55: **105mm** 31: 18 L119 Light Gun; 8 M101A1; 5 M-56; **155mm** 24 M114A1

**MOR** 249: **81mm** 164 (incl 21 SP); **107mm** 31 M30 (incl 20 SP); **120mm** 54 Tampella

#### AT

##### MSL

**SP** 20: 16 M113 with TOW; 4 M901 with TOW

**MANPATS** *Milan*; TOW

**RCL** 236: **84mm** 162 *Carl Gustav*; **90mm** 29 M67; **106mm** 45 M40A1

#### AD

##### SAM

**SP** 29: 5 M48A2 *Chaparral*; 24 M48A3 *Chaparral*

**MANPAD** FIM-92A *Stinger*

**GUNS • TOWED** 20mm 20 Rh 202

#### AEV M728

**ARV** 6 M88A1, 7 *Pandur*

#### VLB M48

## Navy 8,700 (incl 1,450 Marines)

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### EQUIPMENT BY TYPE

**SUBMARINES • TACTICAL • SSK** 2 *Tridente* (GER Type-214) with 8 533mm TT with *Black Shark* HWT

### PRINCIPAL SURFACE COMBATANTS 5

#### FRIGATES • FFGHM 5:

3 *Vasco Da Gama* with 2 quad Mk141 Inchr with RGM-84C *Harpoon* ASHM, 1 octuple Mk 29 GMLS with RIM-7M *Sea Sparrow* SAM, 2 Mk32 triple 324mm ASTT with Mk46 LWT, 1 *Phalanx* Block 1B CIWS, 1 100mm gun (capacity 2 *Lynx* Mk95 (*Super Lynx*) hel)

2 *Bartolomeu Dias* (ex-NLD *Karel Doorman*) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* ASHM, 1 16-cell Mk48 VLS with RIM-7M *Sea Sparrow* SAM, 2 Mk32 twin 324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS, 1 76mm gun (capacity: 1 *Lynx* Mk95 (*Super Lynx*) hel)

### PATROL AND COASTAL COMBATANTS 22

#### CORVETTES • FS 5:

3 *Baptista de Andrade* with 1 100mm gun, 1 hel landing platform

2 *Joao Coutinho* with 1 twin 76mm gun, 1 hel landing platform

**PSO 2** *Viana do Castelo* with 1 hel landing platform  
**PCC 3** *Cacine*

**PBR 12:** 2 *Albatroz*; 5 *Argos*; 4 *Centauro*; 1 *Rio Minho*

#### LOGISTICS AND SUPPORT 21

**AGS 4:** 2 *D Carlos I* (ex-US *Stalwart*); 2 *Andromeda*

**AORL 1** *Bérrio* (ex-UK *Rover*) with 1 hel landing platform  
 (for medium hel)

**AXS 3:** 1 *Sagres*; 1 *Creoula*; 1 *Polar*

**YGS 3**

**YP 8**

#### Marines 1,450

##### FORCES BY ROLE

##### SPECIAL FORCES

1 SF det

##### MANOEUVRE

##### Light

2 lt inf bn

##### COMBAT SUPPORT

1 mor coy

1 MP det

##### EQUIPMENT BY TYPE

**ARTY • MOR 120mm 30**

#### Naval Aviation

##### EQUIPMENT BY TYPE

**HELICOPTERS • ASW 5** *Lynx Mk95 (Super Lynx)*

#### Air Force 6,350

Flying hours 180 hrs/year on F-16 *Fighting Falcon*

##### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

2 sqn with F-16AM/BM *Fighting Falcon*

##### MARITIME PATROL

1 sqn with P-3C *Orion*

##### ISR/TRANSPORT

1 sqn with C-295M

##### COMBAT SEARCH & RESCUE

1 sqn with with AW101 *Merlin*

##### TRANSPORT

1 sqn with C-130H/C-130H-30 *Hercules*

1 sqn with *Falcon 50*

##### TRAINING

1 sqn with *Alpha Jet\**

1 sqn with SA316 *Alouette III*

1 sqn with TB-30 *Epsilon*

##### EQUIPMENT BY TYPE

**AIRCRAFT 41** combat capable

**FTR 30:** 26 F-16AM *Fighting Falcon*; 4 F-16BM *Fighting Falcon*

**ASW 5** P-3C *Orion*

**ISR:** 7: 5 C-295M (maritime surveillance), 2 C-295M (photo recce)

**TPT 14: Medium 6:** 3 C-130H *Hercules*; 3 C-130H-30 *Hercules* (tpt/SAR); **Light 5** C-295M; **PAX 3** *Falcon 50* (tpt/VIP)

**TRG 20:** 6 *Alpha Jet\**; 14 TB-30 *Epsilon*

##### HELICOPTERS

**MRH 6** SA316 *Alouette III* (trg, utl)

**TPT • Medium 12** AW101 *Merlin* (6 SAR, 4 CSAR, 2 fishery protection)

#### MSL

**AAM • IR** AIM-9L/I *Sidewinder*; **ARH** AIM-120

AMRAAM

**ASM** AGM-65A *Maverick*

**AShM** AGM-84A *Harpoon*

#### BOMBS

*Enhanced Paveway II*; GBU-49; GBU-31 JDAM

#### Paramilitary 42,800

##### National Republican Guard 21,600

##### EQUIPMENT BY TYPE

**APC (W):** some *Commando Mk III (Bravia)*

**PATROL AND COASTAL COMBATANTS 32**

**PBF 12**

**PB 20**

**HELICOPTERS • MRH 7** SA315 *Lama*

##### Public Security Police 21,200

#### Cyber

A Cyberdefence Centre is being established, under the command of the Portuguese CHOD.

#### DEPLOYMENT

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1976) (revised in 2005)

**Decision on deployment of troops abroad:** By government

##### AFGHANISTAN

**NATO •** *Operation Resolute Support* 10

**UN •** UNAMA 1 obs

##### BOSNIA-HERZEGOVINA

**EU •** *Operation Althea* 8

##### CENTRAL AFRICAN REPUBLIC

**EU •** EUMAM RCA 8

##### IRAQ

*Operation Inherent Resolve* 30

##### MALI

**EU •** EUTM Mali 9

**UN •** MINUSMA 2

##### NORTH SEA

**NATO •** SNMG 1: 1 FFGHM

##### SERBIA

**NATO •** KFOR 186; 1 AB coy (KTM)

**OSCE •** Kosovo 1

##### UGANDA

**EU •** EUTM Somalia 4

##### UKRAINE

**OSCE •** Ukraine 5

#### FOREIGN FORCES

**United States** US European Command: 700; 1 spt facility at Lajes



Romania ROM				
New Lei		2014	2015	2016
GDP	lei	667bn	699bn	
	US\$	199bn	175bn	
<i>per capita</i>	US\$	9,981	8,807	
Growth	%	2.8	3.4	
Inflation	%	1.1	-0.4	
Def exp [a]	lei	9.01bn		
	US\$	2.69bn		
Def bdgt [b]	lei	9.32bn	10.1bn	9.83bn
	US\$	2.78bn	2.52bn	
FMA (US)	US\$	8m	5.4m	5.4m
US\$1=lei		3.35	4.00	

[a] NATO definition

[b] Includes military pensions

Population	21,666,350					
Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.4%	2.7%	2.9%	4.0%	25.3%	6.4%
Female	7.0%	2.6%	2.8%	3.8%	25.8%	9.4%

## Capabilities

Romania's armed forces are structured around territorial defence and support to NATO, and they have contributed to missions in Afghanistan and Iraq during the last decade. Romania is also a member of the Strategic Airlift Capability C-17 unit. Force modernisation is a priority, with ageing Soviet-era equipment seen as a limiting factor for the country's military capability. Fresh emphasis was placed on procurement and equipment upgrades following the deteriorating security situation in Eastern Europe in 2015. The Romanian armed forces train with a variety of NATO and regional partners. The *Platinum Lion* exercise in Bulgaria saw Romanian soldiers train with US, Bulgarian and Serbian forces, and the navy conducted exercises with the US Navy in the Black Sea as part of routine NATO bilateral engagement. US Air Force A-10s were deployed to the country in April 2015 for three months as part of a wider deployment to the region. In 2014, the US established the Naval Support Facility Deveselu at a formerly disused Romanian air field. This is the site for one of the two land-based *Aegis* Ashore ballistic-missile defence systems planned in Europe; Deveselu is planned to become operational in late 2015.

**ACTIVE 70,500** (Army 39,600 Navy 6,600 Air 10,300 Joint 14,000) Paramilitary 79,900

**RESERVE 50,000** (Joint 50,000)

## ORGANISATIONS BY SERVICE

### Army 39,600

Readiness is reported as 70-90% for NATO-designated forces (1 div HQ, 1 mech bde, 1 inf bde & 1 mtn inf bde) and 40-70% for other forces

## FORCES BY ROLE

### COMMAND

2 div HQ  
elm 1 div HQ (MND-SE)

### SPECIAL FORCES

1 SF bde (2 SF bn, 1 para bn, 1 log bn)

### MANOEUVRE

#### Reconnaissance

3 recce bn

#### Mechanised

5 mech bde (1 tk bn, 2 mech inf bn, 1 arty bn, 1 AD bn, 1 log bn)

#### Light

1 inf bde (2 inf bn, 1 arty bn, 1 AD bn, 1 log bn)  
1 inf bde (2 inf bn, 1 mtn inf bn, 1 arty bn, 1 AD bn, 1 log bn)

#### Mountain

2 mtn inf bde (3 mtn inf bn, 1 arty bn, 1 AD bn, 1 log bn)

### COMBAT SUPPORT

1 arty bde (3 MRL bn, 1 log bn)  
3 arty regt 3 AD regt  
1 engr bde (1 engr bn, 2 ptn br bn, 1 log bn)  
3 engr bn  
3 sigs bn  
1 CIMIC bn  
1 MP bn  
3 CBRN bn

### COMBAT SERVICE SUPPORT

3 spt bn

### EQUIPMENT BY TYPE

**MBT** 437: 250 T-55; 42 TR-580; 91 TR-85; 54 TR-85 M1

**AIFV** 124: 23 MLI-84; 101 MLI-84 JDER

**APC** 1,609

**APC (T)** 75 MLVM

**APC (W)** 969: 69 B33 TAB *Zimbru*; 31 *Piranha* III; 367 TAB-71; 140 TAB-77; 362 TABC-79

**TYPE VARIANTS** 505 APC

**PPV** 60 *Maxxpro*

**ARTY** 899

**SP 122mm** 24: 6 2S1; 18 Model 89

**TOWED** 422: **122mm** 72 (M-30) M-1938 (A-19); **152mm** 350: 247 M-1981; 103 M-1985

**MRL 122mm** 187: 133 APR-40; 54 LAROM

**MOR 120mm** 266 M-1982

**AT**

**MSL • SP** 134: 12 9P122 *Malyutka* (AT-3 *Sagger*); 74 9P133 *Malyutka* (AT-3 *Sagger*); 48 9P148 *Konkurs* (AT-5 *Spandrel*)

**GUNS 100mm** 232: 209 M-1977; 23 SU-100 SP

**AD • GUNS** 66

**SP 35mm** 42 *Gepard*

**TOWED • 35mm** 24 GDF-203

**RADARS • LAND** 8 SNAR-10 *Big Fred*

**ARV** 3 BPz-2

### Navy 6,600

### EQUIPMENT BY TYPE

**PRINCIPAL SURFACE COMBATANTS** 3

**DESTROYERS** 3:

**DDGH** 1 *Marasesti* with 4 twin Inchr with P-15M *Termit*-M (SS-N-2C *Styx*) ASHM, 2 triple 533mm ASTT with RUS 53–65 ASW, 2 RBU 6000 *Smerch* 2 A/S mor, 2 twin 76mm guns (capacity 2 SA-316 (IAR-316) *Alouette* III hel)

**DDH** 2 *Regele Ferdinand* (ex-UK Type-22), with 2 triple 324mm TT, 1 76mm gun (capacity 1 SA330 (IAR-330) *Puma*)

#### PATROL AND COASTAL COMBATANTS 24

##### CORVETTES 4

**FSH** 2 *Tetal* II with 2 twin 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 AK630 CIWS, 1 76mm gun (capacity 1 SA316 (IAR-316) *Alouette* III hel)

**FS** 2 *Tetal* I with 2 twin 533mm ASTT with RUS 53–65 ASW, 2 RBU 2500 *Smerch* 1 A/S mor, 2 twin 76mm guns

**PCFG** 3 *Zborul* with 2 twin Inchr with P-15M *Termit*-M (SS-N-2C *Styx*) ASHM, 2 AK630 CIWS, 1 76mm gun

**PCFT** 3 *Naluca* with 4 single 533mm ASTT

##### PCR 8:

1 *Brutar* I with 2 BM-21 MRL, 1 100mm gun  
4 *Brutar* II with 2 BM-21 MRL, 1 100mm gun  
3 *Kogalniceanu* with 2 BM-21 MRL, 2 100mm guns

**PBR** 6 VD 141 (ex MSI now used for river patrol)

#### MINE WARFARE 11

##### MINE COUNTERMEASURES 10

**MSO** 4 *Musca* with 2 RBU 1200 A/S mor, 2 AK230 CIWS  
**MSI** 6 VD141 (used for river MCM)

**MINELAYERS** • **ML** 1 *Corsar* with up to 100 mines, 2 RBU 1200 A/S mor, 2 AK630 CIWS, 1 57mm gun

#### LOGISTICS AND SUPPORT 14

**ADG** 1 *Magnetica*

**AETL** 2 *Constanta* with 2 RBU 1200 A/S mor, 2 twin 57mm guns

**AGOR** 1 *Corsar*

**AGS** 2: 1 *Emil Racovita*; 1 *Catuneanu*

**AOL** 3: 1 *Tulcea*; 2 (river tanker)

**ATF** 1 *Grozavu*

**AXS** 1 *Mircea*

**YTL** 3

### Naval Infantry

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 naval inf bn

##### EQUIPMENT BY TYPE

**APC (W)** 14: 11 ABC-79M; 3 TABC-79M

### Air Force 10,300

Flying hours 120 hrs/year

#### FORCES BY ROLE

##### FIGHTER

2 sqn with MiG-21 *Lancer* C

##### FIGHTER/GROUND ATTACK

1 sqn with MiG-21 *Lancer* A/B

##### TRANSPORT

1 sqn with An-30 *Clank*; C-27J *Spartan*

1 sqn with C-130B/H *Hercules*

#### TRAINING

1 sqn with IAR-99 *Soim*\*

1 sqn with SA316B *Alouette* III (IAR-316B); Yak-52 (Iak-52)

#### TRANSPORT HELICOPTER

2 (multirole) sqn with IAR-330 SOCAT *Puma*

3 sqn with SA330 *Puma* (IAR-330)

#### AIR DEFENCE

1 AD bde

#### COMBAT SERVICE SUPPORT

1 engr regt

#### EQUIPMENT BY TYPE

**AIRCRAFT** 69 combat capable

**FGA** 36: 10 MiG-21 *Lancer* A; 6 MiG-21 *Lancer* B; 20 MiG-21 *Lancer* C

**ISR** 2 An-30 *Clank*

**TPT** • **Medium** 12: 7 C-27J *Spartan*; 4 C-130B *Hercules*; 1 C-130H *Hercules*

**TRG** 33: 10 IAR-99 *Soim*\*; 11 IAR-99C *Soim*\*; 12 Yak-52 (Iak-52)

#### HELICOPTERS

**MRH** 30: 22 IAR-330 SOCAT *Puma*; 8 SA316B *Alouette* III (IAR-316B)

**TPT** • **Medium** 36: 21 SA330L *Puma* (IAR-330L); 15 SA330M *Puma* (IAR-330M)

**AD** • **SAM** 14: 6 S-75M3 *Volkhov* (SA-2 *Guideline*); 8 MIM-23 HAWK PIP III

#### MSL

**AAM** • **IR** R-73 (AA-11 *Archer*); R-550 *Magic* 2; *Python* 3

**ASM** *Spike*-ER

### Paramilitary 79,900

#### Border Guards 22,900 (incl conscripts)

Ministry of Interior

##### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 14

**PCO** 1 *Stefan cel Mare* (Damen OPV 900)

**PBF** 1 *Bigliani*

**PB** 12: 4 *Neustadt*; 3 *Mai*; 5 SNR-17

#### Gendarmerie €57,000

Ministry of Interior

### Cyber

In 2013, Romania adopted its first Cyber Security Strategy, which defines the conceptual framework, aim, objectives, priorities and courses of action for providing cyber security at the national level. A military CERT (CERTMIL) exists within the Ministry of National Defence, having responsibility for cyber-incident management in the defence realm.

### DEPLOYMENT

#### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1991)

**Decision on deployment of troops abroad:** a)

By parliament (Art. 62); or b) by president upon parliamentary approval (Art. 92).

#### AFGHANISTAN

**NATO** • *Operation Resolute Support* 618

**UN** • UNAMA 1 obs

**BOSNIA-HERZEGOVINA**EU • EUFOR • *Operation Althea 39***COTE D'IVOIRE**

UN • UNOCI 6 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 22 obs

**LIBERIA**

UN • UNMIL 2 obs

**MALI**

UN • MINUSMA 1

**SERBIA**

NATO • KFOR 53

OSCE • Kosovo 2

UN • UNMIK 1 obs

**SOUTH SUDAN**

UN • UNMISS 2; 5 obs

**UKRAINE**

OSCE • Ukraine 31

**Serbia SER**

Serbian Dinar d		2014	2015	2016
GDP	d	3.88tr	3.98tr	
	US\$	43.9bn	36.6bn	
<i>per capita</i>	US\$	6,123	5,102	
Growth	%	-1.8	0.5	
Inflation	%	2.1	1.6	
Def bdgt	d	61.4bn	64.2bn	
	US\$	695m	591m	
FMA (US)	US\$	1.8m	1.8m	1.8m
US\$1=d		88.41	108.76	

Population 7,176,794

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.6%	2.8%	3.1%	3.4%	24.7%	7.2%
Female	7.1%	2.6%	2.9%	3.2%	25.0%	10.4%

**Capabilities**

Serbia's armed forces are undergoing a restructuring process to enable improved ties with NATO. They have reduced in size over the last decade but remain capable of territorial defence, internal security and limited support to peacekeeping missions. The air force has ambitions to procure a modern multi-role combat aircraft type, however funding constraints have delayed the project. Serbia is a member of NATO's 'Partnership for Peace' programme and has long-term ambitions for EU membership, however Belgrade also maintains a relationship with Moscow. In September 2015 NATO's commander in Kosovo met the Serbian Chief of the General Staff at talks designed to enhance ties between KFOR and Serbian forces. Synchronised patrols between the two forces have also taken place.

**ACTIVE 28,150** (Army 13,250 Air Force and Air Defence 5,100 Training Command 3,000 Guards 1,600 Other MoD 5,200)

*Conscript liability 6 months (voluntary)*

**RESERVE 50,150**

**ORGANISATIONS BY SERVICE****Army 13,250****FORCES BY ROLE****SPECIAL FORCES**

1 SF bde (1 CT bn, 1 cdo bn, 1 para bn, 1 log bn)

**MANOEUVRE****Mechanised**

1 (1st) bde (1 tk bn, 2 mech inf bn, 1 inf bn, 1 SP arty bn, 1 MRL bn, 1 AD bn, 1 engr bn, 1 log bn)

3 (2nd, 3rd & 4th) bde (1 tk bn, 2 mech inf bn, 2 inf bn, 1 SP arty bn, 1 MRL bn, 1 AD bn, 1 engr bn, 1 log bn)

**COMBAT SUPPORT**

1 (mixed) arty bde (4 arty bn, 1 MRL bn, 1 spt bn)

2 ptn bridging bn

1 NBC bn

1 sigs bn

2 MP bn

**Reserve Organisations****FORCES BY ROLE****MANOEUVRE****Light**

8 (territorial) inf bde

**EQUIPMENT BY TYPE**

MBT 212: 199 M-84; 13 T-72

RECCE 46 BRDM-2

AIFV 323 M-80

APC 39 BOV VP M-86

ARTY 515

SP 122mm 67 2S1

TOWED 204: 122mm 78 D-30; 130mm 18 M-46; 152mm 36 M-84; 155mm 72: 66 M-1; 6 M-65

MRL 81: 128mm 78: 18 M-63 *Plamen*; 60 M-77 *Organj*; 262mm 3 *Orkan*

MOR 163: 82mm 106 M-69; 120mm 57 M-74/M-75

**AT****MSL**

SP 48 BOV-1 (M-83) with 9K11 *Malyutka* (AT-3 *Sagger*)

MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*)

RCL 90mm 6 M-79

**AD • SAM 156**

SP 94: 77 2K12 *Kub* (SA-6 *Gainful*); 12 S-1M (SA-9 *Gaskin*); 5 SAVA S10M

MANPADS S-2M (SA-7 *Grail*)†; Šilo (SA-16 *Gimlet*)

**GUNS 36**

TOWED 40mm 36 Bofors L70

**AEV IWT**

ARV M84A1; T-54/T-55

VLB MT-55; TMM

## River Flotilla

The Serbian Montenegrin navy was transferred to Montenegro upon independence in 2006, but the Danube flotilla remained in Serbian control. The flotilla is subordinate to the Land Forces.

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 5

PBR 5: 3 Type-20; 2 others

#### MINE WARFARE • MINE COUNTERMEASURES 4

MSI 4 *Nestin* with 1 quad Inchr with *Strela 2M* (SA-N-5 *Grail*) SAM

#### AMPHIBIOUS • LANDING CRAFT • LCU 5 Type-22

#### LOGISTICS AND SUPPORT 5

ADG 1 *Šabac*

AGF 1 *Kozara*

AOL 1

YFD 1

YTL 1

## Air Force and Air Defence 5,100

Flying hours: Ftr – 40 per yr

### FORCES BY ROLE

#### FIGHTER

1 sqn with MiG-21bis *Fishbed*; MiG-29 *Fulcrum*

#### FIGHTER/GROUND ATTACK

1 sqn with G-4 *Super Galeb\**; J-22 *Orao*

#### ISR

2 flt with IJ-22 *Orao 1\**; MiG-21R *Fishbed H\**

#### TRANSPORT

1 sqn with An-2; An-26; Do-28; Yak-40 (Jak-40); 1 PA-34 *Seneca V*

#### TRAINING

1 sqn with G-4 *Super Galeb\** (adv trg/light atk); SA341/342 *Gazelle*; Utva-75 (basic trg)

#### ATTACK HELICOPTER

1 sqn with SA341H/342L *Gazelle*; (HN-42/45); Mi-24 *Hind*

#### TRANSPORT HELICOPTER

2 sqn with Mi-8 *Hip*; Mi-17 *Hip H*

#### AIR DEFENCE

1 bde (5 bn (2 msl, 3 SP msl) with S-125 *Neva* (SA-3 *Goa*); 2K12 *Kub* (SA-6 *Gainful*); 9K32 *Strela-2* (SA-7 *Grail*); 9K310 *Igla-1* (SA-16 *Gimlet*))

2 radar bn (for early warning and reporting)

#### COMBAT SUPPORT

1 sigs bn

#### COMBAT SERVICE SUPPORT

1 maint bn

### EQUIPMENT BY TYPE

#### AIRCRAFT 83 combat capable

FTR 30: 20 MiG-21bis *Fishbed L & N*; 6 MiG-21UM *Mongol B*; 3 MiG-29 *Fulcrum*; 1 MiG-29UB *Fulcrum*  
FGA 17 J-22 *Orao 1*

ISR 12: 10 IJ-22R *Orao 1\**; 2 MiG-21R *Fishbed H\**

TPT • Light 10: 1 An-2 *Colt*; 4 An-26 *Curl*; 2 Do-28

*Skyservant*; 2 Yak-40 (Jak-40); 1 PA-34 *Seneca V*

TRG 45: 24 G-4 *Super Galeb\**; 11 Utva-75; 10 Lasta 95

#### HELICOPTERS

ATK 2 Mi-24 *Hind*

MRH 50: 1 Mi-17 *Hip H*; 2 SA341H *Gazelle* (HI-42); 34

SA341H *Gazelle* (HN-42)/SA342L *Gazelle* (HN-45); 13

SA341H *Gazelle* (HO-42)/SA342L1 *Gazelle* (HO-45)

TPT • Medium 8 Mi-8T *Hip* (HT-40)

#### AD

SAM 15: 6 S-125 *Pechora* (SA-3 *Goa*); 9 2K12 *Kub* (SA-6 *Gainful*)

MANPAD 9K32 *Strela-2* (SA-7 *Grail*)†; 9K310 *Igla-1* (SA-16 *Gimlet*)

#### GUNS • 40mm 24 Bofors L-70

#### MSL

AAM • IR R-60 (AA-8 *Aphid*)

ASM AGM-65 *Maverick*; A-77 *Thunder*

## Guards 1,600

### FORCES BY ROLE

#### MANOEUVRE

##### Other

1 (ceremonial) gd bde (1 gd bn, 1 MP bn, 1 spt bn)

## DEPLOYMENT

Legal provisions for foreign deployment:

Constitution: Codified constitution (2006)

Decision on deployment of troops abroad: By parliament (Art. 140)

### BOSNIA-HERZEGOVINA

OSCE • Bosnia and Herzegovina 1

### CENTRAL AFRICAN REPUBLIC

EU • EUMAM RCA 4

UN • MINUSCA 70; 2 obs; 1 med coy

### CÔTE D'IVOIRE

UN • UNOCI 3 obs

### CYPRUS

UN • UNFICYP 46

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 8

### LEBANON

UN • UNIFIL 177; 1 mech inf coy

### LIBERIA

UN • UNMIL 5 obs

### MIDDLE EAST

UN • UNTSO 1 obs

### UGANDA

EU • EUTM Somalia 5

### UKRAINE

OSCE • Ukraine 10

## TERRITORY WHERE THE GOVERNMENT DOES NOT EXERCISE EFFECTIVE CONTROL

Data here represents the de facto situation in Kosovo. This does not imply international recognition as a sovereign state. In February 2008, Kosovo declared itself independent. Serbia remains opposed to this, and while Kosovo has not

been admitted to the United Nations, a number of states have recognised Kosovo's self-declared status.

### Kosovo Security Force 2,500; reserves 800

The Kosovo Security Force was formed in January 2009 as a non-military organisation with responsibility for crisis response, civil protection and EOD. The force is armed with small arms and light vehicles only. A July 2010 law created a reserve force. It is undergoing a professionalisation process.

## FOREIGN FORCES

All under Kosovo Force (KFOR) comd. unless otherwise specified.

Albania 14 • OSCE 1

Armenia 34

Austria 505; 2 mech inf coy • OSCE 2

Bosnia-Herzegovina OSCE 10

Bulgaria 12 • OSCE 1

Canada 5 • OSCE 4

Croatia 28 • OSCE 4

Czech Republic 11 • OSCE 1 • UNMIK 2 obs

Denmark 35

Estonia 2

Finland 21 • OSCE 2

France 2 • OSCE 4

Georgia OSCE 2

Germany 795 • OSCE 6

Greece 119; 1 inf coy • OSCE 4

Hungary 357; 1 inf coy (KTM) • OSCE 4

Ireland 12 • OSCE 4

Italy 542; 1 recce BG HQ; 1 Carabinieri unit • OSCE 13

Latvia OSCE 1

Lithuania 1

Luxembourg 25

Macedonia (FYROM) OSCE 19

Moldova 41 • UNMIK 1 obs

Montenegro OSCE 1

Netherlands 5

Norway 2

Poland 240; 1 inf coy • OSCE 1 • UNMIK 1 obs

Portugal 186; 1 AB coy (KTM) • OSCE 1

Romania 53 • OSCE 2 • UNMIK 1 obs

Russia OSCE 1

Slovakia OSCE 2

Slovenia 307; 2 mot inf coy

Spain OSCE 1

Sweden 5 • OSCE 3

Switzerland 218; 1 inf coy • OSCE 1

Turkey 394; 1 inf coy • OSCE 4 • UNMIK 1 obs

Ukraine 33 • OSCE 1 • UNMIK 2 obs

United Kingdom 1 • OSCE 13

United States 688; elm 1 ARNG armd bde HQ; 1 ARNG armd/armd inf coy • OSCE 4

## Slovakia SVK

Euro €		2014	2015	2016
GDP	€	75.2bn	77.5bn	
	US\$	99.9bn	86.2bn	
<i>per capita</i>	US\$	18,435	15,893	
Growth	%	2.4	3.2	
Inflation	%	-0.1	-0.1	
Def exp [a]	€	752m		
	US\$	998m		
Def bdgt [b]	€	785m	831m	
	US\$	1.04bn	924m	
FMA (US)	US\$	0.45m		
US\$1=€		0.75	0.90	

[a] NATO definition

[b] Includes military pensions

Population 5,445,027

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.8%	2.7%	3.4%	3.8%	25.5%	5.5%
Female	7.4%	2.6%	3.2%	3.6%	25.9%	8.9%

## Capabilities

Faced with an ageing inventory based on Soviet-era equipment, Slovakia is planning to replace its small fighter and rotary-wing transport fleets in the latter half of this decade. There are also ambitions to replace land equipment and improve the technology level in the armed forces. Slovakia is set to take delivery of nine *Black Hawk* helicopters from 2016 to replace its Mi-17s under an FMS agreement with the US. Also, Slovakia has secured a Polish-government-sponsored loan to finance the purchase of *Rosomak* 8x8 vehicles. In October 2015, NATO agreed to set up a NATO Force Integration Unit, a small headquarters, in Slovakia.

**ACTIVE 15,850 (Army 6,250 Air 3,950 Central Staff 2,550 Support and Training 3,100)**

*Conscript liability* 6 months

## ORGANISATIONS BY SERVICE

**Central Staff 2,550**

### FORCES BY ROLE

#### SPECIAL FORCES

1 (5th Special) recce regt

**Army 6,250**

### FORCES BY ROLE

#### MANOEUVRE

##### Mechanised

1 (1st) mech bde (3 mech inf bn, 1 engr coy, 1 spt bn)  
1 (2nd) mech bde (1 ISR coy, 1 tk bn, 2 mech inf bn, 1 mixed SP arty bn, 1 engr coy, 1 spt bn)

#### COMBAT SUPPORT

1 MRL bn  
1 engr bn



1 MP bn  
1 NBC bn

**EQUIPMENT BY TYPE**

**MBT** 30 T-72M

**AIFV** 239: 148 BMP-1; 91 BMP-2

**APC** 101+

**APC (T)** 72 OT-90

**APC (W)** 22: 7 OT-64; 15 *Tatrapan* (6×6)

**PPV** 7+ RG-32M

**ARTY** 68

**SP** 19: 152mm 3 M-77 *Dana*; 155mm 16 M-2000 *Zuzana*

**TOWED** 122mm 19 D-30

**MRL** 30: 122mm 4 RM-70; 122/227mm 26 RM-70/85

**MODULAR**

**AT**

**SP** 9S428 with *Malyutka* (AT-3 *Sagger*) on BMP-1; 9P135 *Fagot* (AT-4 *Spigot*) on BMP-2; 9P148 (AT-5 *Spandrel*) on BRDM-2

**MANPADS** 9K11 *Malyutka* (AT-3 *Sagger*); 9K113 *Konkurs* (AT-5 *Spandrel*)

**AD**

**SAM**

**SP** 48 9K35 *Strela-10* (SA-13 *Gopher*)

**MANPADS** 9K32 *Strela-2* (SA-7 *Grail*); 9K310 *Igla-1* (SA-16 *Gimlet*)

**RADAR** • **LAND** SNAR-10 *Big Fred* (veh, arty)

**ARV** MT-55; VT-55A; VT-72B; WPT-TOPAS

**VLB** AM-50; MT-55A

**MW** *Bozena*; UOS-155 *Belarty*

**Air Force 3,950**

Flying hours 90 hrs/yr for MiG-29 pilots (NATO Integrated AD System); 90 hrs/yr for Mi-8/17 crews (reserved for EU & NATO)

**FORCES BY ROLE****FIGHTER**

1 sqn with MiG-29AS/UBS *Fulcrum*

**TRANSPORT**

1 flt with An-26 *Curl*

1 flt with L-410FG/T/UVP *Turbolet*

**TRANSPORT HELICOPTER**

1 sqn with Mi-8 *Hip*; Mi-17 *Hip H*

1 sqn with PZL MI-2 *Hoplite*

**TRAINING**

1 sqn with L-39CM/ZA/ZAM *Albatros*

**AIR DEFENCE**

1 bde with 2K12 *Kub* (SA-6 *Gainful*); 9K32 *Strela-2* (SA-7 *Grail*); S-300 (SA-10 *Grumble*)

**EQUIPMENT BY TYPE**

**AIRCRAFT** 33 combat capable

**FTR** 20: 10 MiG-29AS *Fulcrum*; 2 MiG-29UBS *Fulcrum*; 8 MiG-29A/UB *Fulcrum*

**TPT** • **Light** 9: 1 An-26 *Curl*; 2 L-410FG *Turbolet*; 2 L-410T *Turbolet*; 4 L-410UVP *Turbolet*

**TRG** 13: 6 L-39CM *Albatros*\*; 5 L-39ZA *Albatros*\*; 2 L-39ZAM *Albatros*\*

**HELICOPTERS**

**ATK** (15: 5 Mi-24D *Hind D*; 10 Mi-24V *Hind E* all in store)

**MRH** 13 Mi-17 *Hip H*

**TPT** 7: **Medium** 1 Mi-8 *Hip*; **Light** 6 PZL MI-2 *Hoplite*

**AD • SAM**

**SP** S-300 (SA-10B *Grumble*); 2K12 *Kub* (SA-6 *Gainful*)

**MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡

**MSL**

**AAM** • **IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*)

**SARH** R-27R (AA-10A *Alamo*)

**ASM** S5K/S5KO (57mm rockets); S8KP/S8KOM (80mm rockets)

**DEPLOYMENT**

**Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1992)

**Decision on deployment of troops abroad:** By the parliament (Art. 86)

**AFGHANISTAN**

**NATO** • *Operation Resolute Support* 39

**BOSNIA-HERZEGOVINA**

**EU** • **EUFOR** • *Operation Althea* 19

**OSCE** • Bosnia and Herzegovina 1

**CYPRUS**

**UN** • UNFICYP 159; elm 1 inf coy; 1 engr pl

**MIDDLE EAST**

**UN** • UNTSO 2 obs

**SERBIA**

**OSCE** • Kosovo 2

**UKRAINE**

**OSCE** • Ukraine 7

**Slovenia SVN**

Euro €	2014	2015	2016
<b>GDP</b>	€ 37.3bn	38.4bn	
	US\$ 49.6bn	42.7bn	
<i>per capita</i>	US\$ 24,050	20,712	
<b>Growth</b>	% 3.0	2.3	
<b>Inflation</b>	% 0.2	-0.4	
<b>Def exp [a]</b>	€ 366m		
	US\$ 486m		
<b>Def bdgt [b]</b>	€ 401m	402m	404m
	US\$ 533m	447m	
<b>FMA (US)</b>	US\$ 0.45m		
<b>US\$1=€</b>	0.75	0.90	

[a] NATO definition

[b] Excludes military pensions

**Population** 1,983,412

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	6.9%	2.4%	2.6%	3.2%	26.1%	7.4%
<b>Female</b>	6.5%	2.2%	2.5%	3.1%	26.0%	11.0%

## Capabilities

Territorial defence and the ability to take part in peace-support operations are central to Slovenia's defence strategy. The country has contributed regularly to NATO and EU operations; its contribution to KFOR by far represents its largest operational commitment abroad. Slovenia acts as the framework nation for the NATO Mountain Warfare Centre of Excellence. Development of the armed forces is constrained by the amount of available funding. Its small air wing is not equipped to provide air policing; Italy and Hungary currently partner in providing this capability.

**ACTIVE 7,600 (Army 7,600) Paramilitary 5,950**

**RESERVE 1,500 (Army 1,500) Paramilitary 260**

## ORGANISATIONS BY SERVICE

### Army 7,600

#### FORCES BY ROLE

Regt are bn sized

#### SPECIAL FORCES

1 SF unit (1 spec ops coy, 1 CSS coy)

#### MANOEUVRE

##### Reconnaissance

1 ISR bn (2 coy)

##### Mechanised

1 mech inf bde (1st) (1 mech inf regt, 1 mtn inf regt, 1 cbt spt bn)

1 mech inf bde (72nd) (2 mech inf regt, 1 cbt spt bn)

##### Other

1 armd trg bn (1 armd coy)

#### COMBAT SUPPORT

1 arty bn (2 arty bty)

1 AD bn (2 AD bty)

1 engr bn (2 engr coy)

1 EW coy

1 MP bn (2 MP coy)

1 CBRN bn (2 CBRN coy)

1 sigs bn (2 sigs coy)

#### COMBAT SERVICE SUPPORT

1 log bde (1 log regt, 1 maint regt, 1 med regt)

#### Reserves

#### FORCES BY ROLE

#### MANOEUVRE

##### Mountain

2 inf regt (territorial - 1 allocated to each inf bde)

#### EQUIPMENT BY TYPE

MBT 14 M-84 (trg role); (32 more in store)

RECCE 10 *Cobra* CBRN

APC (W) 115: 85 *Pandur* 6x6 (*Valuk*); 30 *Patria* 8x8 (*Svarun*)

ARTY 68

TOWED • 155mm 18 TN-90

MOR 120mm 50 MN-9/M-74

AT • MSL • MANPATS *Spike* MR/LR

ARV VT-55A

VLB MTU

AD • SAM • MANPAD 9K338 *Igla-S* (SA-24 *Grinch*)

## Army Maritime Element 170

#### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

1 maritime det

#### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 2

PBF 1 *Super Dvora* MkII

PCC 1 *Triglav* III (RUS *Svetlyak*)

## Air Element 650

#### FORCES BY ROLE

#### TRANSPORT

1 sqn with L-410 *Turbolet*; PC-6B *Turbo Porter*

#### TRAINING

1 unit with Bell 206 *Jet Ranger* (AB-206); PC-9; PC-9M\*; Z-143L; Z-242L

#### TRANSPORT HELICOPTER

1 sqn with AS532AL *Cougar*; Bell 412 *Twin Huey* (some armed)

#### COMBAT SERVICE SUPPORT

1 maint sqn

#### EQUIPMENT BY TYPE

#### AIRCRAFT 9 combat capable

TPT 4: **Light** 3: 1 L-410 *Turbolet*; 2 PC-6B *Turbo Porter*

PAX 1 *Falcon* 2000EX

TRG 21: 2 PC-9; 9 PC-9M\*; 2 Z-143L; 8 Z-242L

#### HELICOPTERS

MRH 8: 5 Bell 412EP *Twin Huey*; 2 Bell 412HP *Twin Huey*; 1 Bell 412SP *Twin Huey* (some armed)

TPT 8: **Medium** 4 AS532AL *Cougar*; **Light** 4 Bell 206 *Jet Ranger* (AB-206)

## Paramilitary 5,950

### Police 5,950; 260 reservists

Ministry of Interior (civilian); limited elements could be prequalified to cooperate in military defence with the armed forces during state of emergency or war)

#### PATROL AND COASTAL COMBATANTS • PBF 1 *Ladse*

#### HELICOPTERS

MRH 1 Bell 412 *Twin Huey*,

TPT • **Light** 5: 1 AW109; 2 Bell 206 (AB-206) *Jet Ranger*; 1 Bell 212 (AB-212); 1 H135

## Cyber

A National Cyber Strategy was expected by the end of 2015.

## DEPLOYMENT

#### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1991)

**Decision on deployment of troops abroad:** By government (Art. 84 of Defence Act)

#### AFGHANISTAN

NATO • *Operation Resolute Support* 7

**ALBANIA**

OSCE • Albania 1

**BOSNIA-HERZEGOVINA**EU • EUFOR • *Operation Althea* 9**LEBANON**

UN • UNIFIL 14

**MALI**

EU • EUTM Mali 3

**MEDITERRANEAN SEA**

EU • EU NAVFOR MED: 1 PCC

**MIDDLE EAST**

UN • UNTSO 3 obs

**SERBIA**

NATO • KFOR 307; 2 mot inf coy

**UKRAINE**

OSCE • Ukraine 2

**Spain ESP**

Euro €		2014	2015	2016
GDP	€	1.06tr	1.1tr	
	US\$	1.41tr	1.22tr	
<i>per capita</i>	US\$	30,272	26,327	
Growth	%	1.4	3.1	
Inflation	%	-0.2	-0.3	
Def exp [a]	€	9.51bn		
	US\$	12.6bn		
Def bdgt [b]	€	9.51bn	9.67bn	
	US\$	12.6bn	10.8bn	
US\$1=€		0.75	0.90	
[a] NATO definition				
[b] Includes military pensions				

Population 48,146,134

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.9%	2.4%	2.6%	3.0%	25.9%	7.6%
Female	7.5%	2.2%	2.4%	2.7%	25.6%	10.2%

**Capabilities**

Following years of financial pressure, Spain's defence budget has seen a modest increase. New recapitalisation programmes have been announced for the army with a contract to renew the entire logistics fleet and a request for new 8x8 AIFVs. Increased emphasis is put on key equipment programmes with priority given to Eurofighter *Typhoon* aircraft, A400M strategic-transport aircraft, *Tiger* attack helicopters and H135 light utility helicopters. Continuous funding of these programmes, however, has required that parliament adopt exceptional budgetary schemes. Spain is looking to consolidate its helicopter fleet on four platforms including the *Tiger*, H135, CH-47 and NH90 MRH, of which it received the first unit. The air force ISR fleet will also be

expanded; in October, the US DSCA issued a notification that Spain had requested the sale of four MQ-9 Blk 5 MALE UAVs. The navy will benefit from longer-term investments with the S80 submarine and F-110 multi-role-frigate programmes. The Spanish Army has conducted a comprehensive force-structure review. In 2016, nine existing brigades and the Mountain Command will be reorganised into eight multipurpose organic brigades, with enhanced capabilities for deployable operations. Spain has deployed air-defence batteries to Turkey, hosted large-scale amphibious exercises, and contributed a battalion-sized contingent to *Operation Resolute Support*. It contributed to the maritime and air elements of the NATO VJTF in 2015 and will lead the VJTF brigade in 2016.

**ACTIVE 122,000** (Army 71,100 Navy 20,200 Air 19,500 Joint 11,200) Paramilitary 78,000

**RESERVE 16,150** (Army 10,400 Navy 2,750 Air 2,300 Other 700)

**ORGANISATIONS BY SERVICE****Space****EQUIPMENT BY TYPE**

**SATELLITES • COMMUNICATIONS** 2: 1 *Spainsat*; 1 *Xtar-Eur*

**Army 71,100**

The Land Forces High Readiness HQ Spain provides one NATO Rapid Deployment Corps HQ (NRDC-SP).

**FORCES BY ROLE**

Infantry regiments usually comprise 2 bn. Spain deploys its main battle tanks within its armd/mech inf formations, and its armd cav regt

**COMMAND**

- 1 corps HQ (CGTAD) (1 int regt, 1 MP bn)
- 2 div HQ

**SPECIAL FORCES**

- 1 comd (3 spec ops bn, 1 int coy, 1 sigs coy, 1 log bn)

**MANOEUVRE****Reconnaissance**

- 1 (2nd) bde (3 lt armd cav regt, 1 fd arty regt, 1 AD coy, 1 engr bn, 1 int coy, 1 NBC coy, 1 sigs coy, 1 log bn)

**Armoured**

- 1 (12th) bde (1 recce sqn, 1 armd inf regt, 1 mech inf regt, 1 SP arty bn, 1 AD coy, 1 engr bn, 1 int coy, 1 NBC coy, 1 sigs coy, 1 log bn)

**Mechanised**

- 2 (10th & 11th) bde (1 recce sqn, 1 armd inf bn, 1 mech inf regt, 1 SP arty bn, 1 AT coy, 1 AD coy, 1 engr bn, 1 int coy, 1 NBC coy, 1 sigs coy, 1 log bn)

**Light**

- 2 (2nd/La Legion & 7th) bde (1 recce bn, 2 inf regt, 1 fd arty bn, 1 AT coy, 1 AD coy, 1 engr bn, 1 int coy, 1 NBC coy, 1 sigs coy, 1 log bn)

- 1 (5th) bde (2 lt inf regt)

**Air Manoeuvre**

- 1 (6th) bde (1 recce coy, 3 para bn, 1 fd arty bn, 1 AT coy, 1 AD coy, 1 engr bn, 1 int coy, 1 NBC coy, 1 sigs coy, 1 log bn)

**Mountain**

1 (1st) comd (3 mtn inf regt)

**Other**

1 (Canary Islands) comd (1 lt inf bde (3 lt inf regt, 1 fd arty regt, 1 AT coy, 1 engr bn, 1 int coy, 1 NBC coy, 1 sigs coy, 1 log bn); 1 spt hel bn; 1 AD regt)

1 (Balearic Islands) comd (1 inf regt)

2 (Ceuta and Melilla) comd (1 cav regt, 2 inf regt, 1 arty regt, 1 engr bn, 1 sigs coy, 1 log bn)

**Aviation**

1 (FAMET) avn comd (1 atk hel bn, 2 spt hel bn, 1 tpt hel bn, 1 sigs bn, 1 log unit (1 spt coy, 1 supply coy))

**COMBAT SUPPORT**

1 arty comd (3 arty regt; 1 coastal arty regt)

1 AD comd (5 ADA regt, 1 sigs unit)

1 engr comd (2 engr regt, 1 bridging regt)

1 EW/sigs bde with (1 EW regt, 3 sigs regt)

1 EW regt

1 NBC regt

1 railway regt

1 sigs regt

1 CIMIC bn

**COMBAT SERVICE SUPPORT**

1 log bde (5 log regt)

1 med bde (1 log unit, 2 med regt, 1 fd hospital unit)

**EQUIPMENT BY TYPE**MBT 331: 108 *Leopard* 2A4; 223 *Leopard* 2A5ERECCE 271: 84 B-1 *Centauro*; 187 VEC-3562 BMR-VECAIFV 144 *Pizarro* (incl 21 comd)

APC 875

APC (T) 453 M113 (incl variants)

APC (W) 312 BMR-600/BMR-600M1

PPV 110 RG-31

ARTY 1,750

SP 155mm 96 M109A5

TOWED 287: 105mm 223: 56 L118 Light Gun; 167 Model 56 pack howitzer; 155mm 64 SBT 155/52 SIAC

COASTAL 155mm 19 SBT 155/52 APU SBT V07

MOR 1,348: 81mm 887; 120mm 461

AT • MSL • MANPATS *Spike-LR*; TOW**HELICOPTERS**ATK 9: 6 EC665 *Tiger* HAP-E; 3 EC665 *Tiger* HAD-E

MRH 17 Bo-105 HOT

TPT 82: **Heavy** 17 CH-47D *Chinook* (HT-17D); **Medium**34: 15 AS332B *Super Puma* (HU-21); 12 AS532UL *Cougar*;6 AS532AL *Cougar*; 1 NH90 TTH; **Light** 31: 6 Bell-205(HU-10B *Iroquois*); 5 Bell 212 (HU.18); 20 EC135T2

(HE.26/HU.26)

UAV • ISR • **Medium** 6: 2 *Searcher* MkII-J (PASI); 4*Searcher* MkIII (PASI)

AD 370

SAM 279

SP 18 *Roland*TOWED 71: 42 MIM-23B I-HAWK Phase III; 13 *Skyguard/Aspide*; 8 NASAMS; 8 MIM-104C *Patriot* PAC-2MANPAD *Mistral*

GUNS • TOWED 35mm 91 GDF-005/GDF-007

RADAR • LAND 6: 4 ARTHUR; 2 AN/TPQ-36 *Firefinder*

AEV 34 CZ-10/25E

ARV 60: 16 *Leopard* REC; 1 AMX-30; 5 BMR REC; 4 *Centauro* REC; 22 M47-VR; 12 M113

VLB 16: 1 M47; 15 M60

**Navy 22,200 (incl Naval Aviation and Marines)****EQUIPMENT BY TYPE**

SUBMARINES • TACTICAL • SSK 3:

3 *Galerna* with 4 single 533mm TT with F17 Mod 2/L5 HWT

PRINCIPAL SURFACE COMBATANTS 11

DESTROYERS • DDGHM 5:

5 *Alvaro de Bazan* (*Aegis* Baseline 5) with *Aegis* C2, 2 quad Mk141 Inchr with RGM-84F *Harpoon* AShM, 1 48-cell Mk41 VLS (LAM capable) with SM-2MR/RIM-162B *Sea Sparrow* SAM, 2 twin 324mm ASTT with Mk46 LWT, 1 127mm gun (capacity 1 SH-60B *Seahawk* ASW hel)

FRIGATES • FFGHM 6:

6 *Santa Maria* with 1 Mk13 GMLS with RGM-84C *Harpoon* AShM/SM-1MR SAM, 2 Mk32 triple 324mm ASTT with Mk46 LWT, 1 *Meroka* mod 2 CIWS, 1 76mm gun (capacity 2 SH-60B *Seahawk* ASW hel)**AMPHIBIOUS**

PRINCIPAL AMPHIBIOUS SHIPS 3:

LHD 1 *Juan Carlos I* (capacity 18 hel or 10 AV-8B FGA ac; 4 LCM; 42 APC; 46 MBT; 700 troops)LPD 2 *Galicia* (capacity 6 Bell 212 or 4 SH-3D *Sea King* hel; 4 LCM; 130 APC or 33 MBT; 450 troops)

LANDING CRAFT 14

LCM 14 LCM 1E

**LOGISTICS AND SUPPORT 2**AORH 2: 1 *Patino* (capacity 3 Bell 212 or 2 SH-3D *Sea King* hel); 1 *Cantabria* (capacity 3 Bell 212 or 2 SH-3D *Sea King* hel)**Maritime Action Force****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 23

PSOH 4 *Meteoro* (*Buques de Accion Maritima*) with 1 76mm gun (additional vessels on order)

PSO 7:

3 *Alboran* each with 1 hel landing platform4 *Descubierta* with 1 76mm gunPCO 4 *Serviola* with 1 76mm gunPCC 3 *Anaga* with 1 76mm gunPB 2 *Toralla*

PBR 3 P-101/114/201

MINE WARFARE • MINE COUNTERMEASURES 6

MHO 6 *Segura*

LOGISTICS AND SUPPORT 76

AGDS 1 *Neptuno*AGI 1 *Alerta*

AGOR 2 (with ice-strengthened hull, for polar research duties in Antarctica)

AGS 3: 2 *Malaspina*; 1 *Castor*AK 2: 1 *Martin Posadillo* (with 1 hel landing platform); 1 *El Camino Español*AP 1 *Contramaestre* (with 1 hel landing platform)ATF 3: 1 *Mar Caribe*; 1 *Mahon*; 1 *La Grana*AXL 8: 4 *Contramaestre*; 4 *Guardiamarina*

AXS 8

YO 22

YTM 25

**Naval Aviation 800**

Flying 150 hrs/year on AV-8B *Harrier* II FGA ac; 200 hours  
 hours hrs/year on hel

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with AV-8B *Harrier* II Plus

**ANTI-SUBMARINE WARFARE**

1 sqn with SH-60B *Seahawk*

**AIRBORNE EARLY WARNING**

1 sqn with SH-3H AEW *Sea King*

**TRANSPORT**

1 (liaison) sqn with Cessna 550 *Citation* II; Cessna 650  
*Citation* VII

**TRAINING**

1 sqn with Hughes 500MD8

1 flt with TAV-8B *Harrier*

**TRANSPORT HELICOPTER**

1 sqn with Bell 212 (HU-18)

1 sqn with SH-3D *Sea King*

**EQUIPMENT BY TYPE****AIRCRAFT** 13 combat capable

FGA 13: 12 AV-8B *Harrier* II Plus; 1 TAV-8B *Harrier* (on  
 lease from USMC)

TPT • Light 4: 3 Cessna 550 *Citation* II; 1 Cessna 650  
*Citation* VII

**HELICOPTERS**

ASW 19: 7 SH-3D *Sea King* (tpt); 12 SH-60B *Seahawk*

MRH 9 Hughes 500MD

AEW 3 SH-3H AEW *Sea King*

TPT • Light 7 Bell 212 (HA-18)

**MSL**

AAM • IR AIM-9L *Sidewinder*; ARH AIM-120  
 AMRAAM

ASM AGM-65G *Maverick*

AShM AGM-119 *Penguin*

**Marines 5,300****FORCES BY ROLE****SPECIAL FORCES**

1 spec ops bn

**MANOEUVRE****Amphibious**

1 mne bde (1 recce unit, 1 mech inf bn, 2 inf bn, 1 arty  
 bn, 1 log bn)

**Other**

1 sy bde (5 mne garrison gp)

**EQUIPMENT BY TYPE**

MBT 16 M60A3TTS

APC (W) 33: 32 *Piranha* IIIIC; 1 *Piranha* IIIIC EW

AAV 18: 16 AAV-7A1/AAVP-7A1; 2 AAVC-7A1

**ARTY** 18

SP 155mm 6 M109A2

TOWED 105mm 12 M-56 (pack)

**AT**

MSL • MANPATS *Spike* LR; TOW-2

RL 90mm C-90C

AD • SAM • MANPAD 12 *Mistral*

AEV 1 *Piranha* IIIIC

ARV 2: 1 AAVR-7A1; 1 *Piranha* IIIIC

**Air Force 20,400**

The Spanish Air Force is organised in 3 commands –  
 General Air Command, Combat Air Command and Canary  
 Islands Air Command

Flying hours 120 hrs/year on hel/tpt ac; 180 hrs/year on  
 FGA/ftt

**FORCES BY ROLE****FIGHTER**

2 sqn with Eurofighter *Typhoon*

**FIGHTER/GROUND ATTACK**

5 sqn with F/A-18A/B MLU *Hornet* (EF-18A/B MLU)

**MARITIME PATROL**

1 sqn with P-3A/M *Orion*

**ISR**

1 sqn with Beech C90 *King Air*

1 sqn with Cessna 550 *Citation* V; CN-235 (TR-19A)

**ELECTRONIC WARFARE**

1 sqn with C-212 *Aviocar*; *Falcon* 20D/E

**SEARCH & RESCUE**

1 sqn with AS332B/B1 *Super Puma*; CN-235 VIGMA

1 sqn with AS332B *Super Puma*; CN-235 VIGMA

1 sqn with C-212 *Aviocar*; CN-235 VIGMA; SA330J/L  
*Puma* (AS330)

**TANKER/TRANSPORT**

1 sqn with B-707

1 sqn with KC-130H *Hercules*

**TRANSPORT**

1 VIP sqn with A310; *Falcon* 900

1 sqn with C-130H/H-30 *Hercules*

1 sqn with C-212 *Aviocar*

2 sqn with C-295

1 sqn with CN-235

**TRAINING**

1 OCU sqn with Eurofighter *Typhoon*

1 OCU sqn with F/A-18A/B (EF-18A/B MLU) *Hornet*

1 sqn with Beech F33C *Bonanza*

2 sqn with C-101 *Aviojet*

1 sqn with C-212 *Aviocar*

1 sqn with T-35 *Pillan* (E-26)

2 (LIFT) sqn with F-5B *Freedom Fighter*

1 hel sqn with H120 *Colibri*

1 hel sqn with S-76C

**FIRE FIGHTING**

1 sqn with CL-215; CL-415

**TRANSPORT HELICOPTER**

1 sqn with AS332M1 *Super Puma*; AS532UL *Cougar* (VIP)

**EQUIPMENT BY TYPE****AIRCRAFT** 151 combat capable

FTR 60: 41 Eurofighter *Typhoon*; 19 F-5B *Freedom Fighter*

FGA 86: 20 F/A-18A *Hornet* (EF-18A); 54 EF-18A MLU;  
 12 EF-18B MLU

ASW 5: 2 P-3A *Orion*; 3 P-3M *Orion*

MP 8 CN-235 VIGMA

ISR 2 CN-235 (TR-19A)

EW 5: 1 C-212 *Aviocar* (TM.12D); 2 *Falcon* 20D; 2 *Falcon*  
 20E

TKR 5 KC-130H *Hercules*

TPT 75: **Medium** 7: 6 C-130H *Hercules*; 1 C-130H-30  
*Hercules*; **Light** 60: 4 Beech C90 *King Air*; 22 Beech F33C  
*Bonanza*; 10 C-212 *Aviocar* (incl 9 trg); 13 C-295; 8 CN-235;



3 Cessna 550 *Citation V* (ISR); **PAX** 8: 2 A310; 1 B-707; 5 *Falcon* 900 (VIP)  
**TRG** 103: 66 C-101 *Aviojet*; 37 T-35 *Pillan* (E-26)  
**FF** 17: 14 CL-215; 3 CL-415

**HELICOPTERS**

**TPT** 44: **Medium** 21: 9 AS332B/B1 *Super Puma*; 4 AS332M1 *Super Puma*; 2 AS532UL *Cougar* (VIP); 4 SA330J *Puma* (AS330); 2 SA330L *Puma* (AS330); **Light** 23: 15 H120 *Colibri*; 8 S-76C

**AD**

**SAM** *Mistral*  
**TOWED** *Skyguard/Aspide*

**MSL**

**AAM** • **IR** AIM-9L/JULI *Sidewinder*; **IIR** IRIS-T; **SARH** AIM-7P *Sparrow*; **ARH** AIM-120B/C AMRAAM  
**ARM** AGM-88B HARM  
**ASM** AGM-65G *Maverick*  
**AShM** AGM-84D *Harpoon*  
**LACM** *Taurus* KEPD 350

**BOMBS**

**Laser-guided**: GBU-10/12/16 *Paveway II*; GBU-24 *Paveway III*; EGBU-16 *Paveway II*; BPG-2000

**Emergencies Military Unit (UME)****FORCES BY ROLE****COMMAND**

1 div HQ

**FIRE FIGHTING**

1 sqn with CL-215; CL-415 opcon Air Force

**MANOEUVRE****Aviation**

1 hel bn opcon Army

**Other**

5 Emergency Intervention bn

1 Emergency Support and Intervention regt

**COMBAT SUPPORT**

1 sigs bn

**Paramilitary 76,250****Guardia Civil 75,500**

17 regions, 54 Rural Comds

**FORCES BY ROLE****SPECIAL FORCES**

8 (rural) gp

**MANOEUVRE****Other**

15 (traffic) sy gp

1 (Special) sy bn

**EQUIPMENT BY TYPE**

**AIRCRAFT** • **TPT** • **Light** 2 CN-235-300

**HELICOPTERS**

**MRH** 18 Bo-105ATH

**TPT** • **Light** 21: 8 BK-117; 13 H135

**Guardia Civil Del Mar 1,250****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 72**

**PSO** 1 with 1 hel landing platform

**PCC** 2

**PBF** 34

**PB** 29

**Cyber**

A Joint Cyber Command was set up in 2013. In 2014, short/medium-term goals included achieving FOC on 'CNDefense, CNExploitation, and CNAttack'. Spain's intelligence CERT (CCN-CERT) coordinates CERT activities.

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1978)

**Specific legislation:** 'Ley Orgánica de la Defensa Nacional' (2005)

**Decision on deployment of troops abroad:** a) By the government (Art. 6 of the 'Defence Law'); b) parliamentary approval is required for military operations 'which are not directly related to the defence of Spain or national interests' (Art. 17 of the 'Defence Law')

**AFGHANISTAN**

**NATO** • *Operation Resolute Support* 20

**ALBANIA**

**OSCE** • Albania 1

**BOSNIA-HERZEGOVINA**

**EU** • **EUFOR** • *Operation Althea* 2

**OSCE** • Bosnia and Herzegovina 2

**CENTRAL AFRICAN REPUBLIC**

**EU** • **EUMAM** RCA 22

**COTE D'IVOIRE**

**UN** • **UNOCI** 1

**DJIBOUTI**

**EU** • *Operation Atalanta* 1 CN-235

**GULF OF ADEN & INDIAN OCEAN**

**EU** • *Operation Atalanta* 1 FSGM

**IRAQ**

*Operation Inherent Resolve* 301

**LEBANON**

**UN** • **UNIFIL** 613; 1 armd inf bde HQ; 1 mech inf BG

**MALI**

**EU** • **EUTM** Mali 118

**MEDITERRANEAN SEA**

**EU** • **EU NAVFOR** MED: 1 FFGHM; 1 P-3M *Orion*

**NATO** • **SNMCMG** 2: 1 MHO

**NORTH SEA**

**NATO** • **SNMG** 1: 1 DDGDM

**SERBIA**

**OSCE** • Kosovo 1

**TURKEY**

**NATO** • *Operation Active Fence* 2 AD bty with MIM-104C *Patriot* PAC-2

**UGANDA**

**EU** • **EUTM** Somalia 13

**UKRAINE**

**OSCE** • Ukraine 14

## FOREIGN FORCES

**United States** US European Command: 2,100; 1 air base at Morón; 1 naval base at Rota

## Sweden SWE

Swedish Krona Skr		2014	2015	2016
GDP	Skr	3.91tr	4.09tr	
	US\$	571bn	484bn	
<i>per capita</i>	US\$	58,538	48,966	
Growth	%	2.3	2.8	
Inflation	%	0.2	0.5	
Def exp [a]	Skr	43.9bn		
	US\$	6.4bn		
Def bdgt	Skr	43.2bn	44.5bn	44.8bn
	US\$	6.3bn	5.26bn	
US\$1=Skr		6.86	8.46	

[a] Excludes military pensions and peacekeeping expenditure

**Population** 9,723,809

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.8%	2.7%	3.4%	3.5%	22.3%	9.2%
Female	8.3%	2.5%	3.3%	3.4%	21.7%	10.8%

## Capabilities

The armed forces remain configured for territorial defence, the equipment and capabilities of all three services reflecting this task. National defence became a topic of debate during the Russian annexation of Crimea in 2014 and has increased since the escalation in Russian military activity in the Baltic. Anxiety over Swedish preparedness has led to greater cooperation with NATO and NORDEFSCO partners, as well as further deliberation over Swedish membership of the Alliance. Future capabilities will depend on the delivery of key procurements, including *Gripen* JAS-39E combat aircraft and A26 submarines. The purchase of 60 new *Gripen* aircraft was approved by Sweden's parliament in 2013, and a similar announcement was made in 2015 on A26 and *Gotland*-class submarine upgrades. The government announced an increase to planned defence spending between 2016 and 2020 in response to security concerns, with funds being spent on modernising ships and re-deploying troops on the strategically important island of Gotland.

**ACTIVE 29,750** (Army 6,850 Navy 2,100 Air 2,700 Other 18,100) Paramilitary 750 Voluntary Auxiliary Organisations 21,200

## ORGANISATIONS BY SERVICE

### Army 6,850

The army has been transformed to provide brigade-sized task forces depending on the operational requirement.

## FORCES BY ROLE

### COMMAND

2 bde HQ

### MANOEUVRE

#### Reconnaissance

1 recce bn

#### Armoured

3 armrd coy

#### Mechanised

5 mech bn

#### Light

1 mot inf bn

1 lt inf bn

#### Air Manoeuvr

1 AB bn

#### Other

1 sy bn

### COMBAT SUPPORT

2 arty bn

2 AD bn

2 engr bn

2 MP coy

1 CBRN coy

### COMBAT SERVICE SUPPORT

1 tpt coy

## Reserves

### FORCES BY ROLE

#### MANOEUVRE

##### Other

40 Home Guard bn

### EQUIPMENT BY TYPE

**MBT** 129: 9 *Leopard* 2A4 (Strv-121); 120 *Leopard* 2A5 (Strv 122)

**AIFV** 354 CV9040 (Strf 9040)

**APC** 1,106

**APC (T)** 431: 281 Pbv 302; 150 BvS10 MkII

**APC (W)** 315: 34 XA-180 *Sisu* (Patgb 180); 20 XA-202 *Sisu* (Patgb 202); 148 XA-203 *Sisu* (Patgb 203); 113 XA-360 (Patgb 360)

**PPV** 360 RG-32M

**ARTY** 301

**SP 155mm** 5 *Archer*

**MOR** 296; **80mm** 212; **120mm** 84

### AT

**MSL • MANPATS** RB-55

**RCL 84mm** *Carl Gustav*

### AD

#### SAM

**TOWED RBS-97**

**MANPAD RBS-70**

**GUNS • SP 40mm** 30 Strv 90LV

**RADAR • LAND ARTHUR** (arty)

**AEV** 6 *Kodiak*

**ARV** 40: 14 Bgbv 120; 26 CV90

**MW** *Aardvark* Mk2; 33 Area Clearing System

**Navy** 1,250; 850 Amphibious; (total 2,100)

### EQUIPMENT BY TYPE

**SUBMARINES** 6

**TACTICAL • SSK 5:**

- 3 *Gotland* (AIP fitted) with 2 single 400mm TT with Tp432/Tp 451, 4 single 533mm TT with Tp613/Tp62  
 2 *Södermanland* (AIP fitted) with 6 single 533mm TT with Tp432/Tp451/Tp613/Tp62

**SSW 1 Spiggen II****PATROL AND COASTAL COMBATANTS 21**

**CORVETTES • FSG 5 *Visby*** with 8 RBS-15 AShM, 4 single 400mm ASTT with Tp45 LWT, 1 57mm gun, 1 hel landing platform

**PCG 4:**

- 2 *Göteborg* with 4 twin Inchr with RBS-15 Mk2 AShM, 4 single 400mm ASTT with Tp431 LWT, 4 Saab 601 A/S mor, 1 57mm gun  
 2 *Stockholm* with 4 twin Inchr with RBS-15 Mk2 AShM, 4 Saab 601 mortars, 4 single 400mm ASTT with Tp431 LWT, 1 57mm gun

**PB 1 *Jägaren***

**PBR 11 *Tapper***

**MINE WARFARE • MINE COUNTERMEASURES 10**

**MCC 5 *Koster***

**MCD 2 *Spårö***

**MSD 3: 2 *Sam*; 1 *Sokaren***

**AMPHIBIOUS • LANDING CRAFT 140**

**LCM 8 *Trossbat***

**LCPL 129 *Combatboat 90E/H/HS***

**LCAC 3 *Griffon 8100TD***

**LOGISTICS AND SUPPORT 38**

**AG 2: 1 *Carlskrona*** with 2 57mm gun, 1 hel landing platform (former ML); 1 *Trosso* (spt ship for corvettes and patrol vessels but can also be used as HQ ship)

**AGF 3 *Combatboat 450***

**AGI 1 *Orion***

**AGS 2 (Government Maritime Forces)**

**AK 1 *Loke***

**ARS 2: 1 *Belos III*; 1 *Furusund* (former ML)**

**AX 5 *Altair***

**AXS 2: 1 *Falkan*; 1 *Gladan***

**YAG 7 *Trossbat***

**YDT 1 *Agir***

**YPT 1 *Pelikanen***

**YTM 11**

**Amphibious 850****FORCES BY ROLE****MANOEUVRE**

**Amphibious**

1 amph bn

**EQUIPMENT BY TYPE**

**ARTY • MOR 81mm 12**

**MSL • AShM 8 RBS-17 *Hellfire***

**Air Force 2,700**

Flying hours 100–150 hrs/year

**FORCES BY ROLE****FIGHTER/GROUND ATTACK/ISR**

4 sqn with JAS 39C/D *Gripen*

**TRANSPORT/ISR/AEW&C**

1 sqn with C-130H *Hercules* (Tp-84); KC-130H *Hercules* (Tp-84); Gulfstream IV SRA-4 (S-102B); S-100B/D *Argus*

**TRAINING**

- 1 sqn with JAS-39A/B *Gripen*  
 1 OCU sqn with JAS-39C/D *Gripen*  
 1 unit with Sk-60

**AIR DEFENCE**

1 (fighter control and air surv) bn

**EQUIPMENT BY TYPE****AIRCRAFT 97 combat capable**

**FGA 97 JAS 39C/D *Gripen***

**ELINT 2 Gulfstream IV SRA-4 (S-102B)**

**AEW&C 3: 1 S-100B *Argus*; 2 S-100D *Argus***

**TKR 1 KC-130H *Hercules* (Tp-84)**

**TPT 8: **Medium** 5 C-130H *Hercules* (Tp-84); **Light** 2 Saab**

**340 (OS-100A/Tp-100C); **PAX** 1 Gulfstream 550 (Tp-102D)**

**TRG 67 Sk-60W**

**UAV • ISR • **Medium** 8 RQ-7 *Shadow* (AUV 3 *Örnen*)****MSL**

**ASM AGM-65 *Maverick* (RB-75)**

**AShM RB-15F**

**AAM • IR AIM-9L *Sidewinder* (RB-74); **IIR IRIS-T** (RB-98); **ARH AIM-120B AMRAAM** (RB-99)**

**BOMBS**

**Laser-Guided GBU-12 *Paveway II***

**INS/GPS guided GBU-39 Small Diameter Bomb**

**Armed Forces Hel Wing****FORCES BY ROLE****TRANSPORT HELICOPTER**

3 sqn with AW109 (Hkp 15A); AW109M (Hkp-15B); NH90 TTH (Hkp-14); UH-60M *Black Hawk* (Hkp-16)

**EQUIPMENT BY TYPE****HELICOPTERS**

**TPT 49: **Medium** 29: 15 UH-60M *Black Hawk* (Hkp-16); 14 NH90 TTH (Hkp-14); **Light** 20: 12 AW109 (Hkp-15A); 8 AW109M (Hkp-15B)**

**Special Forces****FORCES BY ROLE****SPECIAL FORCES**

1 spec ops gp

**COMBAT SUPPORT**

1 cbt spt gp

**Other 18,100**

Includes staff, logistics and intelligence personnel

**FORCES BY ROLE****COMBAT SUPPORT**

1 EW bn

1 psyops unit

**COMBAT SERVICE SUPPORT**

2 log bn

1 maint bn

4 med coy

1 tpt coy

**Paramilitary 750****Coast Guard 750****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 21**

PSO 3 KBV-001  
 PCO 1 KBV-181 (fishery protection)  
 PCC 2 KBV-201  
 PB 15: 10 KBV-301; 5 KBV-312

**AMPHIBIOUS • LANDING CRAFT • LCAC** 3; 1  
 Griffon 2000TDX (KBV-592); 2 Griffon 2450TD (KBV-590  
 & 593)

**LOGISTICS AND SUPPORT • AG** 9: 1 KBV-010; 4  
 KBV-031; 2 KBV-047; 2 KBV-050

## Air Arm

### EQUIPMENT BY TYPE

**AIRCRAFT • TPT • Light** 3 DHC-8Q-300

## Cyber

Sweden has a national CERT, is involved in informal CERT communities and is a member of the European Government CERTs group (EGC). A national cyber-security strategy has also been adopted. Four ministries have a cyber remit: defence, foreign affairs, justice, and enterprise and industry. The Swedish Civil Contingencies Agency (AMS), which reports to the defence ministry, is in charge of supporting and coordinating security nationwide. According to the 2015 defence bill, 'cyber defence capabilities are an important part of the Swedish Defence. Vital systems must be protected from attack. This also requires the ability to carry out active operations in the cyber domain.'

## DEPLOYMENT

### Legal provisions for foreign deployment:

**Constitution:** Constitution consists of four fundamental laws; the most important is 'The Instrument of Government' (1974)

**Decision on deployment of troops abroad:** By the government upon parliamentary approval (Ch. 10, Art. 9)

### AFGHANISTAN

NATO • *Operation Resolute Support* 32

### ARMENIA/AZERBAIJAN

OSCE • Minsk Conference 1

### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 2

### CENTRAL AFRICAN REPUBLIC

EU • EUMAM RCA 2

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 2 obs

### INDIA/PAKISTAN

UN • UNMOGIP 5 obs

### KOREA, REPUBLIC OF

NNSC • 5 obs

### MALI

EU • EUTM Mali 10

UN • MINUSMA 210; 1 int coy

### MIDDLE EAST

UN • UNTSO 6 obs

### MOLDOVA

OSCE • Moldova 3

### SERBIA

NATO • KFOR 5

OSCE • Kosovo 3

### SOUTH SUDAN

UN • UNMISS 1; 1 obs

### UGANDA

EU • EUTM Somalia 10

### UKRAINE

OSCE • Ukraine 19

## Switzerland CHE

Swiss Franc fr		2014	2015	2016
<b>GDP</b>	fr	645bn	643bn	
	US\$	704bn	677bn	
<i>per capita</i>	US\$	86,468	82,178	
<b>Growth</b>	%	1.9	1.0	
<b>Inflation</b>	%	-0.01	-1.1	
<b>Def exp</b>	fr	4.23bn		
	US\$	4.61bn		
<b>Def bddt [a]</b>	fr	4.73bn	4.59bn	4.9bn
	US\$	5.17bn	4.83bn	
<b>US\$1=fr</b>		0.92	0.95	

[a] Includes military pensions

**Population** 8,121,830

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	7.8%	2.8%	3.0%	3.2%	24.8%	7.8%
<b>Female</b>	7.3%	2.6%	2.9%	3.3%	24.6%	10.0%

## Capabilities

Overwhelmingly conscript based, the armed forces are geared for territorial defence and limited participation in international peace-support operations. Plans to replace the ageing F-5 *Tiger* II aircraft with the *Gripen* had to be scrapped after a national referendum in May 2014 rejected the proposal. In 2015, Switzerland had to prematurely retire ten of its F-5s due to cracks close to the cockpit area. A further six aircraft were affected but were deemed fit for repair. With Switzerland's air-policing capabilities now diminished, the government intends to relaunch in 2017 its attempt to procure a new combat aircraft. Motions to procure a transport aircraft were rejected by the Swiss National Council in 2015. The Swiss government has redirected some of the funds intended for the *Gripen* acquisition towards purchases of communications equipment and ammunition as well as air-defence and all-terrain-vehicle life-extension programmes. Other acquisition programmes include UAVs and partial replacement for the AIM-120B missile with AIM 120C-7, as well as modernisation of nuclear-biological-chemical defence and ground mobility, such as bridging.

**ACTIVE 20,800 (Joint 20,800)**

*Conscript liability* Recruit trg of 18, 21 or 25 weeks (depending on military branch) at age 19–20, followed by 7, 6 or 5 refresher trg courses (3 weeks each) over a 10-year period between ages 20–30

**RESERVE 148,250 (Army 96,900 Air 23,050 Armed Forces Logistic Organisation 13,400 Command Support Organisation 14,900)**

**Civil Defence 72,900**

**ORGANISATIONS BY SERVICE**

**Joint 3,350 active; 17,450 conscript (20,800 total)**

**Land Forces (Army) 96,900 on mobilisation**

4 Territorial Regions. With the exception of military security all units are non-active.

**FORCES BY ROLE****COMMAND**

4 regional comd (2 engr bn, 1 sigs bn)

**MANOEUVRE****Armoured**

1 (1st) bde (1 recce bn, 2 armd bn, 2 armd inf bn, 1 sp arty bn, 2 engr bn, 1 sigs bn)

1 (11th) bde (1 recce bn, 2 armd bn, 2 armd inf bn, 1 inf bn, 2 SP arty bn, 1 engr bn, 1 sigs bn)

**Light**

1 (2nd) bde (1 recce bn, 4 inf bn, 2 SP arty bn, 1 engr bn, 1 sigs bn)

1 (5th) bde (1 recce bn, 3 inf bn, 2 SP arty bn, 1 engr bn, 1 sigs bn)

1 (7th) reserve bde (3 recce bn, 3 inf bn, 2 mtn inf bn, 1 sigs bn)

**Mountain**

1 (9th) bde (5 mtn inf bn, 1 SP Arty bn, 1 sigs bn)

1 (12th) bde (2 inf bn, 3 mtn inf bn, 1 (fortress) arty bn, 1 sigs bn)

1 (10th) reserve bde (1 recce bn, 2 armd bn, 3 inf bn, 2 mtn inf bn, 2 SP arty bn, 2 sigs bn)

**Other**

1 sy bde

**COMBAT SERVICE SUPPORT**

1 armd/arty trg unit

1 inf trg unit

1 engr rescue trg unit

1 log trg unit

**EQUIPMENT BY TYPE**

**MBT** 134 *Leopard 2 (Pz-87 Leo)*

**RECCE** 455: 443 *Eagle II*; 12 *Piranha IIIC CBRN*

**AIFV** 186: 154 CV9030; 32 CV9030 CP

**APC** 914

**APC (T)** 238 M113A2 (incl variants)

**APC (W)** 676: 346 *Piranha II*; 330 *Piranha I/II/IIIC CP*

**ARTY** 383

**SP 155mm** 133 M109

**MOR • 81mm** 250 M72/91

**AT • MSL • SP** 110 *Piranha I TOW-2*

**AD • SAM • MANPAD** FIM-92A *Stinger*

**AEV** 12 *Kodiak*

**ARV** 25 *Büffel*

**MW** 46: 26 Area Clearing System; 20 M113A2

**PATROL AND COASTAL COMBATANTS • PBR** 11 *Aquarius*

**Air Force 23,050 (incl air defence units and military airfield guard units)**

Flying hours 200–250 hrs/year

**FORCES BY ROLE****FIGHTER**

3 sqn with F-5E/F *Tiger II*

3 sqn with F/A-18C/D *Hornet*

**TRANSPORT**

1 sqn with Beech 350 *King Air*; DHC-6 *Twin Otter*;

PC-6 *Turbo Porter*; PC-12

1 VIP Flt with Beech 1900D; Cessna 560XL *Citation*;  
*Falcon 900EX*

**TRAINING**

1 sqn with PC-7CH *Turbo Trainer*; PC-21

1 sqn with PC-9 (tgt towing)

1 OCU Sqn with F-5E/F *Tiger II*

**TRANSPORT HELICOPTER**

6 sqn with AS332M *Super Puma*; AS532UL *Cougar*;  
H135M

**ISR UAV**

1 sqn with ADS 95 *Ranger*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 86 combat capable

**FTR** 54: 42 F-5E *Tiger II*; 12 F-5F *Tiger II*

**FGA** 31: 25 F/A-18C *Hornet*; 6 F/A-18D *Hornet*

**TPT** 22: **Light** 21: 1 Beech 350 *King Air*; 1 Beech 1900D;

1 Cessna 560XL *Citation*; 1 DHC-6 *Twin Otter*; 15 PC-6  
*Turbo Porter*; 1 PC-6 (owned by armasuisse, civil

registration); 1 PC-12 (owned by armasuisse, civil registration); **PAX** 1 *Falcon 900EX*

**TRG** 44: 28 PC-7CH *Turbo Trainer*; 8 PC-9; 8 PC-21

**HELICOPTERS**

**MRH** 20 H135M

**TPT • Medium** 26: 15 AS332M *Super Puma*; 11  
AS532UL *Cougar*

**UAV • ISR • Medium** 16 ADS 95 *Ranger* (4 systems)

**MSL • AAM • IR** AIM-9P *Sidewinder*; **IIR** AIM-9X

*Sidewinder*; **ARH** AIM-120B **AMRAAM**

**Ground Based Air Defence (GBAD)**

GBAD assets can be used to form AD clusters to be deployed independently as task forces within Swiss territory.

**EQUIPMENT BY TYPE****AD****SAM**

**TOWED** *Rapier*

**MANPAD** FIM-92A *Stinger*

**GUNS 35mm**

**RADARS • AD RADARS** *Skyguard*

**Armed Forces Logistic Organisation 13,400 on mobilisation****FORCES BY ROLE****COMBAT SERVICE SUPPORT**

1 log bde



## Command Support Organisation 14,900 on mobilisation

### FORCES BY ROLE

#### COMBAT SERVICE SUPPORT

1 spt bde

## Civil Defence 72,900

(not part of armed forces)

## Cyber

Five major Swiss government organisations maintain an overview of elements of cyber threats and responses: the Federal Intelligence Service; the Military Intelligence Service; the Command Support Organisation; Information Security and Facility Protection; and the Federal Office for Civil Protection. A National Cyber Defence Strategy was published in 2012. As cyber protection is decentralised, the Federal Department of Finance is in charge of implementing the strategy until 2017.

## DEPLOYMENT

### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1999)

### Decision on deployment of troops abroad:

**Peace promotion** (66, 66a, 66b Swiss Mil Law): UN.OSCE mandate. Decision by govt; if over 100 tps deployed or op over 3 weeks Fed Assembly must agree first, except in emergency.

**Support service abroad** (69, 60 Swiss Mil Law): Decision by govt; if over 2,000 tps or op over 3 weeks Fed Assembly must agree in next official session

### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 20

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 3

### INDIA/PAKISTAN

UN • UNMOGIP 3 obs

### KOREA, REPUBLIC OF

NNSC • 5 officers

### MALI

UN • MINUSMA 3

### MIDDLE EAST

UN • UNTSO 15 obs

### MOLDOVA

OSCE • Moldova 1

### SERBIA

NATO • KFOR 218 (military volunteers); 1 inf coy

OSCE • Kosovo 1

### SOUTH SUDAN

UN • UNMISS 2; 1 obs

### UKRAINE

OSCE • Ukraine 1

### WESTERN SAHARA

UN • MINURSO 2 obs

## Turkey TUR

New Turkish Lira L		2014	2015	2016
GDP	L	1.75tr	1.99tr	
	US\$	798bn	722bn	
<i>per capita</i>	US\$	10,381	9,290	
Growth	%	2.9	3.0	
Inflation	%	8.9	7.4	
Def exp [a]	L	30bn		
	US\$	13.7bn		
Def bdgt [b]	L	21.8bn	22.9bn	24.8bn
	US\$	9.97bn	8.35bn	
US\$1=L		2.19	2.75	

[a] NATO definition

[b] Includes funding for Undersecretariat of Defence Industries. Excludes military procurement allocations.

Population 79,414,269

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	13.0%	4.2%	4.1%	4.1%	21.8%	3.1%
Female	12.4%	4.0%	3.9%	4.0%	21.4%	3.9%

## Capabilities

The regional threat posed by conflict in Syria and by ISIS in 2015 placed the Turkish armed forces on high alert on the border. Turkey has capable armed forces intended to meet national defence requirements and NATO obligations, and aims to provide a highly mobile force able to fight across the spectrum of conflict. The air force is well equipped and well trained. There is also an ambitious procurement plan in place. The development of a new attack helicopter is under way and *Chinook* heavy transport helicopters are on order. The navy's new *Milgem*-class-corvette project is ahead of schedule, and construction of the fourth ship began in October 2015, as did the first of a new class of submarines. However, there have been delays to some strategically important projects, including a military satellite. Single and inter-service training is carried out regularly, as is mobilisation training. The armed forces participate in multinational exercises with NATO partners.

**ACTIVE 510,600** (Army 402,000 Navy 48,600 Air 60,000) Paramilitary 201,200

*Conscript liability* 15 months. Active figure reducing.

**RESERVE 378,700** (Army 258,700 Navy 55,000 Air 65,000)

Reserve service to age of 41 for all services.

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

SATELLITES • ISR 1 *Gokturk-2*

**Army** €77,000; €325,000 conscript (total 402,000)

#### FORCES BY ROLE

##### COMMAND

4 army HQ  
9 corps HQ

##### SPECIAL FORCES

4 cdo bde  
1 mtn cdo bde  
1 cdo regt

##### MANOEUVRE

###### Armoured

1 (52nd) armd div (2 armd bde, 1 mech bde)  
7 armd bde

###### Mechanised

2 (28th & 29th) mech div  
14 mech inf bde

###### Light

1 (23rd) mot inf div (3 mot inf regt)  
11 mot inf bde

###### Aviation

4 avn regt  
4 avn bn

##### COMBAT SUPPORT

2 arty bde  
1 trg arty bde  
6 arty regt  
2 engr regt

##### EQUIPMENT BY TYPE

**MBT** 2,504: 325 *Leopard* 2A4; 170 *Leopard* 1A4; 227 *Leopard* 1A3; 274 M60A1; 658 M60A3; 850 M48A5 T1/T2 (2,000 more in store)

**RECCE** 320+: €250 *Akrep*; 70+ ARSV *Cobra*

**AIFV** 650 AIFV

**APC** 3,943

**APC (T)** 3,643: 830 AAPC; 2,813 M113/M113A1/M113A2  
**PPV** 300+ *Kirpi*

**ARTY** 7,852+

**SP** 1,133: **105mm** 391: 26 M108T; 365 M52T; **155mm** 487: 222 M44T1; €265 T-155 *Firtina* (K9 *Thunder*); **175mm** 36 M107; **203mm** 219 M110A2

**TOWED** 760+: **105mm** 75+ M101A1; **155mm** 523: 517 M114A1/M114A2; 6 *Panther*; **203mm** 162 M115

**MRL** 146+: **107mm** 48; **122mm** €36 T-122; **227mm** 12 MLRS (incl ATACMS); **302mm** 50+ TR-300 *Kasirga* (WS-1)

**MOR** 5,813+

**SP** 1,443+: **81mm**; **107mm** 1,264 M30; **120mm** 179

**TOWED** 4,370: **81mm** 3,792; **120mm** 578

##### AT

**MSL** 1,363

**SP** 365 TOW

**MANPATS** 9K135 *Kornet-E* (AT-14 *Spriggan*); *Cobra*; *Eryx*; *Milan*

**RCL** 3,869: **57mm** 923 M18; **75mm** 617; **106mm** 2,329 M40A1

##### AIRCRAFT

**TPT** • **Light** 38: 5 Beech 200 *King Air*; 30 Cessna 185 (U-17B); 3 Cessna 421

**TRG** 74: 45 Cessna T182; 25 T-41D *Mescalero*; 4 T-42A *Cochise*

##### HELICOPTERS

**ATK** 49: 18 AH-1P *Cobra*; 12 AH-1S *Cobra*; 6 AH-1W *Cobra*; 4 TAH-1P *Cobra*; 9 T129A

**MRH** 28 Hughes 300C

**ISR** 3 OH-58B *Kiowa*

**TPT** 221+: **Medium** 80+: 30 AS532UL *Cougar*; 50+ S-70A *Black Hawk*; **Light** 141: 12 Bell 204B (AB-204B); €45 Bell 205 (UH-1H *Iroquois*); 64 Bell 205A (AB-205A); 20 Bell 206 *Jet Ranger*

**UAV** • **ISR Heavy** *Falcon* 600/*Firebee*; **Medium** CL-89; *Gnat*; **Light** *Harpy*

##### AD

##### SAM

**SP** 148: 70 *Altigan* PMADS octuple *Stinger* Inchr, 78 *Zipkin* PMADS quad *Stinger* Inchr

**MANPAD** 935: 789 FIM-43 *Redeye* (being withdrawn); 146 FIM-92A *Stinger*

**GUNS** 1,664

**SP 40mm** 262 M42A1

**TOWED** 1,402: **20mm** 439 GAI-D01; **35mm** 120 GDF-001/GDF-003; **40mm** 843: 803 L/60/L/70; 40 T-1

**RADAR** • **LAND** AN/TPQ-36 *Firefinder*

**AEV** 12+: 12 M48; M113A2T2

**ARV** 150: 12 *Leopard* 1; 105 M48T5; 33 M88A2

**VLB** 52 Mobile Floating Assault Bridge

**MW** *Tamkar*

**Navy** 14,100; 34,500 conscript (total 48,600 including 2,200 Coast Guard and 3,100 Marines)

##### EQUIPMENT BY TYPE

**SUBMARINES** • **TACTICAL** • **SSK** 13:

5 *Atilay* (GER Type-209/1200) with 8 single 533mm ASTT with SST-4 HWT

8 *Preveze/Gür* (GER Type-209/1400) with 8 single 533mm ASTT with UGM-84 *Harpoon* AShM/*Tigerfish* Mk2 HWT

**PRINCIPAL SURFACE COMBATANTS** 18

**FRIGATES** • **FFGHM** 18:

2 *Barbaros* (mod GER MEKO 200 F244 & F245) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 octuple Mk29 Inchr with *Aspide* SAM, 2 Mk32 triple 324mm ASTT with Mk46 LWT, 3 *Sea Zenith* CIWS, 1 127mm gun (capacity 1 Bell 212 (AB-212) hel)

2 *Barbaros* (mod GER MEKO 200 F246 & F247) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 8-cell Mk41 VLS with *Aspide* SAM, 2 Mk32 triple 324mm ASTT with Mk46 LWT, 3 *Sea Zenith* CIWS, 1 127mm gun (capacity 1 Bell 212 (AB-212) hel)

3 *Gaziantep* (ex-US *Oliver Hazard Perry*-class) with 1 Mk13 GMLS with RGM-84C *Harpoon* AShM/SM-1MR SAM, 1 8-cell Mk41 VLS with RIM-162 SAM, 2 Mk32 triple 324mm ASTT with Mk46 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 1 S-70B *Seahawk* ASW hel)

5 *Gaziantep* (ex-US *Oliver Hazard Perry*-class) with 1 Mk13 GMLS with RGM-84C *Harpoon* AShM/SM-1MR SAM, 2 Mk32 triple 324mm ASTT with Mk46 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 1 S-70B *Seahawk* ASW hel)

- 4 *Yavuz* (GER MEKO 200TN) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 octuple Mk29 GMLS with *Aspide* SAM, 2 Mk32 triple 324mm ASST with Mk46 LWT, 3 *Sea Zenith* CIWS, 1 127mm gun (capacity 1 Bell 212 (AB-212) hel)
- 2 *Ada* with 2 quad Inchr with RCM-84C *Harpoon* AShM, 1 Mk49 21-cell Inchr with RIM-116 SAM, 2 Mk32 twin 324mm ASST with Mk46 LWT, 1 76mm gun (capacity 1 S-70B *Seahawk* hel)

#### PATROL AND COASTAL COMBATANTS 53

##### CORVETTES • FSGM 6:

- 6 *Burak* (ex-FRA *d'Estienne d'Orves*) with 2 single Inchr with MM-38 *Exocet* AShM, 4 single 324mm ASST with Mk46 LWT, 1 Mk54 A/S mor, 1 100mm gun

##### PCFG 19:

- 8 *Dogan* (GER *Lurssen-57*) with 2 quad Inchr with RGM-84A/C *Harpoon* AShM, 1 76mm gun
- 9 *Kilic* with 2 quad Mk 141 Inchr with RGM-84C *Harpoon* AShM, 1 76mm gun
- 2 *Yildiz* with 2 quad Inchr with RGM-84A/C *Harpoon* AShM, 1 76mm gun

##### PCC 15 *Tuzla*

**PBFG 2 *Kartal*** (GER *Jaguar*) with 4 single Inchr with RB 12 *Penguin* ASHm, 2 single 533mm TT

**PBF 4:** 2 *Kaan 20*; 2 MRTP22

##### PB 7:

- 4 PGM-71 with 1 Mk22 *Mousetrap* A/S mor
- 3 *Turk* with 1 Mk20 *Mousetrap* A/S mor

#### MINE WARFARE • MINE COUNTERMEASURES 27

**MCM SPT 8** (tenders)

**MHO 11:** 5 *Edineik* (FRA *Circe*); 6 *Aydin*

**MSC 4 *Silifke*** (US *Adjutant*)

**MSI 4 *Foca*** (US *Cape*)

#### AMPHIBIOUS

##### LANDING SHIPS • LST 4:

- 1 *Ertugrul* (ex-US *Terrebonne Parish*) with 3 76mm gun, (capacity 18 tanks; 400 troops) (with 1 hel landing platform)
- 1 *Osman Gazi* with 1 *Phalanx* CIWS, (capacity 4 LCVP; 17 tanks; 980 troops) (with 1 hel landing platform)
- 2 *Sarucabey* with 1 *Phalanx* CIWS (capacity 11 tanks; 600 troops) (with 1 hel landing platform)

##### LANDING CRAFT 30

**LCT 21:** 2 C-120/130; 11 C-140; 8 C-151

**LCM 9:** 1 C-310; 8 C-320

#### LOGISTICS AND SUPPORT 64

**ABU 2:** 1 AG5; 1 AG6 with 1 76mm gun

**AGS 2:** 1 *Cesme* (ex-US *Silas Bent*); 1 *Cubuklu*

**AOR 2 *Akar*** with 1 twin 76mm gun, 1 *Phalanx* CIWS, 1 hel landing platform

**AOT 2 *Burak***

**AOL 1 *Gurcan***

**AP 1 *Iskenderun***

**ARS 2:** 1 *Isin*; 1 *Kemer*

**ASR 1 *Akin***

**ATF 9:** 1 *Akbas*; 1 *Degirmendere*; 1 *Gazal*; 1 *Inebolu*; 5 *Onder*

**AWT 3 *Sogut***

**AXL 8**

**AX 2 *Pasa*** (ex-GER *Rhein*)

**YFD 13**

**YPB 2**

**YPT 3**

**YTM 11**

#### Marines 3,100

##### FORCES BY ROLE

##### MANOEUVRE

##### Amphibious

1 mne bde (3 mne bn; 1 arty bn)

#### Naval Aviation

##### FORCES BY ROLE

##### ANTI-SUBMARINE WARFARE

2 sqn with Bell 212 ASW (AB-212 ASW); S-70B *Seahawk*  
1 sqn with ATR-72-600; CN-235M-100; TB-20 *Trinidad*

##### EQUIPMENT BY TYPE

##### AIRCRAFT

MP 6 CN-235M-100

TPT • Light 6: 1 ATR-72-600; 5 TB-20 *Trinidad*

##### HELICOPTERS

ASW 29: 11 Bell 212 ASW (AB-212 ASW); 18 S-70B *Seahawk*

#### Air Force 60,000

2 tac air forces (divided between east and west)

Flying hours 180 hrs/year

##### FORCES BY ROLE

##### FIGHTER

1 sqn with F-4E *Phantom* 2020

2 sqn with F-16C/D *Fighting Falcon*

##### FIGHTER/GROUND ATTACK

2 sqn with F-4E *Phantom* 2020

8 sqn with F-16C/D *Fighting Falcon*

##### ISR

1 unit with *King Air* 350

##### AIRBORNE EARLY WARNING & CONTROL

1 sqn (forming) with B-737 AEW&C

##### EW

1 unit with CN-235M EW

##### SEARCH & RESCUE

1 sqn with AS532AL/UL *Cougar*

##### TANKER

1 sqn with KC-135R *Stratotanker*

##### TRANSPORT

1 sqn with A400M *Atlas*; C-160D *Transall*

1 sqn with C-130B/E/H *Hercules*

1 (VIP) sqn with Cessna 550 *Citation* II (UC-35); Cessna 650 *Citation* VII; CN-235M; Gulfstream 550

3 sqn with CN-235M

10 (liaison) flt with Bell 205 (UH-1H *Iroquois*); CN-235M

##### TRAINING

1 sqn with F-4E *Phantom* 2020; F-16C/D *Fighting Falcon*

1 sqn with F-5A/B *Freedom Fighter*; NF-5A/B *Freedom Fighter*

1 OCU sqn with F-16C/D *Fighting Falcon*

1 sqn with SF-260D

1 sqn with KT-IT

1 sqn with T-38A/M *Talon*

1 sqn with T-41D *Mescalero*

##### AIR DEFENCE

4 sqn with MIM-14 *Nike Hercules*

2 sqn with *Rapier*  
8 (firing) unit with MIM-23 HAWK

**MANOEUVRE****Air Manoeuvre**

1 AB bde

**EQUIPMENT BY TYPE****AIRCRAFT** 364 combat capable

**FTR** 53: 18 F-5A *Freedom Fighter*; 8 F-5B *Freedom Fighter*; 17 NF-5A *Freedom Fighter*; 10 NF-5B *Freedom Fighter* (48 F-5s being upgraded as LIFT)

**FGA** 311: 51 F-4E *Phantom* 2020; 27 F-16C *Fighting Falcon* Block 30; 162 F-16C *Fighting Falcon* Block 50; 14 F-16C *Fighting Falcon* Block 50+; 8 F-16D Block 30 *Fighting Falcon*; 33 F-16D *Fighting Falcon* Block 50; 16 F-16D *Fighting Falcon* Block 50+

**ISR** 5 Beech 350 *King Air*

**EW** 2+ CN-235M EW

**AEW&C** 3 B-737 AEW&C (1 more on order)

**TKR** 7 KC-135R *Stratotanker*

**TPT** 87: **Heavy** 1 A400M *Atlas*; **Medium** 35: 6 C-130B *Hercules*; 12 C-130E *Hercules*; 1 C-130H *Hercules*; 16 C-160D *Transall*; **Light** 50: 2 Cessna 550 *Citation II* (UC-35 - VIP); 2 Cessna 650 *Citation VII*; 46 CN-235M; **PAX** 1 Gulfstream 550

**TRG** 172: 34 SF-260D; 70 T-38A/M *Talon*; 28 T-41D *Mescalero*; 40 KT-IT

**HELICOPTERS**

**TPT** 40: **Medium** 20: 6 AS532AL *Cougar* (CSAR); 14 AS532UL *Cougar* (SAR); **Light** 20 Bell 205 (UH-1H *Iroquois*)

**UAV** • **ISR** 27: **Heavy** 9 *Heron*; **Medium** 18 *Gnat* 750

**AD**

**SAM** *Rapier*

**TOWED** MIM-23 HAWK

**STATIC** MIM-14 *Nike Hercules*

**MSL**

**AAAM** • **IR** AIM-9S *Sidewinder*; *Shafir* 2(‡); **IIR** AIM-9X *Sidewinder*; **SARH** AIM-7E *Sparrow*; **ARH** AIM-120A/B AMRAAM

**ARM** AGM-88A HARM

**ASM** AGM-65A/G *Maverick*; AGM-154A JSOW; AGM-154C JSOW; *Popeye* I

**BOMBS**

**Electro-optical guided** GBU-8B HOBOS (GBU-15)

**Laser-guided** *Paveway* I; *Paveway* II

**PODS**

**Infrared** 80: 40 AN/AAQ-14 LANTIRN; 40 AN/AAQ-13 LANTIRN

**Paramilitary 201,200****Gendarmerie 195,450**

Ministry of Interior; Ministry of Defence in war

**FORCES BY ROLE****SPECIAL FORCES**

1 cdo bde

**MANOEUVRE****Other**

1 (border) paramilitary div

2 paramilitary bde

**EQUIPMENT BY TYPE**

**RECCE** *Akrep*

**APC (W)** 560: 535 BTR-60/BTR-80; 25 *Condor*

**AIRCRAFT**

**ISR** Some O-1E *Bird Dog*

**TPT** • **Light** 2 Do-28D

**HELICOPTERS**

**MRH** 19 Mi-17 *Hip H*

**TPT** 36: **Medium** 13 S-70A *Black Hawk*; **Light** 23: 8 Bell 204B (AB-204B); 6 Bell 205A (AB-205A); 8 Bell 206A (AB-206A) *Jet Ranger*; 1 Bell 212 (AB-212)

**Coast Guard 5,750****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 115

**PSOH** 4 *Dost* with 1 76mm gun

**PBF** 54

**PB** 57

**AIRCRAFT** • **MP** 1 CN-235 MPA (2 more to be delivered)

**HELICOPTERS** • **MRH** 8 Bell 412EP (AB-412EP – SAR)

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Constitution:** Codified constitution (1985)

**Decision on deployment of troops abroad:** a) In general, by parliament (Art. 92); b) in cases of sudden aggression and if parliament is unable to convene, by president (Art. 92, 104b)

**AFGHANISTAN**

**NATO** • *Operation Resolute Support* 503; 1 mot inf bn(-)

**UN** • UNAMA 1 obs

**ARABIAN SEA & GULF OF ADEN**

**Combined Maritime Forces** • CTF-151: 1 FFGHM

**BOSNIA-HERZEGOVINA**

**EU** • EUFOR • *Operation Althea* 243; 1 inf coy

**CYPRUS (NORTHERN)**

€43,000; 1 army corps HQ; 1 armd bde; 2 mech inf div; 1 avn cmd; 8 M48A2 (trg); 340 M48A5T1/T2; 361 AAPC (incl variants); 266 M113 (incl variants); 72 M101A1; 18 M114A2; 12 M115; 90 M44T; 6 T-122; 175 81mm mor; 148 M30; 127 HY-12; 66 *Milan*; 48 TOW; 192 M40A1; Rh 202; 16 GDF-003; 48 M1; 3 Cessna 185 (U-17); 1 AS532UL *Cougar*; 3 UH-1H *Iroquois*; 1 PB

**GULF OF ADEN & SOMALI BASIN**

**NATO** • *Operation Ocean Shield* 1 FFGHM

**LEBANON**

**UN** • UNIFIL 49; 1 PCFG

**MEDITERRANEAN SEA**

**NATO** • SNMG 2: 1 FFGHM

**NATO** • SNMCMG 2: 1 MHO; 1 AX

**SERBIA**

**NATO** • KFOR 394; 1 inf coy

**OSCE** • Kosovo 4

**UN** • UNMIK 1 obs

## UKRAINE

OSCE • Ukraine 12

## FOREIGN FORCES

**Germany** *Active Fence*: 2 bty with MIM-104F *Patriot* PAC-3**Spain** *Active Fence*: 2 bty with MIM-104C *Patriot* PAC-2**United States** US European Command: 1,550; 1 FGA sqn with 6 F-15C *Eagle*; 6 F-15E *Strike Eagle*; 1 atk sqn with 12 A-10C *Thunderbolt II*; 1 CISR sqn with MQ-1B *Predator* UAV; 1 spec ops flt with AC-130U *Spectre*; 1 spt facility at Izmir; 1 spt facility at Ankara; 1 air base at Incirlik • US Strategic Command: 1 AN/TPY-2 X-band radar at Kürecik • *Active Fence*: 2 bty with MIM-104E/F *Patriot* PAC-2/3

## United Kingdom UK

British Pound £		2014	2015	2016
GDP	£	1.79tr	1.86tr	
	US\$	2.95tr	2.86tr	
<i>per capita</i>	US\$	45,729	44,118	
Growth	%	3.0	2.5	
Inflation	%	1.5	0.1	
Def exp [a]	£	40bn		
	US\$	65.8bn		
Def bdgt [b]	£	37.3bn	36.4bn	
	US\$	61.5bn	56.2bn	
US\$1=£		0.61	0.65	

[a] NATO definition

[b] Net Cash Requirement figures. These will differ from official figures based on Resource Accounting &amp; Budgeting.

Population 64,088,222

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.9%	3.0%	3.4%	3.6%	23.0%	7.9%
Female	8.5%	2.8%	3.2%	3.4%	22.5%	9.8%

## Capabilities

A new Strategic Defence and Security Review (SDSR) was released in November 2015. It identified future capability plans, some of which were pre-empted by the announcement that special-forces capability would be increased and that ten *Reaper* UAVs would be replaced by 20 more-capable *Protector* UAVs. Nine P-8 aircraft will be bought for the MPA role, and two rapid-reaction Strike Brigades will be formed. There are two major risks to UK military capability. Firstly, the size of the armed forces, with many combat capabilities being close to critical mass and, secondly, recruiting and retention, with both the Royal Navy and Royal Air Force reporting shortages of many key specialists, particularly engineers. The UK continued to commit to a large number of operations, albeit at a small scale. Principal amongst these was the campaign against ISIS in Iraq and Syria, the NATO support mission in Afghanistan and the inter-agency operation to assist Sierra Leone in countering Ebola. Units of all three services took part in NATO reassurance activities and exercises designed to strengthen

deterrence against Russia. Ships were also deployed to the Mediterranean to assist EU operations reacting to the migrant crisis. Significant equipment-programme orders and deliveries in 2015 included the *Ajax* armoured reconnaissance vehicle family, deliveries of an *Astute* submarine and *Voyager* and A400M transport aircraft. With the exception of the withdrawal of troops from Germany and reserves recruiting, the restructuring measures required by the 2010 SDSR are complete. (See pp. 72–75.)

**ACTIVE 154,700 (Army 88,300 Navy 32,500 Air 33,900)****RESERVE 84,000 (Regular Reserve €51,000 (incl 4,850 RAF); Volunteer Reserve 33,000 (Army 27,500, Navy 3,100, Air 2,400)**

Includes both trained and those currently under training within the Regular Forces, excluding university cadet units.

## ORGANISATIONS BY SERVICE

## Strategic Forces 1,000

## Royal Navy

## EQUIPMENT BY TYPE

SUBMARINES • STRATEGIC • SSBN 4:

4 *Vanguard* with 1 16-cell VLS with UGM-133A *Trident* II D-5 SLBM, 4 533mm TT with *Spearfish* HWT (Each boat will not deploy with more than 48 warheads, but each missile could carry up to 12 MIRV; some *Trident* D-5 capable of being configured for sub-strategic role)

MSL • STRATEGIC 48 UGM-133A *Trident* II D-5 SLBM (Fewer than 160 declared operational warheads)

## Royal Air Force

## EQUIPMENT BY TYPE

RADAR • STRATEGIC 1 Ballistic Missile Early Warning System (BMEWS) at Fylingdales Moor

## Space

## EQUIPMENT BY TYPE

SATELLITES • COMMUNICATIONS 8: 1 NATO-4B; 3 *Skynet-4*; 4 *Skynet-5***Army 85,600; 2,700 Gurkhas (total: 88,300)**

Transitioning to a new Army 2020 structure, which is to be complete by the beginning of 2016. Regt normally bn size

## FORCES BY ROLE

## COMMAND

1 (ARRC) corps HQ

## MANOEUVRE

## Armoured

1 (3rd) armd div (3 armd inf bde (1 armd recce regt, 1 armd regt, 2 armd inf bn, 1 mech inf bn); 1 log bde (6 log regt; 4 maint regt; 3 med regt))

## Light

1 (1st) Lt inf div (1 (4th) inf bde (1 recce regt, 1 Lt mech inf bn; 1 Lt inf bn); 1 (7th) inf bde (1 recce regt, 1 2 Lt



mech inf bn; 2 lt inf bn); 1 (11th) inf bde (1 lt mech inf bn; 1 lt inf bn; 1 (Gurkha) lt inf bn); 2 (38th & 42nd) inf bde (2 inf bn); 1 (51st) inf bde (1 recce regt; 2 lt mech inf bn; 1 lt inf bn); 1 (160th) inf bde (1 inf bn); 1 log bde (3 log regt; 2 maint bn; 2 med regt))

2 inf bn (London)

1 (Gurkha) lt inf bn (Brunei)

#### Other

1 trg BG (based on 1 armd inf bn)

#### COMBAT SUPPORT

1 arty bde (3 SP arty regt, 2 fd arty regt)

2 AD regt

1 engr bde (5 cbt engr regt, 2 EOD regt, 1 engr regt, 1 (air spt) engr regt, 1 log regt)

1 (geographic) engr regt

1 ISR bde (1 STA regt, 1 EW regt, 3 int regt, 2 UAV regt)

1 MP bde (3 MP bn)

1 sigs bde (7 sigs regt)

1 sigs bde (2 sigs regt; 1 (ARRC) sigs bn)

1 (77th) cbt spt bde (1 (Stabilisation) spt gp; 1 psyops gp)

#### COMBAT SERVICE SUPPORT

1 log bde (2 log regt)

1 med bde (3 fd hospital)

#### Reserves

#### Army Reserve 24,100 reservists

The Army Reserve (AR) generates individuals, sub-units and some full units. Army 2020 will subordinate the majority of units to regular formation headquarters and pair them with one or more regular units.

#### FORCES BY ROLE

##### MANOEUVRE

##### Reconnaissance

3 recce regt

##### Armoured

1 armd regt

##### Light

13 lt inf bn

##### Aviation

1 UAV regt

#### COMBAT SUPPORT

2 arty regt

1 STA regt

1 MRL regt

1 AD regt

5 engr regt

3 engr sqn

3 EOD sqn

4 int bn

4 sigs regt

#### COMBAT SERVICE SUPPORT

11 log regt

6 maint regt

3 med regt

10 fd hospital

1 (media ops) spt gp

#### EQUIPMENT BY TYPE

**MBT** 227 *Challenger 2*

**RECCE** 648: 200 *Jackal*; 110 *Jackal 2*; 130 *Jackal 2A*; 200 *Scimitar*; 8 *Tpz-1 Fuchs* NBC

**AIFV** 400 *Warrior*

**APC** 2,250

**APC (T)** 1,260: 880 *Bulldog Mk3*; 275 *FV103 Spartan*; 105 *Warthog*

**PPV** 990: 400 *Foxhound*; 420 *Mastiff (6×6)*; 170 *Ridgback*

**ARTY** 574

**SP 155mm** 89 *AS90 Braveheart*

**TOWED 105mm** 90 *L118 Light Gun*

**MRL 227mm** 35 *M270 MLRS*

**MOR 81mm** 360

#### AT • MSL

**SP ε14 Exactor** (*Spike* NLOS)

**MANPATS** *Javelin*

#### AD • SAM

**SP 60 FV4333 Stormer**

**TOWED** 14 *Rapier* FSC

**MANPAD** *Starstreak* (LML)

**AEV** 93: 60 *Terrier*; 33 *Trojan*

**ARV** 155: 80 *CRARRV*; 35 *Samson*; 40 *Warrior* *ARRV*

**MW** 94: 64 *Aardvark*; 30 *M139*

**VLB** 60: 27 *M3*; 33 *Titan*

**RADAR • LAND** 150: 6 *G-AMB Giraffe* (AD); 5 *Mamba*; 139 *MSTAR*

**AMPHIBIOUS** 6 *LCVP*

**LOGISTICS AND SUPPORT** 5 *RCL*

**UAV • ISR • Medium** 8 *Watchkeeper* (21+ more in store)

#### Joint Helicopter Command

Tri-service joint organisation including Royal Navy, Army and RAF units.

#### Army

#### FORCES BY ROLE

##### MANOEUVRE

##### Air Manoeuvre

1 (16th) air aslt bde (1 recce pl, 2 para bn, 1 atk hel regt (2 sqn with *AH-64D Apache*; 1 trg sqn with *AH-64D Apache*), 1 atk hel regt (2 sqn with *AH-64D Apache*), 1 hel regt (3 sqn with *Lynx* *AH9A*), 1 fd arty regt, 1 cbt engr regt, 1 MP coy, 1 log regt, 1 maint regt, 1 med regt)

##### Aviation

1 avn regt (1 sqn with *BN-2 Defender/Islander*; 1 sqn with *SA341B Gazelle* *AH1*)

1 hel regt (1 sqn with *AW159 Wildcat* *AH1*)

1 hel sqn with *Lynx* *AH9A*

1 hel sqn with *AS365N3*; *SA341B Gazelle* *AH1*

1 (test) hel sqn with *Lynx* *AH9A*

1 trg hel regt (1 sqn with *AH-64D Apache*; 1 sqn with *AS350B Ecureuil*; 1 sqn with *Bell 212*; *Lynx* *AH9A*; *SA341B Gazelle* *AH1*)

1 hel flt with *Bell 212* (Brunei)

1 hel flt with *SA341B Gazelle* *AH1* (Canada)

## Army Reserve

### FORCES BY ROLE

#### MANOEUVRE

Air Manoeuvre

1 para bn

Aviation

1 hel regt (4 sqn personnel only)

## Royal Navy

### FORCES BY ROLE

#### ATTACK HELICOPTER

1 lt sqn with AW159 *Wildcat* AH1

#### TRANSPORT HELICOPTER

2 sqn with AW101 *Merlin* HC3/3A/3i

## Royal Air Force

### FORCES BY ROLE

#### TRANSPORT HELICOPTER

3 sqn with CH-47D/SD/F *Chinook* HC3/4/4A/6

2 sqn with SA330 *Puma* HC2

#### TRAINING

1 OCU sqn with CH-47D/SD/F *Chinook* HC3/4/4A/6;

SA330 *Puma* HC2

### EQUIPMENT BY TYPE

ARTY • TOWED 105mm 18 L118 Light Gun

AIRCRAFT • TPT • Light 13: 9 BN-2T-4S *Defender*; 4 BN-2 *Islander* AL1

#### HELICOPTERS

ATK 50 AH-64D *Apache*

MRH 89: 5 AS365N3; 29 AW159 *Wildcat* AH1; 21 *Lynx* AH9A; 34 SA341B *Gazelle* AH1

TPT 123: Heavy 58: 38 CH-47D *Chinook* HC4/4A; 8 CH-47SD *Chinook* HC3; 12 CH-47F *Chinook* HC6; Medium 48: 25 AW101 *Merlin* HC3/3A/3i; 23 SA330 *Puma* HC2; Light 17: 9 AS350B *Ecureuil*; 8 Bell 212

## Royal Navy 32,500

### EQUIPMENT BY TYPE

#### SUBMARINES 10

##### STRATEGIC • SSBN 4:

4 *Vanguard*, opcon Strategic Forces with 1 16-cell VLS with UGM-133A *Trident* II D-5 SLBM, 4 single 533mm TT with *Spearfish* HWT (each boat will not deploy with more than 40 warheads, but each missile could carry up to 12 MIRV; some *Trident* D-5 capable of being configured for sub-strategic role)

##### TACTICAL • SSN 6:

4 *Trafalgar* with 5 single 533mm TT with *Spearfish* HWT/UGM-84 *Harpoon* ASHM/*Tomahawk* tactical LACM  
2 *Astute* with 6 single 533mm TT with *Spearfish* HWT/UGM-84 *Harpoon* ASHM/*Tomahawk* tactical LACM (5 additional vessels on order)

#### PRINCIPAL SURFACE COMBATANTS 19

##### DESTROYERS 6

DDGHM 2 *Daring* (Type-45) with 2 quad Inchr with RGM-84C *Harpoon*, 1 48-cell VLS with *Sea Viper* SAM, 2 *Phalanx* Block 1B CIWS, 1 114mm gun (capacity 1 *Lynx*/AW101 *Merlin* hel)

DDHM 4 *Daring* (Type-45) with 1 48-cell VLS with *Sea Viper* SAM, 2 *Phalanx* Block 1B CIWS, 1 114mm gun (capacity 1 *Lynx*/AW101 *Merlin* hel)

##### FRIGATES • FFGHM 13:

13 *Norfolk* (Type-23) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* ASHM, 1 32-cell VLS with *Sea Wolf* SAM, 2 twin 324mm ASTT with *Sting Ray* LWT, 1 114mm gun (capacity either 2 *Lynx* or 1 AW101 *Merlin* hel)

#### PATROL AND COASTAL COMBATANTS 22

PSO 4: 3 *River*; 1 *River* (mod) with 1 hel landing platform

PB 18: 16 *Archer* (trg); 2 *Scimitar*

#### MINE WARFARE • MINE COUNTERMEASURES 16

MCO 8 *Hunt* (incl 4 mod *Hunt*)

MHC 8 *Sandown* (1 decommissioned and used in trg role)

#### AMPHIBIOUS

##### PRINCIPAL AMPHIBIOUS SHIPS 3

LPD 2 *Albion* with 2 *Goalkeeper* CIWS (capacity 2 med hel; 4 LCU or 2 LCAC; 4 LCVP; 6 MBT; 300 troops) (1 at extended readiness)

LPH 1 *Ocean* with 3 *Phalanx* Block 1B CIWS (capacity 18 hel; 4 LCVP; 800 troops)

#### LOGISTICS AND SUPPORT 10

AGB 1 *Protector* with 1 hel landing platform

AGS 3: 1 *Scott*; 2 *Echo* (all with 1 hel landing platform)

YGS 6: 1 *Gleaner*; 5 *Nesbitt*

## Royal Fleet Auxiliary

Support and miscellaneous vessels are mostly manned and maintained by the Royal Fleet Auxiliary (RFA), a civilian fleet owned by the UK MoD, which has approximately 2,500 personnel with type comd under CINCFLEET.

#### AMPHIBIOUS • PRINCIPAL AMPHIBIOUS SHIPS 3

LSD 3 *Bay* (capacity 4 LCU; 2 LCVP; 24 CR2 *Challenger* 2 MBT; 350 troops)

#### LOGISTICS AND SUPPORT 16

AORH 3: 2 *Wave*; 1 *Fort Victoria*

AOR 1 *Leaf*

AORLH 2 *Rover*

AFSH 2 *Fort Rosalie*

ARH 1 *Diligence*

AG 1 *Argus* (aviation trg ship with secondary role as primarily casualty receiving ship)

AKR 6 *Point* (not RFA manned)

## Naval Aviation (Fleet Air Arm) 5,000

### FORCES BY ROLE

#### ANTI-SUBMARINE WARFARE

3 sqn with AW101 ASW *Merlin* HM2

1 sqn with *Lynx* HMA8

1 flt with *Lynx* HMA8

#### AIRBORNE EARLY WARNING

3 sqn with *Sea King* AEW7

#### SEARCH & RESCUE

1 sqn (and detached flt) with *Sea King* HU5

#### TRAINING

1 sqn with Beech 350ER *King Air*

1 sqn with G-115 (op under contract)

1 sqn with *Hawk* T1

1 OCU sqn with AW101 ASW *Merlin* HM2

1 OCU sqn with AW159 *Wildcat* HMA2

**EQUIPMENT BY TYPE****AIRCRAFT** 12 combat capable**TPT • Light** 4 Beech 350ER *King Air***TRG** 17: 5 G-115 (op under contract); 12 *Hawk T1\****HELICOPTERS****ASW** 75: 20 AW159 *Wildcat* HMA2; 25 *Lynx* HMA8; 30AW101 *ASW Merlin* HM2**AEW** 9 *Sea King* AEW7**TPT • Medium** 12 *Sea King* HU5**MSL • AshM** *Sea Skua***Royal Marines 7,050**

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**FORCES BY ROLE****MANOEUVRE****Amphibious**

1 (3rd Cdo) mne bde (3 mne bn; 1 amph aslt sqn; 1 (army) arty regt; 1 (army) engr regt; 1 ISR gp (1 EW sqn; 1 cbt spt sqn; 1 sigs sqn; 1 log sqn), 1 log regt) 3 landing craft sqn opcon Royal Navy

**Other**

1 (Fleet Protection) sy gp

**EQUIPMENT BY TYPE****APC (T)** 142: 118 BvS-10 *Viking*; 24 BvS-10 Mk2 *Viking***ARTY** 50**TOWED 105mm** 18 L118 Light Gun**MOR 81mm** 32**AT • MSL • MANPATS** *Javelin***PATROL AND COASTAL COMBATANTS • PB** 2 *Island***AMPHIBIOUS • LANDING CRAFT** 37**LCU** 10**LCVP** 23**LCAC** 4 Griffon 2400TD**AD • SAM • HVM****RADAR • LAND** 4 MAMBA (*Arthur*)**Royal Air Force 34,650**

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Flying hours 210 hrs/yr on fast jets; 290 on tpt ac; 240 on support heli; 90 on *Sea King***FORCES BY ROLE****FIGHTER**2 sqn with *Typhoon* FGR4/T3**FIGHTER/GROUND ATTACK**3 sqn with *Tornado* GR4/4A3 sqn with *Typhoon* FGR4/T3**ISR**1 sqn with *Sentinel* R11 sqn with *Shadow* R1**ELINT**1 sqn with RC-135W *Rivet Joint***AIRBORNE EARLY WARNING & CONTROL**1 sqn with E-3D *Sentry***SEARCH & RESCUE**1 sqn with Bell 412EP *Griffin* HAR-2**TANKER/TRANSPORT**2 sqn with A330 MRTT *Voyager* KC2/3**TRANSPORT**1 (comms) sqn with AW109E/SP; BAe-146; BN-2A *Islander* CC21 sqn with A400M *Atlas*1 sqn with C-17A *Globemaster*3 sqn with C-130J/J-30 *Hercules***TRAINING**1 OCU sqn with *Tornado*1 OCU sqn with *Typhoon*1 OEU sqn with *Typhoon*, *Tornado*1 OCU sqn with E-3D *Sentry*; *Sentinel* R11 OEU sqn with E-3D *Sentry*; *Sentinel* R11 sqn with Beech 200 *King Air*1 sqn with EMB-312 *Tucano* T12 sqn with *Hawk* T1/1A/1W1 sqn with *Hawk* T23 sqn with *Tutor***COMBAT/ISR UAV**2 sqn with MQ-9A *Reaper***EQUIPMENT BY TYPE****AIRCRAFT** 254 combat capable**FGA** 194: 3 F-35B *Lightning* II (in test); 76 *Tornado* GR4/GR4A; 115 *Typhoon* FGR4/T3 (15 more Tranche 3 ac in store)**ISR** 11: 5 *Sentinel* R1; 6 *Shadow* R1**ELINT** 2 RC-135W *Rivet Joint***AEW&C** 6 E-3D *Sentry***TKR/TPT** 12 A330 MRTT *Voyager* KC2/3**TPT** 52: **Heavy** 14: 6 A400M *Atlas*; 8 C-17A *Globemaster*;**Medium** 24: 10 C-130J *Hercules*; 14 C-130J-30 *Hercules*;**Light** 10: 5 Beech 200 *King Air* (on lease); 2 Beech 200GT *King Air* (on lease); 3 BN-2A *Islander* CC2; **PAX** 4 BAe-146 CC2/C3**TRG** 202: 39 EMB-312 *Tucano* T1 (43 more in store); 101 G-115E *Tutor*; 28 *Hawk* T2\*; 32 *Hawk* T1/1A/1W\* (€40 more in store)**HELICOPTERS****MRH** 5: 1 AW139; 4 Bell 412EP *Griffin* HAR-2**TPT • Light** 3: 2 AW109E; 1 AW109SP**UAV • CISR • Heavy** 10 MQ-9A *Reaper***MSL****AAM • IR** AIM-9L/9L/L *Sidewinder*; **IIR** ASRAAM; **ARH** AIM-120B/C5 AMRAAM**ASM** *Brimstone*; *Dual-Mode Brimstone***LACM** *Storm Shadow***BOMBS****Laser-Guided/GPS:** *Paveway* II; GBU-10 *Paveway* III;Enhanced *Paveway* II/III; GBU-24 *Paveway* IV**Royal Air Force Regiment**

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**FORCES BY ROLE****COMMAND**

3 (tactical Survive To Operate (STO)) sqn

**MANOEUVRE****Other**

7 sy sqn

**COMBAT SUPPORT**

1 CBRN sqn

**Tri-Service Defence Helicopter School**

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**FORCES BY ROLE****TRAINING**1 hel sqn with Bell 412EP *Griffin* HT12 hel sqn with AS350B *Ecureuil*

**EQUIPMENT BY TYPE****HELICOPTERS**MRH 11 Bell 412EP *Griffin* HT1TPT • Light 27: 25 AS350B *Ecureuil*; 2 AW109E**Volunteer Reserve Air Forces**

(Royal Auxiliary Air Force/RAF Reserve)

**MANOEUVRE****Other**

5 sqn

**COMBAT SUPPORT**

2 int sqn

**COMBAT SERVICE SUPPORT**

1 med sqn

1 (air movements) sqn

1 (HQ augmentation) sqn

1 (C-130 Reserve Aircrew) flt

**UK Special Forces**

Includes Royal Navy, Army and RAF units

**FORCES BY ROLE****SPECIAL FORCES**

1 (SAS) SF regt

1 (SBS) SF regt

1 (Special Reconnaissance) SF regt

1 SF BG (based on 1 para bn)

**MANOEUVRE****Aviation**

1 wg (includes assets drawn from 3 army avn sqn, 1 RAF tpt sqn and 1 RAF hel sqn)

**COMBAT SUPPORT**

1 sigs regt

**Reserve****FORCES BY ROLE****SPECIAL FORCES**

2 (SAS) SF regt

**Cyber****Defence Cyber Operations Group****FORCES BY ROLE****COMBAT SUPPORT**

2 cyber unit

The Office of Cyber Security & Information Assurance (OSCIA) works with the Cyber Security Operations Centre and ministries and agencies to implement cyber-security programmes. CSOC is hosted by GCHQ. A Cyber Security Strategy was published in November 2011. The Defence Cyber Operations Group was set up in 2011 to place 'cyber at the heart of defence operations, doctrine and training'. This group was transferred to Joint Forces Command on this formation's establishment in April 2012. A Joint Forces Cyber Group was set up in 2013, including a Joint Cyber Reserve, providing support to two Joint Cyber Units and other information-assurance units across the defence establishment. Increased concern about the potential of information operations in and through the cyber domain was central to the 2015 creation of 77 Bde. Cyber was expected to feature significantly in the 2015 SDSR.

**DEPLOYMENT****Legal provisions for foreign deployment:**

**Constitution:** Uncodified constitution which includes constitutional statutes, case law, international treaties and unwritten conventions

**Decision on deployment of troops abroad:** By the government

**AFGHANISTAN**NATO • *Operation Resolute Support* 450; 1 inf bn(-)**ALBANIA**

OSCE • Albania 2

**ARABIAN SEA & GULF OF ADEN****Combined Maritime Forces** • CTF-150: 1 FFGHM**ARMENIA/AZERBAIJAN**

OSCE • Minsk Conference 1

**ASCENSION ISLAND**

20

**ATLANTIC (NORTH)/CARIBBEAN**

1 LSD

**ATLANTIC (SOUTH)**

1 FFGHM; 1 AORLH

**BAHRAIN**

20; 1 BAe-146

**BELIZE**

10

**BOSNIA-HERZEGOVINA**EU • EUFOR • *Operation Althea* 31

OSCE • Bosnia and Herzegovina 1

**BRITISH INDIAN OCEAN TERRITORY**

40; 1 Navy/Marine det

**BRUNEI**

2,000; 1 (Gurkha) lt inf bn; 1 jungle trg centre; 1 hel flt with 3 Bell 212

**CANADA**280; 2 trg units; 1 hel flt with SA341 *Gazelle* AH1**CYPRUS**2,800; 2 inf bn; 1 SAR sqn with 4 Bell 412 *Twin Huey*; 1 radar (on det)

*Operation Shader* 1 FGA sqn with 8 *Tornado* GR4; 1 *Sentinel* R1; 1 A330 MRTT *Voyager* KC3; 1 C-130J *Hercules*; 4 CH-47D *Chinook* HC4

UN • UNFICYP 276; 1 inf coy

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 5

**EGYPT**

MFO 1

**FALKLAND ISLANDS**1,010; 1 inf coy(+); 1 AD det with *Rapier*; 1 PSO; 1 ftr flt with 4 *Typhoon* FGR4; 1 tkr/tpt flt with C-130J *Hercules*

**GERMANY**

9,920; 1 armd inf bde

**GIBRALTAR**

410 (incl 175 pers of Gibraltar regt); 2 PB

**IRAQ***Operation Shader* 275 (trg team)**KENYA**

200 (trg team)

**KUWAIT**

40 (trg team)

*Operation Shader* MQ-9A *Reaper***MALI**

EU • EUTM Mali 26

UN • MINUSMA 2

**MEDITERRANEAN SEA**

EU • EU NAVFOR MED: 1 FFGHM

**MOLDOVA**

OSCE • Moldova 2

**NEPAL**

280 (Gurkha trg org)

**NETHERLANDS**

120

**NORTH SEA**

NATO • SNMCMG 1: 1 MHC

**OMAN**

70

**PERSIAN GULF****Combined Maritime Forces** • CTF-152: 1 DDGHM; 2 MCO; 2 MHC; 1 LSD**QATAR***Operation Shader* 1 RC-135W *Rivet Joint***SERBIA**

NATO • KFOR 1

OSCE • Kosovo 13

**SIERRA LEONE***Operation Gritrock* 27**SOUTH SUDAN**

UN • UNMISS 3

**UGANDA**

EU • EUTM Somalia 5

**UKRAINE**

OSCE • Ukraine 29

*Operation Orbital* 75 (trg team)**UNITED ARAB EMIRATES**1 tpt flt with C-17A *Globemaster*; C-130J *Hercules***UNITED STATES**

630

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**FOREIGN FORCES**

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**United States**

US European Command: 9,550; 1 ftr wg at RAF Lakenheath with (1 ftr sqn with 24 F-15C/D *Eagle*, 2 ftr sqn with 23 F-15E *Strike Eagle*); 1 ISR sqn at RAF Mildenhall with OC-135/RC-135; 1 tkr wg at RAF Mildenhall with 15 KC-135R *Stratotanker*; 1 CSAR sqn with 8 HH-60G *Pave Hawk*; 1 Spec Ops gp at RAF Mildenhall with (1 sqn with 5 CV-22B *Osprey*; 1 sqn with 5 MC-130J *Commando II*) • US Strategic Command: 1 AN/FPS-132 Upgraded Early Warning Radar and 1 *Spacetrack* radar at Fylingdales Moor



Table 6 Selected Arms Procurements and Deliveries, Europe

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Belgium (BEL)</b>								
A400M <i>Atlas</i>	Hvy tpt ac	7	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2018	Delivery expected 2018/19
NH90 NFH/TTH	ASW/ Med tpt hel	8	€293m (US\$400m)	FRA/GER/ ITA/NLD	NH Industries	2007	2012	IOC declared in Jun 2015. Final ASW hel being prepared for delivery as of late 2015
<b>Croatia (CRO)</b>								
PzH 2000	Arty (155mm SP)	12	€41m (US\$45.6m)	GER	Government surplus	n.k.	2015	Deliveries to be complete by end of 2016
<b>Denmark (DNK)</b>								
MH-60R <i>Seahawk</i>	ASW hel	9	DKK4bn (US\$686m)	US	Lockheed Martin (Sikorsky)	2012	2016	To replace <i>Lynx</i> . First hel accepted Oct 2015 and will be delivered in 2016
<b>Estonia (EST)</b>								
CV9035	AIFV	44	n.k.	NLD	Government surplus	2014	2016	Ex-NLD army surplus veh
<i>Javelin</i>	MANPATS	80	€40m (US\$53.2m)	US	Lockheed Martin and Raytheon	2014	n.k.	-
<b>Finland (FIN)</b>								
<i>Leopard 2A6</i>	MBT	100	n.k.	NLD	Government surplus	2014	2015	Deliveries ongoing
<b>France (FRA)</b>								
<i>Jaguar</i>	Recce	n.k.	n.k.	FRA	GME	2014	2020	To replace AMX-10RC, ERC-90 <i>Sagaie</i> and VAB HOT
<i>Griffon</i>	APC (W)	n.k.	n.k.	FRA	GME	2014	2018	To replace VAB
MMP	MANPATS	400	n.k.	Int'l	MBDA	2014	2017	To replace <i>Milan</i>
<i>Barracuda</i> -class	SSN	6	€8bn (US\$10.5bn)	FRA	DCNS	2006	2017	One SSN to be delivered every two years until 2027. First boat to enter service 2017
<i>Aquitaine</i> -class	DDGHM	8	n.k.	FRA	DCNS	2002	2012	Second of class sold to EGY. FRA now to get eight ships instead of 11. Fourth ship for FRA launched Sep 2015
<i>Frégates de taille intermédiaire</i>	FFGHM	5	n.k.	FRA	DCNS	2015	2023	To replace <i>LaFayette</i> -class
<i>D'Entrecasteaux</i> -class	PSO	4	n.k.	FRA	Kership	2013	2016	For use in overseas territories. Fourth of class ordered in May 2015. First of class launched May 2015
MdCN	LACM	150	See notes	FRA/GER/ ITA/UK	MBDA	2007	2015	Original contract value €910m (US\$1.2bn) for 250 msl. IOC with <i>Barracuda</i> -class SSN in 2018
<i>Rafale</i>	FGA ac	180	n.k.	FRA	Dassault	1984	2006	140 delivered as of late 2015
A400M <i>Atlas</i>	Hvy tpt ac	50	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2013	Seven delivered as of late 2015
A330 MRTT	Tkr/Tpt ac	12	€3bn (US\$3.8bn)	Int'l	Airbus Group (Airbus Defence & Space)	2014	2018	-

Table 6 Selected Arms Procurements and Deliveries, Europe

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<i>Tiger</i>	Atk hel	80	n.k.	Int'l	Airbus Group (Airbus Helicopters)	1999	2005	40 HAP, 40 HAD variant. All HAP delivered. First HAD variant delivered Apr 2013
NH90 NFH	ASW hel	27	n.k.	FRA/GER/ITA/NLD	NH Industries	2000	2010	For navy; deliveries ongoing
NH90 TTH	Med tpt hel	68	n.k.	FRA/GER/ITA/NLD	NH Industries	2007	2012	For army; deliveries ongoing
MQ-9 <i>Reaper</i>	ISR UAV	16	US\$1.5bn	US	General Atomics	2013	2014	Deliveries ongoing
<i>Meteor</i>	AAM	200	n.k.	FRA/GER/ITA/UK	MBDA	2011	2018	For integration with <i>Rafale</i> F3-R
CERES System	SIGINT satellites	3	n.k.	Int'l/FRA	Airbus Group (Airbus Defence & Space)/Thales (Thales Alenia Space)	2015	2020	-
<b>Germany (GER)</b>								
<i>Leopard 2A7</i>	MBT	20	n.k.	GER	KMW	2007	2015	Deliveries ongoing
<i>Puma</i>	AIFV	350	n.k.	GER	PSM	2007	2015	To replace <i>Marder</i> 1A3/A4/A5 AIFVs. Order reduced from 450. Deliveries ongoing
<i>Boxer</i> (8x8)	APC (W)	403	€2.1bn (US\$2.7bn)	GER/NLD	ARTEC GmbH	2006	2009	Original order for 272 (135 APC, 65 CP variants, 72 ambulances). Additional 131 authorised in Nov 2014
Type-212A	SSK	2	n.k.	GER	TKMS (HDW)	2006	2014	U-35 in service 2014. U-36 ISD expected 2015
<i>Baden-Württemberg-class</i>	DDGHM	4	€2bn (US\$2.6bn)	GER	TKMS	2007	2016	First to be delivered end of 2016. Final delivery due late 2018
<i>Eurofighter Typhoon</i>	FGA ac	143	n.k.	GER/ITA/ESP/UK	Eurofighter GmbH (Airbus Defence & Space)	1998	2003	129 delivered as of late 2015
A400M <i>Atlas</i>	Hvy tpt ac	53	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2014	First ac delivered late 2014
<i>Tiger</i> (UHT variant)	Atk hel	68	See notes	Int'l	Airbus Group (Airbus Helicopters)	1984	2005	Parliament approved reduced deal for 68 <i>Tiger</i> , 18 NH90 <i>Sea Lion</i> and 82 NH90 TTH for €8.46bn (US\$11.2bn)
NH90 <i>Sea Lion</i>	ASW hel	18	See notes	FRA/GER/ITA/NLD	NH Industries	2013	2017	Parliament approved reduced deal for 68 <i>Tiger</i> , 18 NH90 <i>Sea Lion</i> and 82 NH90 TTH for €8.46bn (US\$11.2bn)
NH90 TTH	Med tpt hel	82	See notes	FRA/GER/ITA/NLD	NH Industries	2000	2007	Parliament approved reduced deal for 68 <i>Tiger</i> , 18 NH90 <i>Sea Lion</i> and 82 NH90 TTH for €8.46bn (US\$11.2bn). 50 for army, 32 for air force. Deliveries ongoing
<i>Meteor</i>	AAM	n.k.	n.k.	FRA	MBDA	2013	n.k.	For integration with <i>Typhoon</i>
<b>Greece (GRC)</b>								
<i>Katsonis-class</i>	SSK	6	€1.67bn (US\$2.2bn)	GER	TKMS	2000	2010	Second boat launched Oct 2014
NH90 TTH	Med tpt hel	20	€657m (US\$915m)	FRA/GER/ITA/NLD	NH Industries	2002	2011	16 tac tpt variants and four Special Operations variants. Option on further 14

Table 6 Selected Arms Procurements and Deliveries, Europe

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Ireland (IRL)</b>								
<i>Samuel Beckett</i> -class	PSO	3	€199.3m (US\$265m)	UK	Babcock Marine	2010	2014	Second of class commissioned Sep 2015. Third of class to be delivered mid-2016
<b>Italy (ITA)</b>								
<i>Todaro</i> -class	SSK	2	€915m (US\$1.34bn)	ITA	Fincantieri	2008	2015	Second batch; option exercised from 1996 contract. With AIP. Second boat of the order launched Jul 2015
<i>Bergami</i> -class	DDGHM	10	n.k.	FRA/ITA	Orizzonte Sistemi Navali	2002	2013	Fourth of class commissioned in early 2015. Ninth and tenth vessels ordered in 2015
<i>Pattugliatori Polivalenti d'Altura</i>	FFGHM	6	See notes	ITA	Fincantieri/Finmeccanica	2015	2020	Six frigates and a logistics support ship for €3.5bn (US\$3.9bn). Option for four more frigates
n.k.	LHD	1	€1.1bn (US\$1.2bn)	ITA	Fincantieri/Finmeccanica	2015	2022	To replace <i>Garibaldi</i> , <i>San Giorgio</i> and <i>San Giusto</i> classes
Logistics Support Ship	AFS	1	See notes	ITA	Fincantieri/Finmeccanica	2015	2019	Six frigates and a logistics support ship for €3.5bn (US\$3.9bn)
<i>Eurofighter Typhoon</i>	FGA ac	96	n.k.	GER/ITA/ESP/UK	Eurofighter GmbH (Finmeccanica)	1998	2004	Deliveries ongoing
F-35A <i>Lightning II</i>	FGA ac	8	n.k.	US	Lockheed Martin	2013	2015	First ac rolled off production line Mar 2015
Gulfstream G550 CAEW	AEW&C ac	2	US\$750m	ISR	IAI	2012	2015	First ac being outfitted with mission systems suite prior to delivery
ATR-72MP	MP ac	4	€360–400m (US\$500m)	ITA	Finmeccanica (Alenia Aermacchi)	2009	n.k.	To be fitted with maritime surr suite. First ac in test as of late 2014
NH90 NFH/TTH	ASW/Med tpt hel	116	n.k.	FRA/GER/ITA/NLD	NH Industries	2000	2007	60 TTH for army; 46 NFH and 10 TTH for navy. Deliveries ongoing
CH-47F <i>Chinook</i>	Hvy tpt hel	16	€900m (US\$1.2bn)	US	Boeing	2009	2014	Deliveries ongoing
AW101 (HH-101A <i>Caesar</i> )	CSAR hel	12	n.k.	UK	Agusta-Westland	n.k.	2015	For air force; first hel delivered Jun 2015
P.1HH	UAV	6	n.k.	ITA	Piaggio Aerospace	2015	2016	-
<i>Meteor</i>	AAM	n.k.	n.k.	FRA	MBDA	n.k.	n.k.	For integration with <i>Typhoon</i>
<b>Latvia (LVA)</b>								
CVR(T) Family	AFV	123	€48m (US\$67.5m)	UK	Government surplus	2014	2015	Total includes four variants. Deliveries ongoing
AN/TPS-77	AD Radar	3	n.k.	US	Lockheed Martin	2015	n.k.	-
<b>Lithuania (LTU)</b>								
PzH 2000	Arty (155mm SP)	21	€58.3m (US\$65m)	GER	Government surplus	2015	2016	Order also includes 26 M577 V2 CPs and 6 BPZ-2 ARVs
<b>Luxembourg (LUX)</b>								
A400M <i>Atlas</i>	Hvy tpt ac	1	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2018	-

Table 6 Selected Arms Procurements and Deliveries, Europe

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>NATO</b>								
RQ-4 <i>Global Hawk</i> Block 40	ISR UAV	5	€1.3bn (US\$1.7bn)	US	Northrop Grumman	2012	2017	Part of NATO's Alliance Ground Surveillance programme. First ac rolled out in Jun 2015
<b>Netherlands (NLD)</b>								
<i>Boxer</i> (8x8)	APC (W)	200	€595m (US\$747m)	GER/NLD	ARTEC GmbH	2006	2013	To replace YPR 765. Deliveries ongoing
F-35A <i>Lightning II</i>	FGA ac	10	n.k.	US	Lockheed Martin	2013	2014	Two test ac delivered. Eight production ac ordered in 2015
CH-47F <i>Chinook</i>	Hvy tpt hel	14	n.k.	US	Boeing	2015	2019	-
NH90 NFH/TTH	ASW/ Med tpt hel	20	n.k.	FRA/GER/ ITA/NLD	NH Industries	2001	2011	12 for ASW, eight for coast guard. FOC expected 2017. 18 delivered as of late 2015
<b>Norway (NOR)</b>								
CV90	AIFV/AIFV upgrade	144	GB£500m (US\$750m)	UK	BAE Systems (BAE Land & Armaments)	2012	2015	41 new build CV90s and 103 existing CV9030s to be upgraded. Two pre-series upgraded CV9030s in trials. Deliveries ongoing
F-35A <i>Lightning II</i>	FGA ac	10	n.k.	US	Lockheed Martin	2012	2015	First two ac in test in late 2015
<b>Poland (POL)</b>								
<i>Leopard 2A4/5</i>	MBT	119	€180m (US\$243m)	GER	Government surplus	2013	2014	105 <i>Leopard 2A5</i> and 14 <i>Leopard 2A4</i> . Delivery to be complete in 2015
<i>Rosomak</i>	AIFV	997	US\$2.2bn	FIN	Patria	2003	2004	Includes 2013 follow-up order for 307
<i>Krab</i>	Arty (155mm SP)	120	n.k.	POL/ROK	HSW/Samsung Techwin	2014	2016	Veh in tests, production to begin afterwards
<i>Komorán</i> 2-class	MCO	3	n.k.	POL	Remontowa Shipbuilding	2013	2016	First of class launched Jul 2015
<b>Romania (ROM)</b>								
F-16AM/BM <i>Fighting Falcon</i>	FGA ac	12	US\$250m	PRT	Government surplus	2013	2016	Nine ex-PRT F-16 MLUs and three ex-USAF ac upgraded to MLU status by PRT
<b>Slovakia (SVK)</b>								
<i>Rosomak</i>	AIFV	30	n.k.	POL	WZMS	2015	n.k.	Local designation will be <i>Scipio</i>
UH-60M <i>Black Hawk</i>	Med tpt hel	4	US\$46.1m	US	Lockheed Martin (Sikorsky)	2015	2017	-
<b>Spain (ESP)</b>								
S-80A	SSK	4	n.k.	ESP	Navantia	2003	2017	Delivery further delayed by redesign. Waiting for approval from MoD to commence building
Eurofighter <i>Typhoon</i>	FGA ac	74	n.k.	GER/ITA/ ESP/UK	Eurofighter GmbH (Airbus Defence & Space)	1998	2003	Deliveries since 2012 have gone into storage

Table 6 Selected Arms Procurements and Deliveries, Europe

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
A400M <i>Atlas</i>	Hvy tpt ac	27	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2018	First delivery now scheduled for 2018. Current plans envisage an operational fleet of only 14 ac
<i>Tiger</i> (HAP/HAD)	Atk hel	24	€1.4bn (US\$1.9bn)	Int'l	Airbus Group (Airbus Helicopters)	2003	2007	Six HAP-E delivered 2007/8. HAD-E variant deliveries ongoing
NH90 TTH	Med tpt hel	45	n.k.	FRA/GER/ITA/NLD	NH Industries	2007	2012	Discussions over proposed order reduction to 22 hel. Deliveries ongoing
<i>Meteor</i>	AAM	n.k.	n.k.	FRA	MBDA	n.k.	n.k.	For integration with <i>Typhoon</i>
<b>Sweden (SWE)</b>								
FH-77 BW L52 <i>Archer</i> 6x6	Arty (155mm SP)	24	n.k.	UK	BAE Systems (BAE Land & Armaments)	2010	2013	Four delivered Sep 2013; series production deliveries from 2016
<i>Gripen</i> E/F	FGA ac	60	US\$2.5bn	SWE	Saab	2013	2018	-
NH90 NFH/TTH	ASW/ Med tpt hel	18	n.k.	FRA/GER/ITA/NLD	NH Industries	2001	2007	13 TTT/SAR hel and five ASW variants. Option for seven further hel
<i>Meteor</i>	AAM	n.k.	n.k.	FRA	MBDA	n.k.	2016	For integration with <i>Gripen</i>
<b>Turkey (TUR)</b>								
<i>Altay</i>	MBT	4	US\$500m	TUR	Otokar	2007	2014	Prototypes. Plans to order up to 250 more after testing
<i>Firtina</i> 155mm/52-cal	Arty (155mm SP)	350	n.k.	ROK	Samsung Techwin	2001	2003	ROK Techwin K9 <i>Thunder</i> . Total requirement of 350. Deliveries ongoing
<i>Kirpi</i>	PPV	468	n.k.	TUR	BMC	2009	2010	Delivery resumed after 2011 suspension
Type-214	SSK	6	€1.96bn (US\$2.9bn)	GER	MFI/TKMS (HDW)	2011	n.k.	To be built at Golcuk shipyard. First of class laid down Oct 2015
<i>Ada</i> -class	FFGHM	4	n.k.	TUR	Istanbul Naval Shipyard/RMK Marine	1996	2011	Two in service by late 2014. Contract re-tendered and third and fourth vessels are being built at Istanbul Naval Shipyard
n.k.	LHD	1	n.k.	TUR/ESP	SEDEF/Navantia	2015	2021	Based on <i>Juan Carlos I</i> -class. To be built in TUR with Navantia's assistance
ATR-72MP/ATR-72	MP ac/Lt tpt ac	8	€260m (US\$345m)	ITA	Finmeccanica (Alenia Aermacchi)	2005	2013	Programme delayed; order revised in 2013 to six MP and two utl ac. First utl ac del Jul 2013. First MP ac due Feb 2017
B-737 AEW	AEW&C ac	4	US\$1bn	US	Boeing	2002	2014	<i>Peace Eagle</i> programme. Three delivered as of late 2014; final ac in test
A400M <i>Atlas</i>	Hvy tpt ac	10	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2014	Second ac delivered late 2014. Third ac crashed on maiden flight
T-129B	Atk hel	50	US\$3bn	TUR/ITA	TAI/Aselsan/Finmeccanica (Agusta Westland)	2007	2015	Option on a further 41
CH-47F <i>Chinook</i>	Hvy tpt hel	6	n.k.	US	Boeing	2011	2016	Original aim to acquire 14 for US\$1.2bn, but order cut to six; five for army and one for SF Comd
S-70i <i>Black Hawk</i>	Med tpt hel	109	US\$3.5bn	TUR/USA	TAI/Aselsan/Sikorsky	2014	n.k.	To be built in Turkey and designated T-70
<i>Gokturk-1</i>	Satellite	1	€270m (US\$380m)	ITA/FRA	Telespazio/Thales	2009	2016	Launch delayed until mid-2016



Table 6 **Selected Arms Procurements and Deliveries, Europe**

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>United Kingdom (UK)</b>								
<i>Ajax (Scout)</i>	Recce	589	GB£3.5bn (US\$5.76bn)	US	General Dynamics	2014	2017	Six variants
<i>Astute-class</i>	SSN	6	n.k.	UK	BAE Systems	1994	2010	Third of class in trials as of late 2015
<i>Queen Elizabeth-class</i>	CV	2	GB£3.9bn (US\$8bn)	UK	BAE Systems	2007	2016	Both vessels now to be brought into service. First of class launched in 2014
<i>Tide-class</i>	AOT	4	GB£452m (US\$716m)	ROK	Daewoo Shipbuilding and Marine Engineering (DSME)	2012	2016	MARS programme
<i>Eurofighter Typhoon</i>	FGA ac	160	n.k.	GER/ITA/ESP/UK	Eurofighter GmbH (BAE Systems)	1998	2004	Deliveries ongoing. Tranche 3 ac being put into storage
<i>F-35B Lightning II</i>	FGA ac	14	n.k.	US	Lockheed Martin	2008	2012	Three delivered and in test in US. LRIP 9 includes six ac for UK
<i>Voyager (A330-200 MRTT)</i>	Tkr/Tpt ac	14	GB£13bn (US\$26bn)	Int'l	AirTanker Consortium	2008	2011	All regular ac delivered; first surge ac delivered Feb 2015
<i>RC-135 Rivet Joint</i>	ELINT ac	3	εGB£700m (US\$1bn)	US	Boeing	2010	2013	Second ac delivered late 2015
<i>A400M Atlas</i>	Hvy tpt ac	22	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2003	2014	Sixth ac delivered Nov 2015
<i>AW159 Wildcat</i>	MRH	62	GB£1bn (US\$1.8bn)	ITA	Finmeccanica	2006	2012	34 for army, 28 for navy. Option for a further four hel
<i>CH-47F Chinook (HC6)</i>	Hvy tpt hel	14	GB£1bn (US\$1.6bn)	US	Boeing	2011	2013	12th hel delivered late 2015
<i>Meteor</i>	AAM	n.k.	n.k.	FRA	MBDA	n.k.	2018	For integration with <i>Typhoon</i>

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## RUSSIA

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Russia's decision, in September 2015, to deploy combat forces to Syria reshaped focus on the capabilities of the Russian armed forces and the results of Russia's ongoing military-reform programme. A year after they occupied Crimea and deployed in support of separatists in eastern Ukraine, Russian troops have remained active near the border with Ukraine – and some, it is widely reported, are still in eastern Ukraine itself.

The decision to militarily support Syrian President Bashar al-Assad's embattled regime and to take an active part in the Syrian civil war was a departure in a relationship previously limited (at least publicly) to diplomatic support as well as the supply of defence materiel, and constituted a significant step. At the end of October, the intervention seemed to comprise mainly combat air assets, particularly air-to-ground capabilities, operating primarily against rebel groups in direct combat with regime forces in the west of the country, though Russian airstrikes have also targeted Islamic State of Iraq and al-Sham forces more widely in the country.

Moscow may be keen to avoid involving regular forces from service branches other than the air force and any special forces operating in a training-and-support role, particularly in extended ground operations. Broadly, Russian activity is designed to support the actions of regime and allied ground forces. But for military as well as political analysts, the deployment is significant as it allows a chance to assess the performance of another arm of Russia's armed forces on active service. Since 2014 there has been an opportunity to examine elements of Russian ground forces, but the Syria operation provides a chance to analyse the air force, in a manner that has not been possible since the 2008 war in Georgia. It also allows for the examination of the modernisation process eight years after the start of the Novy Oblik reforms (see previous editions of *The Military Balance*), and possibly also an insight into how that process has changed since the defence-ministerial portfolio passed from Anatoly Serdyukov to Sergei Shoigu.

### Syria mission

Initial indications as of October 2015 were that the mission constituted an improvement over perfor-

mance in the Georgia campaign. Just as Georgian forces deployed some capable anti-air systems and had successes against Russian aircraft, Syrian rebels have demonstrated the ability to down Syrian combat aircraft during the civil war; Russian aircraft are not being operated in a benign environment. Indeed, the November Su-24 shootdown highlighted the risks inherent in such a mission. The level of military organisation, including command and control, and the ability to deploy precision munitions – mainly satellite-guided bombs, but also the *Kalibr* land-attack cruise missile – indicated a developing ability to coordinate during operations.

However, it was also apparent that numbers of precision munitions remained limited; much of the weaponry consisted of 'dumb' high-explosive fragmentation bombs. Additionally, the air force remains short of persistent unmanned-aerial-vehicle (UAV) capability, particularly in the medium-/high-altitude long-endurance area, meaning target assessment and damage assessment would be more reliant on human sources, communications and electronic intercepts, and satellite imagery than would be the case in modern Western armed forces.

It is believed that many of the aircrew deployed are from front-line units. Back in 2008, experienced pilots had to be reassigned from test duties due to a shortage of front-line crews. But while it remains difficult to draw from this conclusive lessons for the wider armed forces, an extended deployment may yet lead to some stretch for available aircrew unless deployment schedules are carefully managed. Meanwhile, operating conditions might raise some concern in time, though initially many assets were deployed from the Central Military Region, where aircrew and maintainers would have become accustomed to austere environments.

There was no significant rotation of forces in theatre by the end of October, so it was unclear how well the Russian air force was able to manage deployment cycles for its aircraft, aircrew and support staff. Russia's last military deployment at such range took place decades earlier, in Afghanistan, so Moscow will be grappling with sustainment requirements that it has not had to consider for some time. Some

supplies may be moved rapidly by the use of airlift assets, such as An-124 or Il-76 heavy transport aircraft, but much will also be moved by sea. Russia has for years been transiting limited numbers of ships, mainly LSTs (landing ship-tank), through the Bosphorus to its Syrian base at Tartus but, together with the continuing requirements for materiel of Syria's armed forces, the demands of this new deployment will be placing additional stresses on Russia's maritime supply fleet. It was significant, in this regard, that reports emerged in late 2015 of the purchase of at least six old cargo vessels, their subsequent reflagging under Russian naval-auxiliary colours and the sighting of at least two passing through the Bosphorus by the end of October.

The Syria operation will constitute a challenge for Russia's armed forces. Coming a year after ground operations began in Ukraine, it not only allows Western observers to assess some of the results of the military-reform process and the current capabilities of Russia's armed forces, but it also allows Moscow to do the same. The lessons gathered from this operation, even as early as October 2015, will be keenly observed, as the mission constitutes a combat test not just of Russia's air force, but also of its ability to manage and resupply missions abroad.

### **New military doctrine**

In December 2014, Russia published an updated military doctrine. Overall, there were few significant departures from the version published in 2010, with changes reflecting Moscow's view of a contemporary international security environment 'characterized by the strengthening of global competition', as the document put it. The main external military dangers were listed as the build-up of NATO's capabilities and the process of 'bringing the military infrastructure of NATO member countries near the borders of the Russian Federation, including by further expansion of the alliance'.

The fourth group of military dangers was the 'establishment and deployment of strategic missile defence systems undermining global stability and violating the established balance of forces related to nuclear missiles, implementation of the global strike concept, intention to place weapons in outer space, as well as deployment of strategic non-nuclear systems of high-precision weapons'. The mention of 'strategic missile defence systems' as a military danger is reflective of a capability that is a long-held matter of concern for Moscow, exacerbated by technical developments in US missile defence, as well as by the NATO plan

to activate *Aegis* Ashore missile-defence systems in Eastern Europe. Meanwhile, the reference to global strike would seem directed at the US prompt-global-strike concept, which Moscow fears could provide Washington with a conventional-missile-based strike option of such high speed and precision that it would lower the threshold for a disarming first strike.

With one eye on events in Ukraine since the toppling of the Yanukovich administration, the document also highlighted a military risk from the establishment of regimes whose 'policies threaten the interests of the Russian Federation' in states neighbouring Russia, 'including by overthrowing legitimate state administration bodies', as well as subversive activities by foreign intelligence services against the Russian Federation. Events in Ukraine are also reflected in the doctrine's new provision on the 'participation in military operations of irregular military formations and private military companies [sic]' as a characteristic of modern military conflicts, along with the 'use of indirect and asymmetric' forms of warfare.

The protection of Russia's national interests in the Arctic has been added to the peacetime tasks of the Russian armed forces. Priorities for military-political cooperation now include 'ensuring common defense and security' with the breakaway Georgian regions of Abkhazia and South Ossetia, both recognised as independent states by Russia since 2008. Actions to improve the armed forces' permanent and mobilisation readiness, and the health of Russia's defence-industrial sector, are also given prominent emphasis in the new doctrine.

### **Personnel issues**

Though there has been some improvement, on the whole Russia's armed forces still suffer the effects of personnel problems noted in previous editions of *The Military Balance*. Russia is still at the bottom of the demographic trough that resulted from the collapse of the birth rate in the 1990s, and every year only about 700,000 men reach conscription age. With conscription bringing personnel into the armed forces for one year's mandatory service, the armed forces have long looked to recruit professional service personnel, the so-called 'contract-service' soldiers, to staff more technologically advanced armed services held at high readiness. Presently, these latter personnel mainly serve in the Airborne-Assault troops and other special-operations forces, but also work on submarines and other complex equipment.

In recent years, ambitious targets for the recruitment of contract personnel have been set, if rarely met. But improvements in pay and conditions, and incentives such as a reported offer for subsidised mortgages for personnel serving over three years, have contributed to a year-on-year increase in the number of contract-service personnel. At the end of 2014, there were 295,000 such personnel in the armed forces, with their number for the first time exceeding that of conscripts by April 2015, according to Defence Minister Shoigu. This apparently allowed the level of manning in the army to be raised to 92.5% of establishment strength. The plan was to increase, by the end of 2015, the number of contract soldiers to 350,000, though media sources reported that this had been achieved by September. And the ambitious plans continue. It is planned that by 2020, two-thirds of soldiers and non-commissioned officers (NCOs) will serve as contract personnel, with their number increasing to 499,000. The other third will continue to be conscripted, which will require the conscript term of service to be kept at the current level. However, analysts have observed that these numbers do not remain constant, and at the same time that new contract personnel sign on, others leave at the end of their service, meaning that maintaining attractive terms of service and recruitment efforts will be needed to sustain this pace of expansion.

Retaining conscription is important as both a social function and a means of providing a pool of potential recruits for contract service, but retaining a mixed manning structure causes problems in units intended to be kept at heightened combat readiness, due to the cycle of conscription and demobilisation. Indeed, during the initial phases of the Crimea operation, some special-forces units could not be deployed in full as they included a conscript contingent only drafted the previous autumn. To address this problem, the plan is for the Airborne-Assault troops, naval infantry and special-forces units that are part of the Rapid Reaction Forces to be fully manned with contract-service personnel. Some of the other units and sub-units will also be fully manned with contract soldiers. But this still does not mean that these units will be fully professional in their entirety; there are, for example, no plans for the entire Airborne-Assault troops to switch fully to contract service – only two of the three battalions in any one regiment will be fully manned with contract soldiers.

The lack of an effective functioning NCO cadre has also been a significant brake on the profession-

alisation process. The armed forces intend to create a fully professional NCO corps by 2016. While there is little in the way of hard information on this process, military units were in 2015 reportedly still publishing vacancy notices for significant numbers of contract sergeants as truck drivers – a position previously held by conscripts – perhaps indicating that there is still some way to go.

Meanwhile, renewed momentum has been given to the concept of a voluntary high-readiness contract-service reserve force, following its establishment by presidential decree in 2015. Initially, this force will recruit 5,000–8,000 high-value specialists from among demobilised contract-service personnel, but it has limited funds and, as the target numbers indicate, it is an experimental project.

### Exercises and deployments

The practice of holding snap exercises continued in 2015, and has become a routine way to check the combat capability of military districts and individual formations. These inspections complement traditional exercises during normal combat-training periods – the place, time and scenario of which are usually known some time in advance. In contrast, units are not warned about snap exercises. After they receive the order, they are brought to the highest degree of combat readiness and within no more than 24 hours are deployed on manoeuvres, often to unfamiliar territory. Although these exercises are costly, they are seen as an effective way to maintain rapid-response capabilities, as they are designed to match operational conditions as closely as possible.

The group of Russian forces in the Arctic continues to be reinforced, as part of the long-heralded, but relatively slow-moving, return to the 'High North'. On 1 December 2014, the new Joint Strategic Command–North was officially established. Its core is the Northern Fleet, with some military units of the Western, Central and Eastern military districts stationed in the Russian Arctic subordinated to it, including two newly formed Arctic motor-rifle brigades. By the end of 2015, it was to be joined by a new air-force and air-defence army, including regiments armed with MiG-31 interceptor aircraft and S-400 air-defence missile systems and radar units. One task will be to restore continuous radar coverage along Russia's entire northern coast, which was lost in the 1990s. To that end, forward military bases will be set up in the Franz Josef archipelago, Novaya Zemlya, the New Siberian Islands, Wrangel Island and

Chukotka. The network of northern airfields suitable as fighter and strategic-bomber bases is also being restored. But there have been aspirations to recreate facilities in the north for some time, and the disrepair into which existing bases had fallen, coupled with the harsh environment, are among the factors that have so far hindered the move back to the north.

Since early 2014, Russia has maintained a large group of forces, in the order of 20,000–30,000 troops, on the border with Ukraine. Military units rotate in and out, each for a period of two to three months. As a result, the forces of all the military districts, including units from Siberia and the Russian Far East, have, in effect, been continuously exercised. The concept of unified command, new for Russia, has for the first time been tested in practice during actions on the border, where Military District land-forces units, Airborne Troops and Naval Infantry are under the single operational command of the military-district headquarters, and act together. Russian humanitarian convoys still cross the border into Ukraine, and there were through to late 2015 continued reports of Russian personnel operating in Ukraine's east, albeit on a reduced scale. Kiev, however, still claimed that Russia continued to support significant forces in the Donbas region.

Important changes are taking place along the border with Ukraine. The headquarters of the Russian 20th Guards Combined-Arms Army is moving from Nizhniy Novgorod to Voronezh, closer to the border. The border itself, which previously had weak military protection, will now be reinforced with a group of forces including the 1st Tank Brigade, the 9th Motor Rifle Brigade and the 82nd Radio-Technical Brigade. It is planned that in 2017–18 a new air-assault brigade will be formed in the border region, consolidating the constant presence of Russian troops in that area.

Meanwhile, Russia has strengthened its military group of forces in Crimea and completed the integration of former Ukrainian military units and troops there (see map 4, p. 175). The largest ground-forces units of the Armed Forces of Ukraine (VSU) in Crimea – a mechanised coastal-defence brigade and a coastal-artillery regiment – have changed their names but are manned largely by ex-VSU soldiers and officers who took up Russian military service. In summer 2015, the establishment of a self-contained group of forces in the peninsula was announced. As in the Kaliningrad region, the inter-service group of forces set up in Crimea is under the operational control of the navy, although it includes the land-forces component noted above. So, in addition to the Black Sea Fleet, a group

of forces corresponding to a combined-arms army has been deployed in Crimea, reinforced by a mixed aviation division from the air force (the 27th Composite Air Division) and powerful air defences (the 31st Air Defence Division). The air and air-defence units are under the control of the Aerospace Defence Forces, while the ground and naval-infantry troops are under the control of the Black Sea Fleet. To support this significant group of forces, a major programme to build housing and ancillary facilities, as well as to restore airfields, has started on the peninsula.

In terms of Russia's land forces, there have been increasingly noticeable departures from the *Novy Oblik* reforms initiated by former minister Serdyukov. The army level, which was abolished in the course of those reforms, was restored, as it was felt that this would help better manage units deployed in separate military districts. In addition, the 1st Guards Tank Army was formed, with the units deployed near Moscow handed over to it, including the 2nd Motor Rifle and the 4th Tank divisions, as well as the 6th Separate Tank Brigade and the 27th Separate Motor Rifle Brigade. It appears that a decision was taken to retain the traditional regiment-based structure for the reconstituted divisions. Similarly, the previous minister's concept of brigades, standardised as light, medium and heavy, has not been progressed. Nevertheless, land-forces brigades continue to be differentiated according to the types of equipment used; it was found when trialling the 'light/medium/heavy' construct that further subdivisions into categories such as 'motor-rifle' had to be made, thus failing to deliver the planned standardisation.

## Armed services

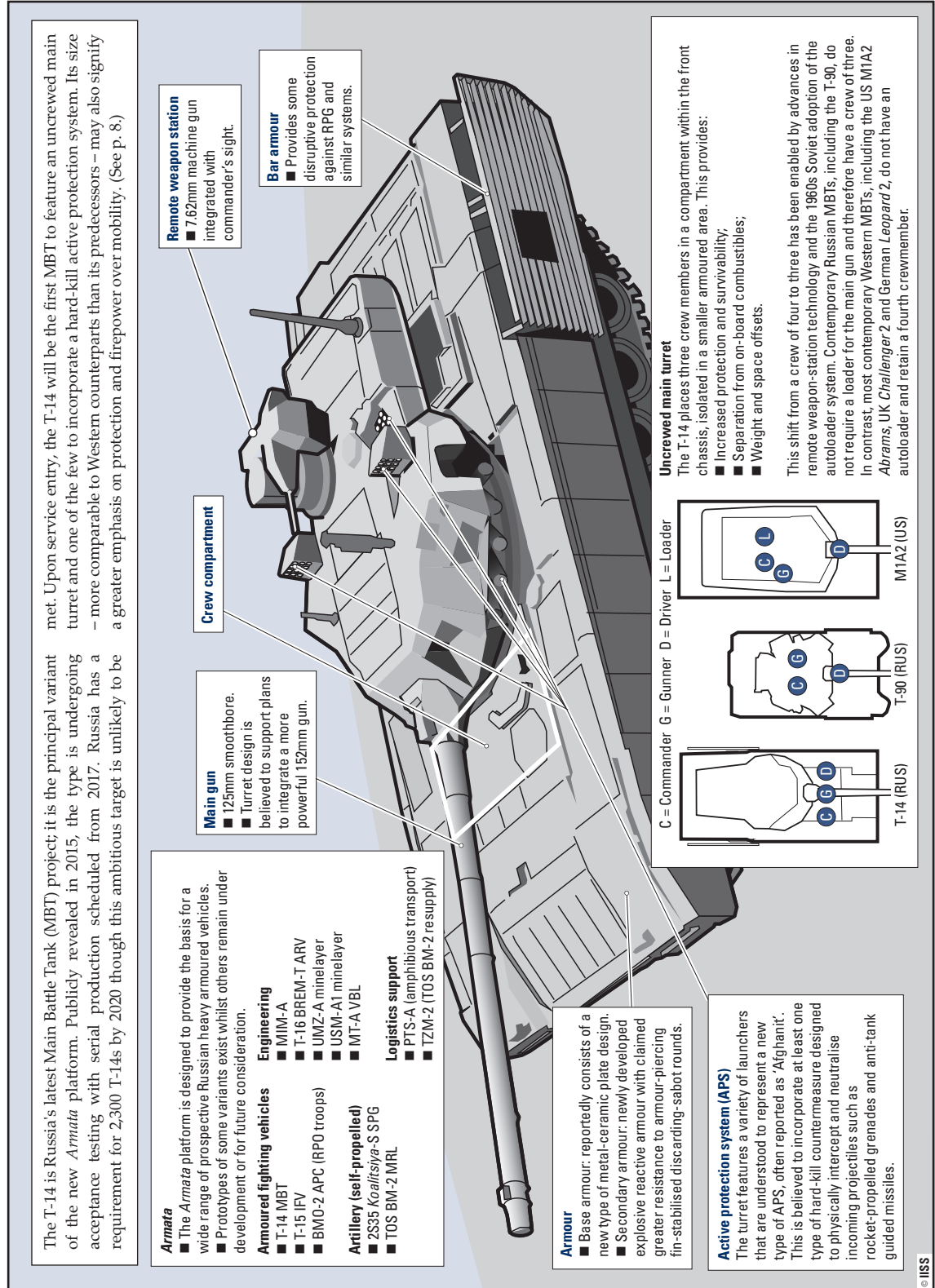
### *Land forces*

Several new armoured platforms were demonstrated at the Victory Day Parade on 9 May 2015. A main battle tank, the T-14, and a heavy infantry fighting vehicle (IFV) based on the *Armata* platform; the new *Koalitsiya-SV* self-propelled gun (SPG); a medium tracked IFV on the *Kurganets-25* platform; and the *Bumerang* wheeled armoured personnel carrier were seen (see p. 8). Notably, all of these models have increased in size and weight compared to their Soviet-era predecessors. These changes are designed to improve both protection and conditions for the crew and mounted troops, as are the active protection systems observed on some of the vehicles.

The number of combat vehicles at the parade was less than that originally announced, which may indi-



Figure 8 Russia's T-14 Armata Main Battle Tank



cate a delay in their production. This theory is also borne out by the situation with the new *Koalitsiya-SV* SPG. Instead of using the chassis of the *Armata* platform as stated originally, the SPGs shown at the parade used the chassis of the T-90 tank. It has not been announced if or when the SPG will use the new chassis.

The field trials of the prototypes displayed will not start until 2016. Depending on the results, serial production can be expected to start in 2017–19; the trial results will consequently determine the number of vehicles to be purchased. Their price has also yet to be decided, and there are serious differences between the defence ministry and industry as to the cost of the new vehicles. As a result, no contracts for the mass production of these new armoured vehicles for the army have yet been placed.

#### *Navy*

The navy's shipbuilding programme is still experiencing difficulties, with the construction of large surface combatants, frigates and corvettes chronically behind schedule. More progress has been made with the submarine fleet, including in the key project to renew the ballistic-missile-submarine (SSBN) fleet. The construction of three of the eight new *Borey*-class SSBNs has been completed and four more are under construction. The final submarine will be laid down in 2016. The fate of the four *Kirov*-class cruisers has been clarified, with the operational *Petr Velikiy* due to be joined by a fully modernised *Admiral Nakhimov* by 2018. Another cruiser of this class will remain mothballed. Work on dismantling of the first ship of the class, the *Kirov*, which was built in the 1970s, is scheduled to start in 2016.

Even though the contract for purchasing French *Mistral* helicopter carriers was abrogated, the plan to buy helicopters for the ships has not been cancelled, and in 2015 a contract was signed for 32 Ka-52K attack helicopters adapted for shipborne deployment. The Russian naval air arm is also on course for significant reinforcement. The air wing on the aircraft carrier *Admiral Kuznetsov* will be modernised with the arrival of the MiG-29K combat aircraft. It was announced in 2012 that 24 MiG-29Ks would be bought for the *Kuznetsov*. These will likely go to the newly established 100th Shipborne Fighter Aviation Regiment, the second such regiment in the navy. The regiments of shore-based fighters and attack aircraft will also be updated. From 2014, they started to take delivery of the Su-30SM. By 2020, the Russian Navy is due to get more than 50 of these multi-role fighters.

#### *Aerospace Forces*

On 1 August 2015, a new armed service was formed, the Aerospace Forces, incorporating the Air Force, army aviation and the Aerospace Defence Forces. This new armed service will also be responsible for both strategic and theatre missile defence. To develop strategic-missile-defence capabilities, elements of the A-235 *Samolyot-M* ballistic-missile-defence system have started to undergo testing. This is intended to replace the current Moscow missile-defence system, the A-135, and unlike the latter there will be not only silo-launched but also road-mobile versions. Meanwhile, the S-500 air-defence system will provide the theatre missile-defence layer when it enters service; trials are expected in 2016. Deliveries of production S-400 systems are under way, maintained at a rate of three regiment sets per year. By the end of 2015, ten air-defence regiments had been re-equipped with S-400s.

The air force also continues to actively recapitalise. Missile armament for the Sukhoi T-50 future combat aircraft (developed for the PAK-FA requirement) was under test, though an accident with one of the test aircraft in 2014 delayed the programme by at least six months. Procurement plans have also been revised: only 12 of the 56 planned production T-50s will have been bought by 2020. Additionally, in 2014, air-force line units took delivery of 179 reconnaissance-UAV sets. The maiden flight of a strike UAV, in the one-tonne class, was scheduled for the end of 2015, although deliveries to line units were not scheduled to begin until 2019. The ongoing parallel development of attack UAVs in the 5- and 20-tonne classes will likely take even longer.

#### *Strategic Rocket Forces*

The modernisation of the Strategic Rocket Forces (SRF) continues at a rate of around 40 missiles per year. Deliveries of *Yars* intercontinental ballistic missiles (ICBMs), both road-mobile and silo-based, are successfully under way, and in 2014 the armed forces took delivery of 16 *Yars* ICBMs and 22 submarine-launched ballistic missiles. Another 24 *Yars* ICBMs were due to be delivered in 2015.

The entry into service of a new heavy liquid-fuel ICBM, the *Sarmat*, with a throw-weight of up to ten tonnes, has an important role to play in these modernisation plans. The first prototype is due to be completed by March 2016 and, in line with plans previously announced, their entry into service is due to begin in 2019 in time to replace the SS-18, which is due to be withdrawn from service in 2022. *Sarmat* has

been linked to the development of a 'hypersonic glide vehicle', dubbed Project 4202, which is estimated to require a 100-ton-class launcher – coincidentally, around the size of *Sarmat*. This might well provide an explanation for the development of a liquid-fuelled ICBM at a time when the main SRF re-equipping effort was geared towards solid-fuelled systems. Furthermore, in summer 2015, plans were officially confirmed regarding the development of a new rail-based ICBM system (*Barguzin*). According to Deputy Defence Minister Yury Borisov, design work on this system is now in progress using the *Yars* missile.

## DEFENCE ECONOMICS

### Macroeconomics

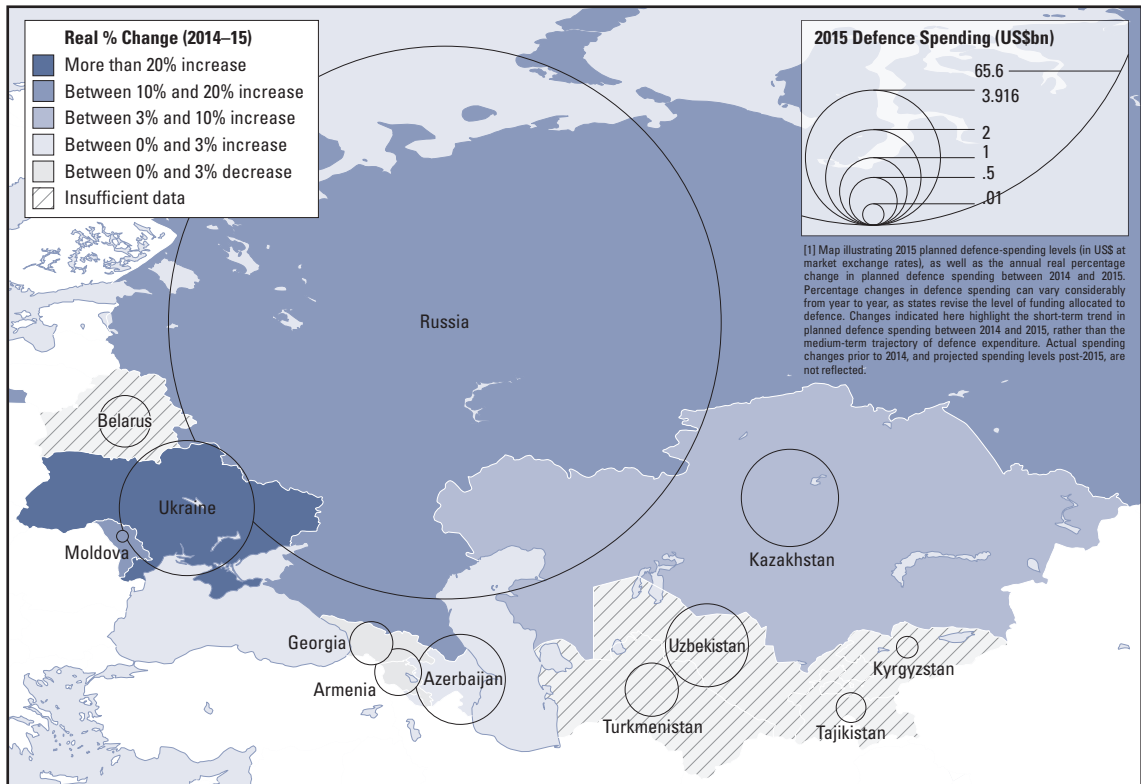
Declining global oil prices and financial sanctions on Russia's banking sector caused significant disruption to the Russian economy in 2015. First imposed in March and April 2014, after Russia's annexation of Crimea, measures were escalated after the downing of Malaysia Airlines flight MH17 in July 2014. These factors, in combination with the decline in the oil price following OPEC's November 2014 decision to maintain

high production levels, produced large-scale capital flight in late 2014, amid growing investor fears over the country's economic outlook. The rouble lost nearly 50% of its value against the dollar and around 60% against the euro over the course of the year, prompting rising imported inflation and the sustained outflow of both international and domestic capital from Russian markets. These developments nearly precipitated twin currency and banking crises in December 2014. Although they were averted by large-scale emergency state support to the banking sector – part of which involved drawing down on sovereign-reserve-fund assets built up in previous years – as well as the central bank's massive 6.5% interest-rate hike to 17% in December 2014, the economic pinch was felt by households and businesses as the Russian banking sector cut back on lending to shore up its declining capital bases and to bolster liquidity levels. Overall growth was projected by the IMF to decline by 3.8% in 2015, the first contraction in economic activity since 2009.

### Defence spending

When the Russian federal budget for 2015 was first drafted, in the first half of 2014, the oil price was high

Map 3 **Russia and Eurasia Regional Defence Spending<sup>1</sup>**



and economic prospects appeared relatively favourable. Consequently, government-spending plans were based on an assumed oil price of US\$100 per barrel, and the 'national defence' (defence-ministry) spending budget was set at R3.3 trillion (US\$86.0 billion at 2014 average exchange rates), or around 4.2% of GDP. This was a significant increase on the 2014 budget, caused partly by the government's commitment to fully fund its procurement programme but also by the conversion, at a late stage, of a planned R235bn (US\$6.1bn) in state-guaranteed credits into budget funding due to concerns that Western financial sanctions would hinder foreign borrowing to raise the necessary credits.

The budget was subsequently amended in March 2015 to reflect the constraints of the large decline in the oil price, a depreciating currency and a forecast decline in GDP; the revised version was instead based on a more realistic oil price of US\$50 per barrel. Accordingly, the 2015 defence allocation was revised downwards by around 6%, to R3.1tr (US\$51.3bn at 2015 average exchange rates). However, since the economy contracted more rapidly (in nominal terms), defence spending as a percentage of GDP rose slightly, to 4.3%. After accounting for defence-related expenditures elsewhere in the budget, total military spending according to the NATO definition rose to a forecast 5.4% of GDP (see Figure 10), placing Russia – for 2015 at least – among a very small group of countries to spend in excess of 5% of GDP on defence.

Amid increasingly uncertain economic prospects, it was decided that for 2016 a one-year budget would be drawn up, instead of the previous three-year budgets. According to the draft 2016 budget submitted for approval in late October 2015, spending on national defence will fall in nominal terms by around 2% (or R65bn) compared with the amended budget for 2015, with a corresponding decline in its GDP share to around 3.9%.

### Procurement and industry

Russia's R20.7tr (around US\$540bn) State Armament Programme (SAP) 2011–20 aims to increase the proportion of advanced weapons in the inventory to 30% by 2015 and to 70–80% by 2020. Implementation of the SAP continued in 2015, but in an increasingly uneven fashion. This was partly due to the impact of the economic slowdown, but also due to supply-chain disruptions caused by the halt in defence-related trade with Ukraine. Furthermore, the programme was hit by dual-use restrictions imposed

Table 7 **Total Russian Military Expenditure<sup>a</sup>** (R bn)

	2014 Actual Expenditure	2015 Amended Budget
<b>Total 'National Defence'</b>	<b>2,479</b>	<b>3,117</b>
<i>as a % of GDP</i>	3.47%	4.26%
Total 'National Defence' Less Arms Recycling & Mobilisation Preparation of the Economy <sup>b</sup>	2,452	3,094
<b>Other Military Expenditure</b>		
Other Ministry of Defence Expenditure <sup>c</sup>	587	607
Paramilitary Forces <sup>d</sup>	272	253
Support for Closed Towns of MoD, Rosatom & Baikonur Space Centre <sup>e</sup>	13	11
<b>Total Other Military Expenditure</b>	<b>771</b>	<b>871</b>
<b>Total Military Expenditure</b>	<b>3,224</b>	<b>3,965</b>
<i>as a % of GDP</i>	4.51%	5.42%

[a] According to the NATO definition

[b] Not included under the NATO definition

[c] Including pensions, social support, healthcare, education and housing expenses

[d] Interior troops of Ministry of Interior and Border Service of Federal Security Service

[e] The closed towns of the State Corporation for Atomic Energy Agency (Rosatom) are engaged in nuclear-munitions production

by the United States, other NATO members and the European Union in 2014. Previously, Ukraine was estimated to have supplied around 190 different parts and components to Russian defence firms annually, while Western states had exported some 860.

Consequently, in 2014 and 2015 resources were diverted towards import substitution, with two such programmes approved over the period. The first, valued at approximately R50bn (around US\$750m), set out measures to replace more than 3,000 components obtained from around 160 Ukrainian enterprises. The second programme, the cost of which has not been revealed, focused on replacing components obtained from NATO and EU countries. According to Deputy Prime Minister Dmitry Rogozin, who is responsible for oversight of the defence industry, some 640 Russian types of weapons and other military hardware include components imported from NATO and EU countries; Moscow intends to substitute around 570 of them. Overall, it is expected that alternative supply arrangements under both programmes – either via domestic manufacture or from countries considered dependable, such as Belarus – will be secured for most items by the end of 2018. Additionally, with the development of closer bilateral relations with Beijing in recent years, it is likely that the Chinese defence industry will play a growing role as an alternative supply source for elec-



tronic components and some manufacturing equipment, replacing Western suppliers.

This disruption in the defence-materiel trade has delayed some Russian production and procurement programmes, particularly those relating to propulsion. Ukraine has refused to supply the M7N1 gas-turbine engines intended for three Project 11356 *Admiral Grigorovich*-class frigates in build at the Yantar shipyard in Kaliningrad, while German manufacturer MTU has refused to supply diesel engines for two Project 20385 corvettes, forcing their replacement with comparable Russian units and resulting in higher construction costs. Helicopter procurement – which had been running at a high level – is also likely to be reduced for a period due to the breakdown in supply of Ukrainian power plants. While domestic engine production is adequate to cover Russian combat-aircraft requirements, it will probably take at least two years for domestic suppliers to increase production sufficiently to meet requirements in all areas.

### State Armament Programme 2011–20

These disruptions notwithstanding, it seems clear that the SAP 2020's interim target of achieving a 30% share of modern weapons by the end of 2015 might in some cases be exceeded – particularly with respect to more mature platforms for which domestic industry has fully mastered all technical aspects. For example, deliveries of modernised T-72 tanks by Uralvagonzavod and Su-34 *Fullback* bomber production by the Novosibirsk Aviation Plant proceeded ahead of the most recent schedule. In fact, with the renewed emphasis on import substitution to offset overseas-supply disruptions, 2014 was one of the most successful years on record for Russia's defence industry in terms of output growth: defence-industrial production grew by 15.5% in real terms, compared with just 1.7% for Russian industry as a whole. According to the Russian Federal Service for Military–Technical Cooperation, record export sales were also achieved in 2014, totalling US\$15.5bn in deliveries to 62 countries. New contracts worth US\$14bn were concluded in 2014, bringing the total order book to around US\$50bn. As in recent years, aircraft deliveries dominated sales (accounting for 44% of the total), followed by ground-forces equipment (26%), air-defence systems (15%) and naval equipment (12%). Consequently, driven by both an increased state-defence order and export contracts, overall military-equipment output grew by just over

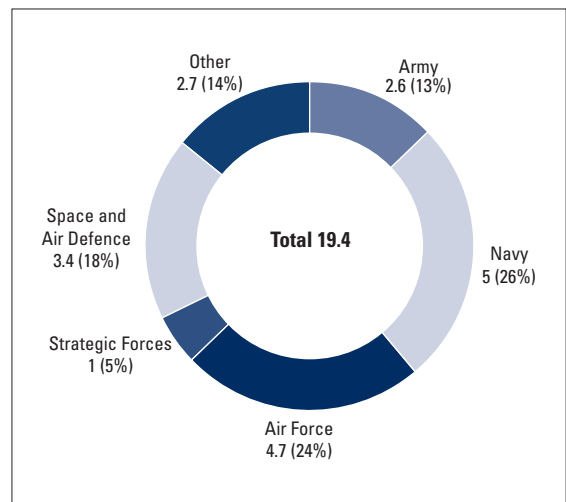


Figure 9 Russian State Armament Programme 2011–20 Funding Breakdown by Service (R tr)

20% in 2014, compared with nearly 18% in 2013, 13% in 2012 and 6% in 2011 (the first year of the SAP 2020).

However, it is likely that industry performance will be more modest in 2015, and that Russian firms will find the requirements of the second half of the SAP – covering 2016–20 – more demanding than those of the less ambitious 2011–15 phase. Nearly two-thirds of funding allocations under the SAP (R14tr, or around US\$365bn) is to be disbursed during the 2016–20 period, indicating that most deliveries were scheduled for the second five-year term.

Indeed, the new 2016–25 State Armament Programme may well re-scope the more ambitious elements of the previous plan's delivery aspirations. Redevelopment goals for a number of programmes are being reconsidered as technical challenges combine with fiscal constraints. The recasting of T-50/PAK-FA procurement plans, delays to the PAK-DA next-generation bomber and growing caution over when the *Armata* heavy armoured platform will enter full-rate production reflect these pressures.

As noted earlier, the air force will receive by 2020 an initial batch of only 12 of the T-50s being developed to meet the PAK-FA requirement, rather than the previously anticipated 56. Initial development-target dates for the S-500 air-defence system are also likely to have been overly optimistic. While the first *Borey*-class SSBNs (Project 955) are entering service with the *Bulava* ballistic missiles, it seems unlikely that all eight boats planned under the SAP will be completed by 2020; while in the land-systems arena the goal of delivering 2,300 T-14 *Armata* main battle tanks to the



Table 8 **Estimated Russian Arms Procurement 2011–15 and State Armament Programme 2020 Objectives**

	2011	2012	2013	2014	2015 State Defence Order	Total to 2020
ICBMs	7	9	15	16	16*	400+
SLBMs	22*	16*	16*	22	24*	n.k.
Military Satellites <sup>a</sup>	8	4	10	n.k.	n.k.	100+
Fixed-wing aircraft	28	35	67	96	126	850*
<i>of which combat aircraft</i>	16*	30*	45*	89	n.k.	450*
Helicopters	82	118	100	135	88	1,150
<i>of which combat helicopters</i>	22	35	31	43	n.k.	330*
UAVs	n.k.	n.k.	n.k.	179	n.k.	4,000+
S-400 air-defence systems (divisions)	4	3	4	2	6	56
Strategic nuclear submarines	0	0	3	1	1	8
Multi-role nuclear submarines	0	0	0	1	0	7
Diesel-electric submarines	0	0	0	2	1	6 to 10
Surface combat ships <sup>b</sup>	2	1	5	3	5	50
Tanks	n.k.	n.k.	n.k.	n.k.	n.k.	2,300+
<i>Iskander</i> missile systems (brigades)	n.k.	n.k.	2	2	2	10

\*Estimates

[a] Total number, excluding failed launches

[b] Mainly frigates and corvettes

army may now not be attained until 2025, five years later than scheduled. Meanwhile, the armed forces are receiving modernised T-72s and, possibly, a new modernised variant of the T-90 main battle tank.

### Future uncertainties

Economic stagnation, the need to address supply-chain disruptions and delays to some development programmes present uncertainties for the SAP. The average procurement budget for the second half of the programme is envisaged to double relative to the first half of the programme, to around R3.5–3.7tr (around US\$60bn) per annum, an amount in excess of the entire official Russian defence budget for 2015. In addition,

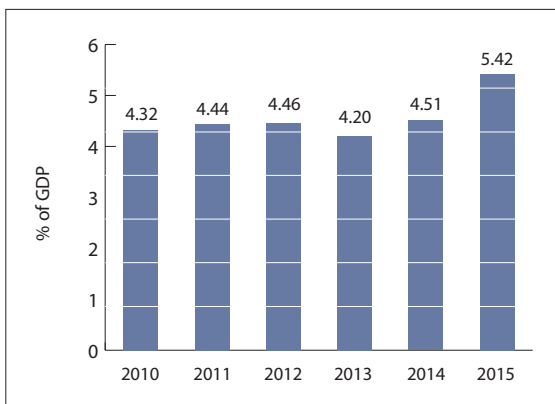


Figure 10 **Estimated Russian Defence Expenditure** as % of GDP

rising inflation in 2014 and 2015 (peaking at around 17% in March 2015) is likely to have escalated defence-acquisition costs above planned levels, thereby reducing the purchasing power of procurement funds already allocated. Given the current economic backdrop, funding the SAP to its full extent would require that either defence expenditure as a proportion of GDP rises to around 6–7% of GDP – levels that would propel Russia into the top ten defence spenders by proportion of GDP – or that economic growth soars to 7–8% between 2017 and 2020.

Both scenarios are unlikely; the IMF projects that Russian economic growth will hover at around 1–1.5% between 2017 and 2020. The next SAP (2016–25), initially scheduled for approval at the end of 2015 before the Military–Industrial Commission decided in January 2015 to delay this until 2018, envisaged an even more ambitious funding envelope. Provisional funding for the SAP 2025 was set at R30tr (US\$500bn approximately), some 50% higher than the R20tr allocated for the SAP 2020 (but 40% lower than the initial R55tr request from the defence ministry).

Without a high level of political will to accept drastic cuts to other areas of governmental spending, such high levels of defence-procurement outlays seem unrealistic at a time of considerable economic dislocation and supply-chain disruption. It is likely that the SAP will be underfunded in the years ahead, with non-critical programmes extended to the post-2020 period, scaled down or even cancelled. Projects that

### Russian acquisition reform

In an attempt to reduce spending inefficiencies, the misuse of defence-budget funding, arbitrary price increases and other excesses, the Law on the State Defence Order – which regulates the arms-production activities of Russia's defence industry – was amended in June 2015. Controls were tightened through the establishment of an inter-agency system involving the defence ministry, the Bank of Russia, the Federal Antimonopoly Service and the financial monitoring body, Rosfinmonitoring. The principal new measure took effect in September 2015: funding disbursements of the state defence order would henceforth be handled by five large banks (each partly state-owned), with each individual defence order assigned a code number that will be applied to every transaction associated with it, allowing for the comprehensive monitoring of prices and activities at all stages. This tough new approach has not been welcomed by the defence industry, which lobbied hard, but unsuccessfully, to delay its implementation. It is possible that the work of defence-industrial firms will suffer some disruption in the coming months while the new procedures bed in.

This new monitoring system comes under the aegis of a significant new actor in Russia's military system: the new, Moscow-based National Centre for Defence Management, which was a priority project of the defence ministry in 2014, and was built and equipped within a year. Among its many functions, it is charged with monitoring weapons development and production, aided by an inter-agency information system and in some cases video surveillance. This attempt to enhance the powers of the customer is at an early stage and relates to another recent innovation, the introduction of quarterly 'days of acceptance' of new military products, with meetings held at the National Centre to review progress in the implementation of defence orders and consider actions required to ensure deadlines are met. The July 2015 meeting was attended by President Vladimir Putin, as president and chair of the Military-Industrial Commission. This is envisaged as a mechanism for increasing pressure on Russia's defence industry to ensure the timely fulfilment of contractual obligations.

might be affected include the PAK-DA, the *Borey*- and *Yasen*-class nuclear-powered submarine builds, and ambitions for a new class of aircraft carrier. Given the current strategic environment, priority focus might shift from the air domain to the land domain in an effort to ensure that serial production of key systems is ready to commence early in the new armament programme, in 2018, by which time it is hoped that economic conditions will have improved to allow for growth rates of around 3–4%. In the meantime, the authorities are likely to focus on increasing the efficiency of defence outlays by, inter alia, reforming the acquisition process to reduce waste and the misuse of procurement funding (see textbox above).

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## UKRAINE

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### Military expansion; force development

By early 2014, when Russia occupied Crimea and hostilities began in the Donbas region, Ukraine's armed forces was a shadow of the force inherited from the Soviet Union. In the 22 years since independence, the VSU had experienced cuts in equipment and personnel numbers, as well as a significant reduction in the level of training.

Indeed, in 2013, there were only seven battalion-level and 33 company-level tactical exercises. While

this was greater than the number held in 2011–12, it was still limited for a land force that then consisted of ten tank and mechanised brigades, and four airborne-assault brigades. In addition, even the modest targets for exercising the ground forces' combat and support vehicles were not met because of high fuel costs, while aircrew averaged only 36 flying hours per year. Unsurprisingly, this military force was unable to offer effective resistance to local armed separatists and Russian volunteers and mercenaries, let alone Russian special-forces personnel. However, the gradual escalation of hostilities by separatist forces in the east gave Ukraine time to bring greater order to its armed forces.

### Bolstering the armed forces

In the early part of 2014, the VSU and Ukraine's National Guard (re-established in March 2014, under interior-ministry control) began to bring existing formations up to strength and form new units. Reserves were mobilised to bring under-strength units up to their wartime complement. Some units that were intended to be cut under Ukraine's pre-war plans, and which were in the process of being disbanded, were also brought up to strength; one of these, the 92nd Detached Mechanised Brigade, when mobilised grew by a factor of ten, in comparison to its size in spring 2014.

Meanwhile, some existing VSU units had to be effectively recreated from scratch. Among these units, those that were based in Crimea before 2014 included the 36th Coastal Defence Brigade (in effect, a motor-rifle brigade with a reinforced artillery group); the 1st and 501st marine infantry battalions; practically the whole Ukrainian Navy; and the 204th Tactical Aviation Brigade, with its MiG-29 *Fulcrum* combat aircraft. These units had suffered personnel losses of more than 50%, largely through desertion and defection following the Russian occupation, and, although they are technically considered to have 'redeployed', they are in fact newly formed. Troops from these Crimea-based units that remained post-annexation were withdrawn to the southern regions of Ukraine, including Odessa, Nikolayev and Kherson and, after reforming, the marine infantry took up positions on the front line in Donbas.

Another distinctive feature of Ukraine's military expansion was the creation of volunteer 'territorial-defence battalions', the first significant formations established after hostilities began. These were originally established for local defence in each oblast, formed partly of mobilised servicemen and partly of volunteers – as seen in, for example, the 11th and 25th Kievan Rus battalions and the 24th *Aydar* battalion. They were created either as government forces (primarily, interior-ministry special-forces sub-units but also defence-ministry territorial battalions) or as unofficial forces, though most of these were later integrated into government structures. Initially, training was rudimentary, with weapons training mainly focusing on small arms, but later this was augmented with light armour and small-calibre anti-aircraft artillery. As the conflict worsened throughout 2014, these battalions were redeployed to Donbas and to key sections of the borders with Russia, Moldova and the administrative-boundary line with Crimea. The formation of several dozen of these battalions helped to quickly increase the numerical strength of the VSU's land component.

In autumn 2014, they were reassigned to the ground forces as motorised-infantry battalions, with little resistance from the battalions themselves. Integrating the unofficial forces also ran relatively smoothly, even though some volunteer formations, such as the Shakhtersk Battalion and its successor, Tornado, were disbanded, while others saw commanders replaced. For example, the Aydar and Donbas-Ukraine battalions became part of the Ukrainian army, while the Donbas and Azov battalions joined the National

Guard, the latter as a regimental formation. The Right Sector Ukrainian Volunteer Corps (DUK PS) remained the largest formation yet to be integrated with government forces: moves to integrate this body have led to violent confrontations between DUK PS members and state-security forces. However, the presence of a serious external threat has meant that internal Ukrainian disputes have generally been set aside; this may have helped de-escalate conflict between some volunteers and the authorities, but it postpones resolution of the issue.

After deployment to the front line, the battalions were subordinated to the general staff through the front-line commands. Some of these battalions were combined in motorised-infantry brigades, whilst other were assigned to tank and mechanised brigades, because of tactical command requirements as well as a need to carry out tasks such as rear-area protection or holding less contested parts of the front line. A small number of them, primarily those manned by volunteers, remained as separate motorised-infantry battalions.

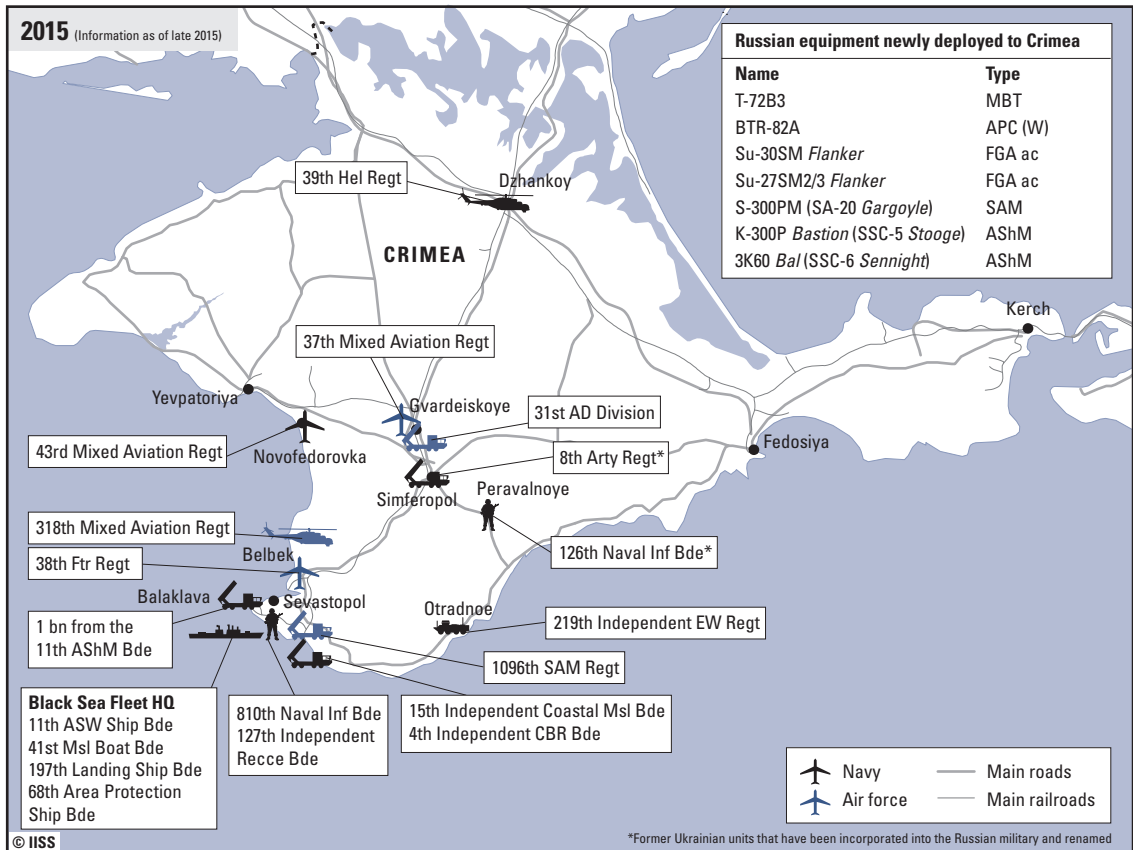
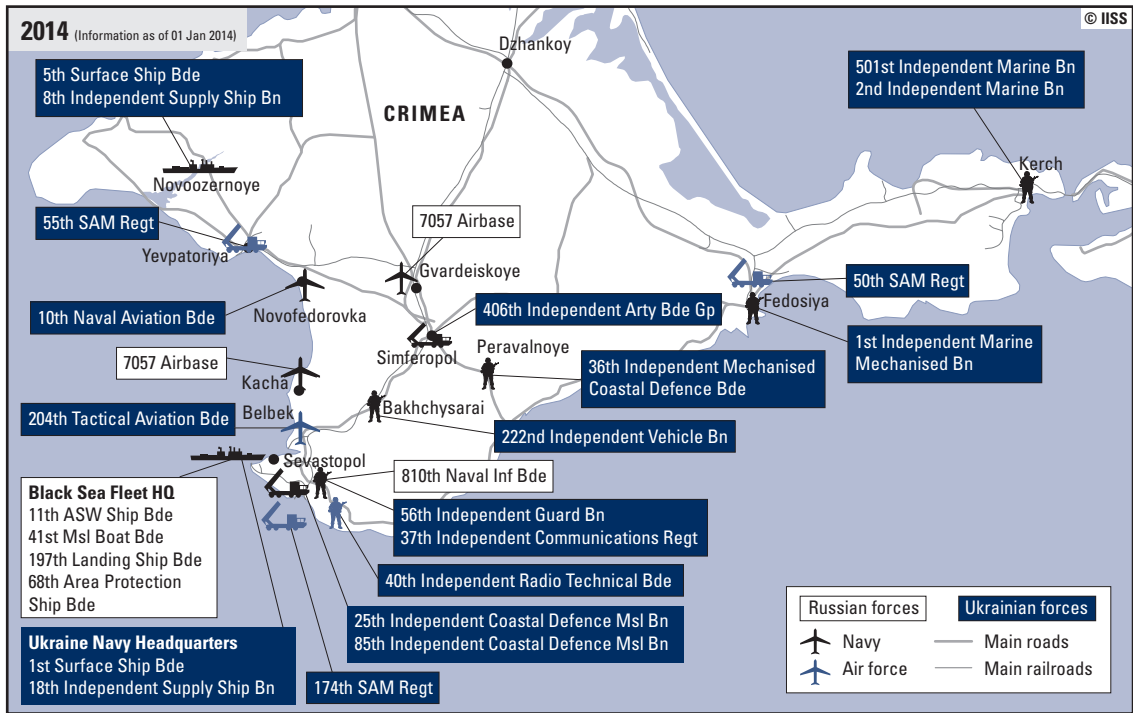
Once the pre-war brigades and regiments were brought up to wartime strength, new units were formed. Along with the motorised-infantry brigades mentioned above, two new mechanised, one airborne-assault and three artillery brigades, plus smaller formations, were established. Infrastructure also received attention, with former garrisons being renovated (while some units had to remain under canvas) and former training ranges reopened. Weapons are being withdrawn from storage and renovated at establishments run by the defence ministry and UkrOboronProm, the state-owned defence concern.

### **Mobilisation and volunteers**

Partial mobilisation was carried out in three waves in 2014 and a further three by August 2015. This provided the main source of personnel for Kiev's extensive military reorganisation, with over 100,000 personnel mobilised in total. Restoration of conscription also provided an additional source of troops. Further mobilisation campaigns are possible should the situation in the east deteriorate, though in October – with the ceasefire in the east still holding – President Petro Poroshenko said that there was no need for additional mobilisation.

The escalation of the conflict and evidence of the growing involvement of Russian regular forces meant that Ukraine's military leadership saw a need to build up reserve forces in the event of a full-scale

Map 4 **Military Dispositions in Crimea: 2014–15**



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Russia and Eurasia

invasion. Reserve forces were expanded by registering those soldiers demobilised after the first and second waves of mobilisation; in future, reserves will also be drawn from the third and subsequent mobilisations. Reserve rifle battalions were also formed in each oblast, although the status of those in Donetsk and Lugansk oblasts remains unclear. The reserve battalions may be called up for active service if the security situation deteriorates, in the same way as the motorised-infantry battalions (the former territorial-defence battalions, now integrated into the VSU), and may perform territorial-defence functions.

In addition, under a late-2014 order from the general staff, self-defence detachments (lightly equipped force-protection battalions) and force-protection companies at district-level military commissariats will become an important component of national military structure. In the event of a formal announcement of a state of war in Ukraine, a further general-staff decision would bring them to full strength through conscription. These units are at various stages of formation, and differ significantly in the number and quality of their personnel, ranging from paper formations to some that are fairly well manned, equipped and trained. Equipment is provided by volunteers or sponsors. Developing this programme is intended to provide Ukraine with a numerically strong, organised reserve capable of accomplishing security missions, as well as countering sabotage and reconnaissance groups, pro-Russian separatist forces in the self-proclaimed Donetsk and Lugansk 'people's republics', and airborne-assault and raiding parties, especially within large population centres. These same formations are also tasked by the general staff with developing a partisan movement in the event of Russian occupation, and training and exercises for this purpose are already under way.

Although the combination of mobilisation, conscription and the recruitment of contract servicemen is largely meeting the VSU's personnel needs, the mobilisation programme itself has not met its numerical targets. This stems from public reservations about mobilisation, a lack of confidence in the government and also, possibly, from the mobilisation targets themselves, which may have been overly optimistic. Despite this, new brigades continue to be formed, as do new sub-units within existing brigades.

Although the majority of additional personnel have been provided by the rounds of mobilisation, the role of volunteer formations has also been significant, especially during the early stages of the conflict.

A feature of a number of the volunteer forces, both those integrated with government forces and those not yet integrated, is that in addition to their front-line formations, they also have an extensive network of regional structures across Ukraine; these serve both as a personnel reserve and a support organisation for combat forces, and function as bases to train and recruit new members. These structures include the Azov Civil Corps, the DUK PS's reserve battalions and others. They allow, if necessary, for the number of soldiers on the front line to be increased, and also function as territorial-defence units within their regions.

### **Paramilitary forces expand**

In parallel with the process of integrating the territorial-defence battalions, Ukraine's National Guard (before 2014, known as the Internal Troops) also brought available units up to strength through mobilisation and conscription, formed new units and reorganised some old brigades, regiments and battalions into operational units. In late 2014, it was reported that at least two new operational brigades, including the 3rd Brigade in Kharkiv, and a total of 16 operational battalions had been formed. Meanwhile, the National Guard also integrated some of the volunteer battalions, as noted above.

But in contrast to the pre-war formations of the then-Internal Troops, such as the Bars Brigade and the Tigr, Yaguar and Gepard regiments (oriented primarily towards policing tasks and combating non-state armed groups), the National Guard's new operational formations were supplied with heavy equipment in order to allow their use in combined-arms operations. New equipment included T-64 tanks; BTR-3 and BTR-4 armoured vehicles; D-30 howitzers; 120mm mortars; and ZU-23-2 air-defence systems. In practical terms, their capabilities meant that they occupied a role in the land forces somewhere between mechanised and motorised-infantry brigades; there was insufficient equipment available to fit them out as mechanised brigades, while the VSU motorised-infantry brigades were established with very light equipment inventories from the start.

Similar processes also took place in other paramilitary forces. In the Border Guard Service, for example, motorised manoeuvre groups were formed, as well as rapid-reaction *komendatura* forces (with functions analogous to those of Western military police) with motor and armoured vehicles. A considerable number of special-forces sub-units of varying sizes



were created under the Ministry of Internal Affairs (MVD), some operating effectively as light-infantry formations; these are believed to be still undergoing reorganisation. Meanwhile, volunteer units such as the Dnepr-1 Regiment and the Kiev-1 and Kiev-2 battalions – set up by the MVD on an emergency basis at the start of hostilities – operate to the immediate rear of front-line VSU units, as well as in the districts where they were formed.

### Training and weaponry

In the 18 months after hostilities began, there was a qualitative leap in the level of training for service personnel as well as increases to the numerical strength of the VSU and other forces. This was facilitated not only by the fighting itself, which allowed a significant proportion of personnel to gain combat experience, but also by the number, intensity and scale of Ukrainian Army exercises, which increased sharply compared with the pre-war period, partly as a result of Western training programmes. All this has contributed to a significant improvement on the low level of training in place before 2014.

During a year of intense fighting, the VSU suffered significant losses in arms and military equipment. At present, both additional and replacement equipment for newly formed units is being provided by repairing Soviet-era hardware. After independence, in 1991, Ukraine significantly reduced the number of weapons and equipment held by line units. Between 1992 and 2014, the number of tanks was reduced by just over 5,000 to around 1,100, and there was a significant reduction in combat aircraft; MiG-29s, for instance, were reduced from an estimated 220 to around 90. Hardware withdrawn from air-force units, including Su-24s and MiG-29s, was accumulated at a large number of storage depots and repair plants, and was available for sale on foreign markets. While the equipment remaining at depots has so far covered replacements and the fitting out of new units, the repair requirements of a country at war will be challenging the capacity of a domestic defence sector still looking to raise revenue through sales of military hardware. In addition, the vast majority of equipment inherited from the Soviet Union is obsolete, and the repair of Soviet-era weapons can only be considered a temporary measure.

The effort to equip the armed forces with new and upgraded weapons and military equipment is proceeding at a slow pace, hindered by financial diffi-

culties and a wide range of problems in the Ukrainian military-industrial complex, including corruption, the effect of legacy linkages with Russia, management problems, a shortage of qualified personnel and ageing production facilities.

Ukraine's military and political leadership has also sought to secure weapons from Western states. As a result of the use of Russian armour in Donbas, the most prominent request for lethal weaponry is for modern anti-tank systems, including single-use anti-armour weapons. But requests have also been made for non-lethal systems, including modern, secure communications systems; counter-battery radars; satellite-navigation systems; thermal imagers; trucks and jeeps; and engineering equipment. The latter is considered essential, given the VSU's supposed transition to a defensive posture in the wake of the February 2015 Minsk II agreement. While the VSU is equipped with Soviet-era combat-engineering hardware, it is generally in poor repair. This has led to fortified positions near the front line and on the Russian border being built by private companies under contract from regional governments. Washington has supplied some counter-mortar radars and a quantity of HMMWV vehicles, and has begun training activities with the armed forces and the National Guard.

Overall, despite the negative impact of over 20 years of stagnation and deterioration, the protracted nature of current operations has set the VSU on the path to improved readiness and capability. At the same time, however, the Ukrainian Army requires further systematic development, primarily in the quality of training and the acquisition of modern arms and equipment, as well as in terms of overall reform. In early September, the National Security Council approved a draft of a new Military Doctrine of Ukraine. The document noted the intention to continue organisational reform, and that main tasks in the near and medium term included the 'integration of volunteer units ... to the Armed Forces of Ukraine, Ministry of Internal Affairs of Ukraine, the National Guard of Ukraine, other military units established under the laws of Ukraine and law enforcement agencies'. Significantly, military reform was being conducted with the aim of achieving 'operational and technical compatibility with armed forces of members of NATO'. The doctrine also noted plans to improve the mobilisation process and ensure the establishment of a reserve force of adequate strength.

Armenia ARM				
Armenian Dram d		2014	2015	2016
GDP	d	4.84tr	5.12tr	
	US\$	11.6bn	10.6bn	
<i>per capita</i>	US\$	3,901	3,547	
Growth	%	3.4	2.5	
Inflation	%	3.0	4.3	
Def bdtg [a]	d	194bn	199bn	
	US\$	467m	412m	
FMA (US)	US\$	2.7m	1.7m	1.7m
US\$1=d		415.94	482.92	

[a] Includes imported military equipment, excludes military pensions

Population 3,056,382

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.8%	3.4%	4.2%	4.7%	21.4%	4.2%
Female	9.3%	3.3%	4.3%	4.8%	24.2%	6.3%

## Capabilities

Given continuing tensions with neighbouring Azerbaijan over Nagorno-Karabakh, the armed forces' main focus is territorial defence. Armenia completed a Strategic Defence Review in May 2011. Conscription continues, but there is also a growing cohort of professional officers. While overall military doctrine remains influenced strongly by Russian thinking, overseas deployments, including to Afghanistan, Kosovo and Lebanon, have enabled personnel to learn from international counterparts. The country aims to develop its peacekeeping contingent into one brigade with NATO standards, so that Armenia can deploy a battalion capable of self-sustainment and interoperability with NATO forces, and Yerevan and NATO are also in talks over the reform of Armenian military education. Armenia is actively engaged in NATO's Partnership for Peace programme. However, defence ties with Russia continue on a broad range of issues, and both countries signed a cooperation agreement in 2014. Equipment is mainly of Russian origin, and in July 2015 a US\$200m loan from Moscow was ratified with the aim of purchasing modern Russian weapons between 2015 and 2017. Serviceability and maintenance of mainly ageing aircraft has been a problem for the air force. Armenia is a CSTO member, and Russia provides national air defence from a base leased until 2044. Armenia is developing cyber-security policies and capabilities, and is to establish a State Cyber Security Committee.

**ACTIVE 44,800** (Army 41,850 Air/AD Aviation Forces (Joint) 1,100 other Air Defence Forces 1,850) Paramilitary 4,300

*Conscript liability* 24 months.

## RESERVES

Some mob reported, possibly 210,000 with military service within 15 years.

## ORGANISATIONS BY SERVICE

**Army 22,900; 18,950 conscripts (total 41,850)**

### FORCES BY ROLE

#### SPECIAL FORCES

1 SF regt

#### MANOEUVRE

##### Mechanised

1 (1st) corps (1 recce bn, 1 tk bn, 2 MR regt, 1 maint bn)

1 (2nd) corps (1 recce bn, 1 tk bn, 2 MR regt, 1 lt inf regt, 1 arty bn)

1 (3rd) corps (1 recce bn, 1 tk bn, 4 MR regt, 1 lt inf regt, 1 arty bn, 1 MRL bn, 1 sigs bn, 1 maint bn)

1 (4th) corps (4 MR regt; 1 SP arty bn; 1 sigs bn)

1 (5th) corps (with 2 fortified areas) (1 MR regt)

##### Other

1 indep MR trg bde

### COMBAT SUPPORT

1 arty bde

1 MRL bde

1 AT regt

1 AD bde

2 AD regt

1 (radiotech) AD regt

1 engr regt

### EQUIPMENT BY TYPE

**MBT** 109: 3 T-54; 5 T-55; 101 T-72

**AIFV** 98: 75 BMP-1; 6 BMP-1K; 5 BMP-2; 12 BRM-1K

**APC (W)** 130: 8 BTR-60; 100 look-a-like; 18 BTR-70; 4 BTR-80

**ARTY** 232

**SP** 38: **122mm** 10 2S1; **152mm** 28 2S3

**TOWED** 131: **122mm** 69 D-30; **152mm** 62: 26 2A36; 2 D-1; 34 D-20

**MRL** 51: **122mm** 47 BM-21; **273mm** 4 WM-80

**MOR** **120mm** 12 M120

**AT** • **MSL** • **SP** 22: 9 9P148; 13 9P149

### AD

#### SAM

**SP** 2K11 *Krug* (SA-4 *Ganef*); 2K12 *Kub* (SA-6 *Gainful*);

9K33 *Osa* (SA-8 *Gecko*)

**TOWED** S-75 *Doima* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)

**MANPAD** 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*)

#### GUNS

**SP** **23mm** ZSU-23-4

**TOWED** **23mm** ZU-23-2

**UAV** **Light** 15 *Krunk*

**RADAR** • **LAND** 6 SNAR-10

**MSL** • **TACTICAL** • **SRBM** 12: 8 9K72 *Elbrus* (SS-1C *Scud* B); 4 9K79 *Tochka* (SS-21 *Scarab*)

**AEV** MT-LB

**ARV** BREhM-D; BREM-1

## Air and Air Defence Aviation Forces 1,100

1 Air & AD Joint Command

### FORCES BY ROLE

#### GROUND ATTACK

1 sqn with Su-25/Su-25UBK *Frogfoot*

**EQUIPMENT BY TYPE****AIRCRAFT** 15 combat capable

ATK 15: 13 Su-25 *Frogfoot*; 2 Su-25UBK *Frogfoot*  
 TPT 3: **Heavy** 2 Il-76 *Candid*; **PAX** 1 A319CJ  
 TRG 14: 4 L-39 *Albatros*; 10 Yak-52

**HELICOPTERS**

ATK 7 Mi-24P *Hind*  
 ISR 4: 2 Mi-24K *Hind*; 2 Mi-24R *Hind* (cbt spt)  
 MRH 10 Mi-8MT (cbt spt)  
 C2 2 Mi-9 *Hip G* (cbt spt)  
 TPT • **Light** 7 PZL Mi-2 *Hoplite*

SAM • SP S-300/S-300PM (SA-10/SA-20)

**Paramilitary 4,300****Ministry of Internal Affairs****FORCES BY ROLE****MANOEUVRE****Other**

4 paramilitary bn

**EQUIPMENT BY TYPE**

AIFV 55: 5 BMD-1; 44 BMP-1; 1 BMP-1K; 5 BRM-1K  
 APC (W) 24 BTR-60/BTR-70/BTR-152

**Border Troops**

Ministry of National Security

**EQUIPMENT BY TYPE**

AIFV 43: 5 BMD-1; 35 BMP-1; 3 BRM-1K  
 APC (W) 23: 5 BTR-60; 18 BTR-70

**DEPLOYMENT****Legal provisions for foreign deployment:****Constitution:** Codified constitution (1995, amended 2005)**Specific legislation:** 'Law on Defence of the Republic of Armenia'

**Decision on deployment of troops abroad:** by the president, in accordance with 'Law on Defence of the Republic of Armenia' (Article 5 (2) (1)). Also, under Art. 55 (13) of constitution, president can call for use of armed forces (and National Assembly shall be convened). (Also Art. 81 (3) of constitution.)

**AFGHANISTAN**NATO • *Operation Resolute Support* 121**LEBANON**

UN • UNIFIL 33

**MALI**

UN • MINUSMA 1

**SERBIA**

NATO • KFOR 34

**UKRAINE**

OSCE • Ukraine 2

**FOREIGN FORCES**

OSCE figures represent total Minsk Conference mission personnel in both Armenia and Azerbaijan

**Bulgaria** OSCE 1**Czech Republic** OSCE 1**Poland** OSCE 1

**Russia** 3,300: 1 mil base with (1 MR bde; 74 T-72; 80 BMP-1; 80 BMP-2; 12 2S1; 12 BM-21); 1 fr sqn with 18 MiG-29 *Fulcrum*; 2 SAM bty with S-300V (SA-12 *Gladiator/Giant*); 1 SAM bty with 2K12 *Kub* (SA-6 *Gainful*)

**Sweden** OSCE 1**Ukraine** OSCE 1**United Kingdom** OSCE 1**Azerbaijan AZE**

Azerbaijani New Manat m		2014	2015	2016
GDP	m	58.1bn	64.9bn	
	US\$	74.1bn	64bn	
<i>per capita</i>	US\$	7,936	6,794	
Growth	%	2.8	4.0	
Inflation	%	1.4	5.0	
Def exp	m	€2.95bn		
	US\$	€3.76bn		
Def bdgt [a]	m	1.64bn	1.76bn	1.84bn
	US\$	2.09bn	1.74bn	
FMA (US)	US\$	2.7m	1.7m	1.7m
US\$1=m		0.78	1.01	

[a] Official defence budget. Excludes a significant proportion of procurement outlays.

**Population** 9,780,780

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	12.1%	4.0%	5.1%	4.9%	21.0%	2.4%
Female	10.5%	3.6%	4.8%	4.7%	23.0%	3.9%

**Capabilities**

Continuing tensions with neighbouring Armenia over Nagorno-Karabakh, mean Baku's major military focus is territorial defence. The armed forces still rely on conscription, and readiness within the services varies between units. The air force also suffers from training and maintenance problems, and the armed forces cannot organically support external deployments. While forces have yet to fully transition from a Soviet-era model, oil revenues have in the recent past allowed an increase in defence expenditure. These increases have enabled the acquisition of additional platform capabilities, such as TOS-1A batteries, BMP-3 AIFVs and T-90S tanks as part of a US\$1bn contract with Moscow. In addition, Baku's surveillance capability has been enhanced by the purchase of Israeli UAVs. However, it is unclear whether the potential benefits brought by such modern systems have been felt in terms of operational capability. Azerbaijan maintains a defence relationship with NATO and in September 2014 its CERT team attended a NATO-sponsored cyber-defence course. Baku maintains a close military relationship with Ankara, and in March 2015 the Azeri Air Force (including its MiG-29s) undertook its first exercise abroad with the Turkish air force. In addition, a large-scale, in-country exercise involving 65,000 troops took place in September. Peacekeeping deployments have included a small number of personnel in Afghanistan.

**ACTIVE 66,950 (Army 56,850 Navy 2,200 Air 7,900)  
Paramilitary 15,000**

*Conscript liability* 17 months, but can be extended for ground forces.

**RESERVE 300,000**

Some mobilisation reported; 300,000 with military service within 15 years.

**ORGANISATIONS BY SERVICE****Army 56,850****FORCES BY ROLE****COMMAND**

5 corps HQ

**MANOEUVRE****Mechanised**

4 MR bde

**Light**

19 MR bde

**Other**

1 sy bde

**COMBAT SUPPORT**

1 arty bde

1 arty trg bde

1 MRL bde

1 AT bde

1 engr bde

1 sigs bde

**COMBAT SERVICE SUPPORT**

1 log bde

**EQUIPMENT BY TYPE**

**MBT** 439: 95 T-55; 244 T-72; 100 T-90S

**AIFV** 206: 20 BMD-1; 43 BMP-1; 33 BMP-2; 88 BMP-3; 15 BRM-1; 7 BTR-80A

**APC** 568

**APC (T)** 336 MT-LB

**APC (W)** 142: 10 BTR-60; 132 BTR-70

**PPV** 90: 45 *Marauder*; 45 *Matador*

**ARTY** 542

**SP** 87: **122mm** 46 2S1; **152mm** 24: 6 2S3; 18 2S19 *Msta-S*; **155mm** 5 *ATMOS* 2000; **203mm** 12 2S7

**TOWED** 207: **122mm** 129 D-30; **130mm** 36 M-46; **152mm** 42: 18 2A36; 24 D-20

**GUN/MOR** **120mm** 36: 18 2S9 *NONA*; 18 2S31 *Vena*

**MRL** 100+: **122mm** 52+: 43 BM-21; 9+ *IMI Lynx*; **128mm** 12 RAK-12; **220mm** 6 TOS-1A; **300mm** 30 9A52 *Smerch*

**MOR** **120mm** 112: 5 *CARDOM*; 107 *PM-38*

**AT** • **MSL** • **MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K115 *Metis* (AT-7 *Saxhorn*); *Spike-LR*

**AD** • **SAM** • **SP** 2K11 *Krug* (SA-4 *Ganef*): 9K33 *Osa* (SA-8 *Gecko*); 9K35 *Strela-10* (SA-13 *Gopher*);

**MANPAD** 9K32 *Strela* (SA-7 *Grail*) †; 9K34 *Strela-3* (SA-14 *Grinch*); 9K310 *Igla-1* (SA-16 *Gimlet*); 9K338 *Igla-S* (SA-24 *Grinch*)

**MSL** • **SSM** 84 9M79 *Tochka* (SS-21 *Scarab*)

**RADAR** • **LAND SNAR**-1 *Long Trough*/SNAR-2/-6 *Pork Trough* (arty); *Small Fred*/Small *Yawn*/SNAR-10 *Big Fred* (veh, arty); GS-13 *Long Eye* (veh)

**UAV** • **ISR** • **Medium** 3 *Aerostar*

**AEV** MT-LB

**MW** *Bozena*

**Navy 2,200****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 8**

**CORVETTES** • **FS** 1 *Kusar* (ex-FSU *Petya II*) with 2 RBU 6000 *Smerch* 2 A/S mor, 2 twin 76mm gun

**PSO** 1 *Luga* (*Woodnik* 2 Class) (FSU Project 888; additional trg role)

**PCC** 3: 2 *Petrushka* (FSU UK-3; additional trg role); 1 *Shelon* (ex-FSU Project 1388M)

**PB** 3: 1 *Araz* (ex-TUR AB 25); 1 *Bryza* (ex-FSU Project 722); 1 *Poluchat* (ex-FSU Project 368)

**MINE WARFARE** • **MINE COUNTERMEASURES 4**

**MHC** 4: 2 *Yevgenya* (FSU Project 1258); 2 *Yakhont* (FSU *Sonya*)

**AMPHIBIOUS 6**

**LSM** 3: 1 *Polnochny A* (FSU Project 770) (capacity 6 MBT; 180 troops); 2 *Polnochny B* (FSU Project 771) (capacity 6 MBT; 180 troops)

**LCU** 1 *Vydrat* (FSU) (capacity either 3 AMX-30 MBT or 200 troops)

**LCM** 2 T-4 (FSU)

**LOGISTICS AND SUPPORT 4**

**AGS** 1 (FSU Project 10470)

**YTB** 2

**YTD** 1

**Air Force and Air Defence 7,900****FORCES BY ROLE****FIGHTER**

1 sqn with MiG-29 *Fulcrum*

**FIGHTER/GROUND ATTACK**

1 regt with Su-24 *Fencer*; Su-25 *Frogfoot*; Su-25UB *Frog-foot B*

**TRANSPORT**

1 sqn with An-12 *Cub*; Yak-40 *Codling*

**ATTACK/TRANSPORT HELICOPTER**

1 regt with Mi-8 *Hip*; Mi-24 *Hind*; PZL Mi-2 *Hoplite*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 35 combat capable

**FTR** 14 MiG-29 *Fulcrum*

**FGA** 2 Su-24 *Fencer*†

**ATK** 19: 16 Su-25 *Frogfoot*; 3 Su-25UB *Frogfoot B*

**TPT** 4: **Medium** 1 An-12 *Cub*; **Light** 3 Yak-40 *Codling*

**TRG** 12 L-39 *Albatros*

**HELICOPTERS**

**ATK** 26 Mi-24 *Hind*

**MRH**: 20+ Mi-17-IV *Hip*

**TPT** 20: **Medium** 13 Mi-8 *Hip*; **Light** 7 PZL Mi-2 *Hoplite*

**UAV** • **ISR** • **Medium** 4 *Aerostar*

**AD** • **SAM** S-75 *Dvina* (SA-2 *Guideline*); S-125 *Neva* (SA-3 *Goa*); S-200 *Vega* (SA-5 *Gammon*) static; 9K37M *Buk-M1* (SA-11 *Gadfly*); S-300PM/PMU2 (SA-20 *Gargoyle*)

**MSL** • **AAM** • **IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*)

**IR/SARH** R-27 (AA-10 *Alamo*)

**Paramilitary** €15,000**Border Guard** €5,000

Ministry of Internal Affairs

**EQUIPMENT BY TYPE**

AIFV 168 BMP-1/2

APC (W) 19 BTR-60/70/80

ARTY • MRL 122mm 3 T-122

HELICOPTERS • ATK 24 Mi-35M *Hind***Coast Guard**

The Coast Guard was established in 2005 as part of the State Border Service.

**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 14

PBF 10: 1 *Osa II* (FSU Project 205); 4 *Shaldag V*; 2 Silver Ships 48ft; 3 *Stenka*PB 4: 2 Baltic 150; 1 *Point* (US); 1 *Grif* (FSU *Zhuk*)LOGISTICS AND SUPPORT • ARS 1 *Iva* (FSU *Vikhr*)**Militia** 10,000+

Ministry of Internal Affairs

**EQUIPMENT BY TYPE**

APC (W) 7 BTR-60/BTR-70/BTR-80

**DEPLOYMENT****Legal provisions for foreign deployment:****Constitution:** Codified constitution (1995)**Decision on deployment of troops abroad:** By parliament upon proposal by president (Art. 109, No. 28)**AFGHANISTAN**NATO • *Operation Resolute Support* 94**FOREIGN FORCES**

OSCE figures represent total Minsk Conference mission personnel in both Armenia and Azerbaijan

**Bulgaria** OSCE 1**Czech Republic** OSCE 1**Poland** OSCE 1**Sweden** OSCE 1**Ukraine** OSCE 1**United Kingdom** OSCE 1**TERRITORY WHERE THE GOVERNMENT DOES NOT EXERCISE EFFECTIVE CONTROL**

Data presented here represents an assessment of the de facto situation. Nagorno-Karabakh was part of Azerbaijan, but mostly populated by ethnic Armenians. In 1988, when inter-ethnic clashes between Armenians and Azeris erupted in Azerbaijan, the local authorities declared their intention to secede and join Armenia. Baku rejected this and armed conflict erupted. A ceasefire was brokered in 1994, since when Armenia has controlled most of Nagorno-Karabakh. While Armenia provides political, economic and military support to Nagorno-Karabakh, the region has declared itself independent – although this has not been recognised by any other state, including Armenia. Azerbaijan claims,

and the rest of the international community generally regards, Nagorno-Karabakh and the occupied territories as part of Azerbaijan. (See IISS Strategic Comment, *Medvedev momentum falters in Nagorno-Karabakh*, August 2011.)

**Nagorno-Karabakh**

Available estimates vary with reference to military holdings in Nagorno-Karabakh. Main battle tanks are usually placed at around 200–300 in number, with similar numbers for other armoured combat vehicles and artillery pieces, and small numbers of helicopters. Overall personnel-strength estimates are between 18,000 and 20,000. Some of the equipment listed may belong to Armenian forces.

**EQUIPMENT BY TYPE**

MBT T-72

RECCE BRDM-2

AIFV BMP-1; BMP-2

ARTY 232

SP 122mm 2S1; 152mm 2S3

TOWED 122mm D-30; 152mm 2A36; D20

MRL 122mm BM-21; 273mm WM-80

MOR 120mm M74/M75

AT

MSL

SP 9P148 *Konkurs*; 9P149 MT-LB *Spiral*MANPATS 9M113 *Konkurs*

RCL 73mm SPG-9

AD

SAM

SP S-125 (SA-3 *Goa*); 2K11 *Krug* (SA-4 *Ganef*); 2K12 *Kub* (SA-6 *Gainful*); 9K33 *Osa* (SA-8 *Gecko*)TOWED S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)MANPAD 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*)

GUNS

SP 23mm ZSU-23-4

TOWED 23mm ZU-23-2

MSL • SRBM 9K72 *Elbrus* (SS-1C *Scud B*)

HELICOPTERS

ATK 5 Mi-24 *Hind*MRH 5 Mi-8MT *Hip***Belarus** BLR

Belarusian Ruble r		2014	2015	2016
GDP	r	778tr	952tr	
	US\$	76.1bn	62bn	
<i>per capita</i>	US\$	8,042	6,583	
Growth	%	1.6	-3.6	
Inflation	%	18.1	15.1	
Def exp	r	€8.56tr		
	US\$	€838m		
US\$1=r		10,224.14	15,353.74	

Population 9,589,689

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.9%	2.5%	3.4%	4.3%	23.9%	4.5%
Female	7.5%	2.4%	3.3%	4.1%	26.5%	9.7%



## Capabilities

Though tasked with defending the territorial integrity of the state, the Belarussian armed forces would not be capable of repulsing a serious incursion across its borders. The military continues to rely for the most part on ageing Soviet-era equipment, although it had been receiving modest numbers of more modern systems from Russia. An EU arms embargo remains in place. Four Yak-130 advanced jet trainer/light combat aircraft were received in 2015 and a further four were ordered for 2016, while five *Tor-M2K* short-range air-defence systems will be delivered from 2016 to complement the *Tor-M2* already in service. Serviceability of the combat air fleet is questionable. While Belarus has close political and military ties to Russia, relations have on occasion been strained. A draft agreement on establishing a permanent air presence near Babruisk remains contentious. Tensions have been exacerbated by Moscow's annexation of Crimea and its military operations in eastern Ukraine; Minsk and Kiev have defence-industrial ties. Belarus has also looked to increase defence exports. In July 2015 it signed a cooperation agreement with Vietnam intended to increase defence sales with the Southeast Asian state. Belarus has also looked to China as a defence-industrial partner. Belarus is a participant in the CSTO and exercises regularly with the Russian armed forces.

**ACTIVE 48,000** (Army 16,500 Air 15,000 Special Operations Forces 6,000 Joint 10,500) Paramilitary 110,000

**RESERVE 289,500** (Joint 289,500 with mil service within last 5 years)

## ORGANISATIONS BY SERVICE

### Army 16,500

#### FORCES BY ROLE

##### COMMAND

2 comd HQ (West & North West)

##### MANOEUVRE

###### Mechanised

2 mech bde

2 mech bde(-)

##### COMBAT SUPPORT

2 arty bde

2 MRL regt

2 engr regt

1 NBC regt

#### EQUIPMENT BY TYPE

**MBT** 515: 446 T-72; 69 T-80

**AIFV** 1,011: 875 BMP-2; 136 BRM-1

**APC • APC (T)** 50 MT-LB

**ARTY** 961

**SP** 434: **122mm** 198 2S1; **152mm** 236: 108 2S3; 116 2S5; 12 2S19

**TOWED 152mm** 180: 48 2A36; 132 2A65

**GUN/MOR 120mm** 48 2S9 NONA

**MRL** 238: **122mm** 126 BM-21; **220mm** 72 9P140 *Uragan*;

**300mm** 40: 36 9A52 *Smerch*; 4 *Polonez*

**MOR 120mm** 61 2S12

#### AT • MSL

**SP** 236: 126 9P148 *Konkurs*; 110 9P149 *Shturm*

**MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K114 *Shturm* (AT-6 *Spiral*); 9K115 *Metis* (AT-7 *Saxhorn*)

**RADAR • LAND** GS-13 *Long Eye*/SNAR-1 *Long Trough*/SNAR-2/-6 *Pork Trough* (arty); some *Small Fred*/*Small Yawon*/SNAR-10 *Big Fred* (veh, arty)

**MSL • TACTICAL • SSM** 96: 36 FROG/9M79 *Tochka* (SS-21 *Scarab*); 60 *Scud*

**AEV** MT-LB

**VLB** MTU

## Air Force and Air Defence Forces 15,000

Flying hours 15 hrs/year

#### FORCES BY ROLE

##### FIGHTER

2 sqn with MiG-29S/UB *Fulcrum*

##### GROUND ATTACK

2 sqn with Su-25K/UBK *Frogfoot* A/B

##### TRANSPORT

1 base with An-12 *Cub*; An-24 *Coke*; An-26 *Curl*; Il-76 *Candid*; Tu-134 *Crusty*

##### TRAINING

Some sqn with L-39 *Albatros*

##### ATTACK HELICOPTER

Some sqn with Mi-24 *Hind*

##### TRANSPORT HELICOPTER

Some (cbt spt) sqn with Mi-6 *Hook*; Mi-8 *Hip*; Mi-24K *Hind* G2; Mi-24R *Hind* G1; Mi-26 *Halo*

#### EQUIPMENT BY TYPE

**AIRCRAFT** 36 combat capable

**FTR** 24 MiG-29S/UB *Fulcrum*

**FGA** (21 Su-27P/UB *Flanker* B/C non-operational/stored)

**ATK** 12 Su-25K/UBK *Frogfoot* A/B

**TPT** 13: **Heavy** 2 Il-76 *Candid* (+9 civ Il-76 available for mil use); **Medium** 3 An-12 *Cub*; **Light** 8: 1 An-24 *Coke*; 4 An-26 *Curl*; 1 Tu-134 *Crusty*

**TRG** 4+: Some L-39 *Albatros*; 4 Yak-130 *Mitten*

##### HELICOPTERS

**ATK** 4 Mi-24 *Hind*

**TPT** 13: **Heavy** 5 Mi-26 *Halo*; **Medium** 8 Mi-8 *Hip*

##### MSL

**AAM • IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*)

**SARH** R-27R (AA-10 *Alamo* A)

**ASM** Kh-25 (AS-10 *Karen*); Kh-29 (AS-14 *Kedge*)

**ARM** Kh-58 (AS-11 *Kilter*)

## Air Defence

AD data from Uzal Baranovichy EW radar

#### FORCES BY ROLE

##### AIR DEFENCE

1 bde with S-200 (SA-5 *Gammon*)

1 bde with S-200 (SA-5 *Gammon*); S-300PS (SA-10B *Grumble*)

1 bde with S-300V (SA-12A *Gladiator*/SA-12B *Giant*)

1 bde with 9K37 *Buk* (SA-11 *Gadfly*)

1 bde with 9K37 *Buk* (SA-11 *Gadfly*); 9K332 *Tor-M2E* (SA-15 *Gauntlet*)

2 bde with 9K33 *Osa* (SA-8 *Gecko*)

2 regt with S-300PS (SA-10B *Grumble*)  
1 regt with S-200 (SA-5 *Gammon*)

**EQUIPMENT BY TYPE****AD • SAM**

SP 9K37 *Buk* (SA-11 *Gadfly*); S-300V (SA-12A *Gladiator*/  
SA-12B *Giant*); 9K35 *Strela-10* (SA-13 *Gopher*); 9K33 *Osa*  
(SA-8 *Gecko*); S-300PS (SA-10B *Grumble*); 12 9K332 *Tor-*  
*M2E* (SA-15 *Gauntlet*)  
STATIC S-200 (SA-5 *Gammon*)

**Special Operations Command 6,000****FORCES BY ROLE****SPECIAL FORCES**

1 SF bde

**MANOEUVRE****Mechanised**

2 (mobile) mech bde

**EQUIPMENT BY TYPE**

APC • APC (W) 192: 39 BTR-70; 153 BTR-80

ARTY • TOWED 122mm 48 D-30

AT • MSL • MANPATS 9K111 *Fagot* (AT-4 *Spigot*); 9K113  
*Konkurs* (AT-5 *Spandrel*); 9K114 *Shturm* (AT-6 *Spiral*); 9K115  
*Metis* (AT-7 *Saxhorn*)

**Joint 10,500 (Centrally controlled units and MoD staff)****FORCES BY ROLE****COMBAT SUPPORT**

1 arty gp  
1 MRL bde  
2 SSM bde  
2 engr bde  
1 EW unit  
1 ptn bridging regt  
2 sigs bde

**EQUIPMENT BY TYPE**

APC • APC (T) 20 MT-LB

ARTY 196

SP 152mm 70 2S5

TOWED 152mm 90 2A65

300mm 36 9A52 *Smerch*

MSL • TACTICAL • SSM 96: 36 FROG/9M79 *Tochka* (SS-  
21 *Scrab*); 60 *Scud*

**Paramilitary 110,000****Border Guards 12,000**

Ministry of Interior

**Militia 87,000**

Ministry of Interior

**Ministry of Interior Troops 11,000****DEPLOYMENT****LEBANON**

UN • UNIFIL 5

**UKRAINE**

OSCE • Ukraine 2

**Georgia GEO**

Georgian Lari		2014	2015	2016
GDP	lari	29.2bn	30.9bn	
	US\$	16.5bn	13.8bn	
<i>per capita</i>	US\$	4,434	3,720	
Growth	%	4.8	2.0	
Inflation	%	3.1	3.7	
Def exp	lari	667m		
	US\$	378m		
Def bdtg	lari	667m	667m	670m
	US\$	378m	297m	
FMA (US)	US\$	12m	10m	
US\$1=lari		1.77	2.24	

Population 4,931,226

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.3%	3.2%	4.1%	4.0%	21.2%	6.0%
Female	8.3%	2.8%	3.9%	4.0%	23.8%	9.3%

**Capabilities**

Georgia's armed forces continue to make efforts to address lessons from the conflict with Russia in 2008, which revealed significant shortcomings in key areas, including reservist organisation, and anti-armour and air-defence capabilities. A substantial amount of US-supplied and Russian-origin equipment was destroyed or captured, including T-72 MBTs. The Israeli short-range *Spyder* system was subsequently acquired to bolster the air-defence capability. The US planned in 2015 to allocate US\$20m to assist Georgia's armed forces via the European Reassurance Initiative. Further support will derive from the NATO–Georgia Substantial Package approved at the 2014 Wales Summit, which included the establishment of a NATO Joint Training and Evaluation Centre near Tbilisi. The Strategic Defence Review 2013–16 used a threat-based methodology to provide the main direction for future force development and force structure, called 'Objective Force 2016'. The 2014 Defence White Book identified priorities including improved professionalisation, mobility and combat readiness, and modernising defence planning and management, including intelligence and sustainment. Georgia deployed 850 personnel in the force-protection and QRF role to NATO's *Resolute Support* mission in Afghanistan, and an infantry battalion has been certified for service with the NATO Response Force. Training activity involves international forces, including the US.

**ACTIVE 20,650 (Army 17,750 Air 1,300 National Guard 1,600) Paramilitary 11,700**

*Conscript liability* 18 months

**ORGANISATIONS BY SERVICE**

**Army 14,000; 3,750 conscript (total 17,750)**

**FORCES BY ROLE****SPECIAL FORCES**

1 SF bde

**MANOEUVRE****Light**

5 inf bde

**Amphibious**

2 mne bn (1 cadre)

**COMBAT SUPPORT**

2 arty bde

1 engr bde

1 sigs bn

1 SIGINT bn

1 MP bn

**COMBAT SERVICE SUPPORT**

1 med bn

**EQUIPMENT BY TYPE****MBT** 123: 23 T-55; 100 T-72**RECCE** 4+ *Didgori-2***AIFV** 72: 25 BMP-1; 46 BMP-2; 1 BRM-1K**APC** 199+**APC (T)** 69+: 3+ *Lazika*; 66 MT-LB**APC (W)** 120+: 25 BTR-70; 19 BTR-80; 8+ *Didgori-1*; 3+ *Didgori-3*; 65 *Ejder***PPV** 10 *Cougar***ARTY** 240**SP** 67: **122mm** 20 2S1; **152mm** 46: 32 M-77 *Dana*; 13 2S3; 1 2S19; **203mm** 1 2S7**TOWED** 71: **122mm** 58 D-30; **152mm** 13: 3 2A36; 10 2A65**MRL** **122mm** 37: 13 BM-21; 6 GRADLAR; 18 RM-70**MOR** **120mm** 65: 14 2S12; 33 M-75; 18 M120**AT** ε50**MSL** ε10**GUNS** ε40**AD** • **SAM** • **SP** 9K35 *Strela-10* (SA-13 *Gopher*); *Spyder***MANPAD** *Grom*; 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K36*Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1* (SA-16 *Gimlet*)**Air Force** 1,300 (incl 300 conscript)

1 avn base, 1 hel air base

**EQUIPMENT BY TYPE****AIRCRAFT** 12 combat capable**ATK** 12: 3 Su-25 *Frogfoot*; 7 Su-25K *Frogfoot A*; 2 Su-25UB *Frogfoot B***TPT** • **Light** 9: 6 An-2 *Colt*; 1 Tu-134A *Crusty* (VIP); 2 Yak-40 *Codling***TRG** 9 L-29 *Delfin***HELICOPTERS****ATK** 6 Mi-24 *Hind***TPT** 29 **Medium** 17 Mi-8T *Hip*; **Light** 12 Bell 205 (UH-1H *Iroquois*)**UAV** • **ISR** • **Medium** 1+ *Hermes* 450**AD** • **SAM** 1-2 bn 9K37 *Buk-M1* (SA-11 *Gadfly*), 8 9K33 *Osa-AK* (SA-8B *Gecko*) (two bty), 6-10 9K33 *Osa-AKM* updated SAM systems.**National Guard** 1,600 active reservists opcon Army**FORCES BY ROLE****MANOEUVRE****Light**

1 inf bde

**Paramilitary** 11,700**Border Guard** 5,400**Coast Guard**

HQ at Poti. The Navy was merged with the Coast Guard in 2009 under the auspices of the Georgian Border Guard, within the Ministry of the Interior.

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 21**PBF** 6: 4 Ares 43m; 1 *Kaan* 33; 1 *Kaan* 20**PB** 15: 1 *Akhmeta*; 2 *Dauntless*; 2 *Dilos* (ex-GRC); 1*Kutaisi* (ex-TUR AB 25); 2 *Point*; 7 *Zhuk* (3 ex-UKR)

(up to 20 patrol launches also in service)

**AMPHIBIOUS** • **LANDING CRAFT** • **LCU** 1 *Vydra*

(ex-BLG)

**LOGISTIC AND SUPPORT** • **YTL** 1**Ministry of Interior Troops** 6,300**DEPLOYMENT****Legal provisions for foreign deployment of armed forces:****Constitution:** Codified constitution (1995)**Decision on deployment of troops abroad:** By the presidency upon parliamentary approval (Art. 100)**AFGHANISTAN****NATO** • *Operation Resolute Support* 885; 1 lt inf bn**CENTRAL AFRICAN REPUBLIC****EU** • EUMAM RCA 5**MALI****EU** • EUTM Mali 1**SERBIA****OSCE** • Kosovo 2**UKRAINE****OSCE** • Ukraine 8**TERRITORY WHERE THE GOVERNMENT DOES NOT EXERCISE EFFECTIVE CONTROL**

Following the August 2008 war between Russia and Georgia, the areas of Abkhazia and South Ossetia declared themselves independent. Data presented here represents the de facto situation and does not imply international recognition as sovereign states.

**FOREIGN FORCES****Russia** 7,000; 1 mil base at Gudauta (Abkhazia) with (1 MR bde; 40 T-90A; 120 BTR-82A; 18 2S3; 12 2S12; 18 BM-21; some S-300 SAM; some atk hel); 1 mil base at Djava/Tskhinvali (S. Ossetia) with (1 MR bde; 40 T-72; 120 BMP-2; 36 2S3; 12 2S12)

## Kazakhstan KAZ

Kazakhstani Tenge t		2014	2015	2016
GDP	t	38.7tr	37.7tr	
	US\$	216bn	195bn	
<i>per capita</i>	US\$	12,400	11,028	
Growth	%	4.3	1.5	
Inflation	%	6.7	6.3	
Def bdgt	t	363bn	375bn	426bn
	US\$	2.02bn	1.94bn	
FMA (US)	US\$	1.5m	0.8m	
US\$1=t		179.19	193.14	

Population 18,157,122

Ethnic groups: Kazakh 51%; Russian 32%; Ukrainian 5%; German 2%; Tatar 2%; Uzbek 13%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	12.5%	3.7%	4.5%	4.7%	20.1%	2.4%
Female	12.6%	3.5%	4.4%	4.7%	22.4%	4.6%

## Capabilities

By regional standards, Kazakhstan's armed forces are both relatively sizeable and well equipped, following the acquisition of significant amounts of new and upgraded materiel in recent years. Kazakhstan's close defence relationship with Russia, reinforced through its membership of the CSTO and SCO, has been a key part of this recapitalisation process. Moscow operates a radar station at Balkash, and, in 2015, provided the first five S-300PS surface-to-air missile systems as part of a Joint Air-Defence Agreement. The arrival of Su-30SM multi-role tactical aircraft, meanwhile, provide a significant boost to Kazakhstan's combat air power. A 2011 Military Doctrine identified both internal and external security concerns, and risks from regional instability, but there were few force-structure changes detailed, with much focus on the development of Kazakhstan's defence industry. In the army, air-mobile units are held at the highest level of readiness, with other units at lower levels. Deployment remains concentrated in the country's eastern regions, with almost all combat formations based in either Almaty or East Kazakhstan. Airlift is being improved, with joint ventures and production envisaged with European companies for rotary-wing and medium-lift fixed-wing aircraft. However, airworthiness remains problematic. The navy, meanwhile, is seeking to procure its first corvette from overseas designs.

**ACTIVE 39,000** (Army 20,000 Navy 3,000 Air 12,000 MoD 4,000) Paramilitary 31,500

Conscript liability 12 months

## ORGANISATIONS BY SERVICE

### Army 20,000

4 regional comd: Astana, East, West and Southern

## FORCES BY ROLE

### MANOEUVRE

#### Armoured

1 tk bde

#### Mechanised

3 mech bde

#### Air Manoeuvre

4 air aslt bde

### COMBAT SUPPORT

3 arty bde

1 SSM unit

3 cbt engr bde

### EQUIPMENT BY TYPE

MBT 300 T-72BA

RECCE 100: 40 BRDM-2; 60 BRM

AIFV 609: 500 BMP-2; 107 BTR-80A; 2 BTR-3E

APC 357

APC (T) 150 MT-LB

APC (W) 207: 190 BTR-80; 17 *Cobra*

ARTY 611

SP 246: **122mm** 126: 120 2S1; 6 *Semser*; **152mm** 120 2S3

TOWED 150: **122mm** 100 D-30; **152mm** 50 2A65;

(**122mm** up to 300 D-30 in store)

GUN/MOR **120mm** 25 2S9 *Anona*

MRL 127: **122mm** 100 BM-21 *Grad*; **220mm** 3 TOS-1A;

**300mm** 24: 6 BM-30 *Smerch*; 18 *Lynx* (with 50 msl);

(**122mm** 100 BM-21 *Grad*; **220mm** 180 9P140 *Uragan* all in store)

MOR 63 SP **120mm** 18 CARDOM **120mm** 45 2B11/M120

### AT

#### MSL

SP 3+: 3 BMP-T; HMMWV with 9K113 *Konkurs* (AT-5 *Spandrel*); 9P149 (MT-LB with *Konkurs*)

MANPATS 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K115 *Metis* (AT-7 *Saxhorn*)

GUNS **100mm** 68 MT-12/T-12

MSL • SSM 12 9K79 *Tochka* (SS-21 *Scarab*)

AEV MT-LB

## Navy 3,000

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 23

PCG 3 *Kazakhstan* with 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) ASHM, 1 3M47 *Ghibka* Inchr with *Igla* (SA-N-10 *Grouse*) SAM

PBF 5: 2 *Saygak*; 3 *Sea Dolphin*

PB 15: 4 *Almaty*; 3 *Archangel*; 1 *Dauntless*; 4 *Sardar*; 1 *Turk* (AB 25); 2 *Zhuk* (of which 1 may be operational)

LOGISTICS AND SUPPORT • AGS 1 *Zhaik*

## Coastal Defence

### FORCES BY ROLE

#### MANOEUVRE

#### Mechanised

1 naval inf bde

### EQUIPMENT BY TYPE

AIFV 70 BTR-82A

**Air Force 12,000 (incl Air Defence)**

Flying hours 100 hrs/year

**FORCES BY ROLE****FIGHTER**

- 1 sqn with MiG-29/MiG-29UB *Fulcrum*
- 2 sqn with MiG-31B/MiG-31BM *Foxhound*

**FIGHTER/GROUND ATTACK**

- 1 sqn with MiG-27 *Flogger D*; MiG-23UB *Flogger C*
- 2 sqn with Su-27/Su-27UB *Flanker*

**GROUND ATTACK**

- 1 sqn with Su-25 *Frogfoot*

**TRANSPORT**

- 1 unit with Tu-134 *Crusty*; Tu-154 *Careless*,
- 1 sqn with An-12 *Cub*, An-26 *Curl*, An-30 *Clank*, An-72 *Coaler*

**TRAINING**

- 1 sqn with L-39 *Albatros*

**ATTACK HELICOPTER**

- 5 sqn with Mi-24V *Hind*

**TRANSPORT HELICOPTER**

- Some sqn with Bell 205 (UH-1H); H145; Mi-8 *Hip*; Mi-17V-5 *Hip*; Mi-26 *Halo*

**AIR DEFENCE**

- Some regt with S-75M *Volkhov* (SA-2 *Guideline*); S-125 *Neva* (SA-3 *Goa*); S-300/S-300PS (SA-10/10B *Grumble*); 2K11 *Krug* (SA-4 *Ganef*); S-200 *Angara* (SA-5 *Gammon*); 2K12 *Kub* (SA-6 *Gainful*)

**EQUIPMENT BY TYPE****AIRCRAFT** 103 combat capable

- FTR** 46: 12 MiG-29 *Fulcrum*; 2 MiG-29UB *Fulcrum*; 32 MiG-31/MiG-31BM *Foxhound*
- FGA** 43: 12 MiG-27 *Flogger D*; 2 MiG-23UB *Flogger C*; 21 Su-27 *Flanker*; 4 Su-27UB *Flanker*; 4 Su-30SM
- ATK** 14: 12 Su-25 *Frogfoot*; 2 Su-25UB *Frogfoot*
- ISR** 1 An-30 *Clank*
- TPT** 17: **Medium** 2 An-12 *Cub*; **Light** 14; 6 An-26 *Curl*, 2 An-72 *Coaler*; 4 C-295; 2 Tu-134 *Crusty*; **PAX** 1 Tu-154 *Careless*
- TRG** 17 L-39 *Albatros*

**HELICOPTERS**

- ATK** 20 Mi-24V *Hind* (some upgraded)
- MRH** 20 Mi-17V-5 *Hip*
- TPT** 16: **Heavy** 4 Mi-26 *Halo*; **Light** 12: 6 Bell-205 (UH-1H); 6 H145

**AD • SAM**

- SP** 2K12 *Kub* (SA-6 *Gainful*); 2K11 *Krug* (SA-4 *Ganef*); S-200 *Angara* (SA-5 *Gammon*); 9K35 *Strela-10* (SA-13 *Gopher*); S-300 (SA-10 *Grumble*); 20 S-300PS (SA-10B *Grumble*)
- TOWED** S-75M *Volkhov* (SA-2 *Guideline*); S-125 *Neva* (SA-3 *Goa*)

**MSL**

- ASM** Kh-23 (AS-7 *Kerry*)‡; Kh-25 (AS-10 *Karen*); Kh-29 (AS-14 *Kedge*)
- ARM** Kh-28 (AS-9 *Kyle*); Kh-27 (AS-12 *Kegler*); Kh-58 (AS-11 *Kilter*)
- AAM • IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR/SARH** R-27 (AA-10 *Alamo*); **SARH** R-33 (AA-9 *Amos*); **ARH** R-77 (AA-12 *Adder* – on MiG-31BM)

**Paramilitary 31,500****Government Guard 500****Internal Security Troops €20,000**

Ministry of Interior

**Presidential Guard 2,000****State Border Protection Forces €9,000**

Ministry of Interior

**PATROL AND COASTAL COMBATANTS**HEL • TPT • **Medium** 1 Mi-171**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 2 obs

**WESTERN SAHARA**

UN • MINURSO 4 obs

**Kyrgyzstan KGZ**

Kyrgyzstani Som s		2014	2015	2016
<b>GDP</b>	s	397bn	436bn	
	US\$	7.4bn	7.16bn	
<b>per capita</b>	US\$	1,256	1,198	
<b>Growth</b>	%	3.6	2.0	
<b>Inflation</b>	%	7.5	8.3	
<b>Def bdgt [a]</b>	s	4.87bn		
	US\$	91m		
<b>FMA (US)</b>	US\$	1.5m		

US\$1=s 53.67 60.96

[a] Expenses on Ministry of Defence &amp; Ministry of Interior.

**Population** 5,664,939**Ethnic groups:** Kyrgyz 56%; Russian 17%; Uzbek 13%; Ukrainian 3%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	15.2%	4.6%	5.0%	4.8%	17.5%	1.9%
<b>Female</b>	14.5%	4.4%	4.9%	4.8%	19.3%	3.0%

**Capabilities**

Kyrgyzstan maintains one of the smaller armed forces in Central Asia, with ageing land equipment and extremely limited air capabilities. The July 2013 military doctrine detailed plans to reform the armed forces, with enhanced command-and-control, effective military logistics and a modern air-defence system. To date there appears to have been little progress, and combat readiness remains low with large numbers of poorly trained conscripts. Kyrgyzstan maintains a close strategic relationship with Russia, being a member of both the CSTO and the SCO, and an agreement for Russia to fund a modernisation and re-equipment programme was reportedly signed in late 2014. A new mountain infantry battalion was activated in 2015, and is intended to receive new Russian equipment. Mos-



cow also maintains a number of military bases in the country, including a squadron of upgraded Su-25 ground-attack aircraft at Kant air base, which it has leased since 2003.

**ACTIVE 10,900 (Army 8,500 Air 2,400) Paramilitary 9,500**

*Conscript liability* 18 months

## ORGANISATIONS BY SERVICE

### Army 8,500

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bde

##### MANOEUVRE

**Mechanised**

2 MR bde

1 (mntn) MR bde

##### COMBAT SUPPORT

1 arty bde

1 AD bde

#### EQUIPMENT BY TYPE

MBT 150 T-72

RECCE 30 BRDM-2

AIFV 320: 230 BMP-1; 90 BMP-2

APC • APC (W) 45: 25 BTR-70; 10 BTR-70M; 10 BTR-80

ARTY 246

SP 122mm 18 2S1

TOWED 141: 100mm 18 M-1944; 122mm 107: 72 D-30; 35 M-30 (M-1938); 152mm 16 D-1

GUN/MOR 120mm 12 2S9 *Anona*

MRL 21: 122mm 15 BM-21; 220mm 6 9P140 *Uragan*

MOR 120mm 54: 6 2S12; 48 M-120

AT • MSL • MANPATS 9K11 (AT-3 *Sagger*); 9K111 (AT-4 *Spigot*); 9K113 (AT-5 *Spandrel*)

RCL 73mm SPG-9

GUNS 100mm 18 MT-12/T-12

AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS 48

SP 23mm 24 ZSU-23-4

TOWED 57mm 24 S-60

### Air Force 2,400

#### FORCES BY ROLE

##### FIGHTER

1 regt with L-39 *Albatros*\*

##### TRANSPORT

1 regt with An-2 *Colt*; An-26 *Curl*

##### ATTACK/TRANSPORT HELICOPTER

1 regt with Mi-24 *Hind*; Mi-8 *Hip*

##### AIR DEFENCE

Some regt with S-125 *Pechora* (SA-3 *Goa*); S-75 *Dvina* (SA-2 *Guideline*)

#### EQUIPMENT BY TYPE

AIRCRAFT 4 combat capable

TPT • Light 6: 4 An-2 *Colt*; 2 An-26 *Curl*

TRG 4 L-39 *Albatros*\*

##### HELICOPTERS

ATK 2 Mi-24 *Hind*

TPT • Medium 8 Mi-8 *Hip*

#### AD • SAM

SP 2K11 *Krug* (SA-4 *Ganef*)

TOWED S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)

### Paramilitary 9,500

**Border Guards** 5,000 (KGZ conscript, RUS officers)

**Interior Troops** 3,500

**National Guard** 1,000

## DEPLOYMENT

#### LIBERIA

UN • UNMIL 3 obs

#### MOLDOVA

OSCE • Moldova 1

#### SERBIA

OSCE • Kosovo 1

#### SOUTH SUDAN

UN • UNMISS 2; 1 obs

#### SUDAN

UN • UNAMID 2 obs

UN • UNISFA 1 obs

#### UKRAINE

OSCE • Ukraine 14

## FOREIGN FORCES

Russia e500 Military Air Forces: 13 Su-25SM *Frogfoot*; 2 Mi-8 *Hip*

## Moldova MDA

Moldovan Leu L		2014	2015	2016
GDP	L	112bn	119bn	
	US\$	7.96bn	6.19bn	
<i>per capita</i>	US\$	2,238	1,740	
Growth	%	4.6	-1.0	
Inflation	%	5.1	8.4	
Def exp	L	303m		
	US\$	22m		
Def bdgt [a]	L	373m	427m	652m
	US\$	24m	25m	
FMA (US)	US\$	1.25m	1.25m	
US\$1=L		14.04	19.31	

[a] Excludes military pensions

Population 3,546,847

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.1%	3.3%	4.1%	4.7%	23.2%	4.2%
Female	8.6%	3.1%	3.8%	4.4%	24.6%	6.9%

## Capabilities

The Moldovan armed forces have a purely defensive mission, as enshrined in the 1995 National Security Concept. The principal role is to protect the integrity of the state from external and internal threats. While constitutionally a neutral state, Moldova exercises regularly with forces from NATO member states and has deployed troops to KFOR. It signed up to the NATO Defence Capacity Building Initiative in September 2014. In July 2015, exercise *Joint Effort 2015* took place in Moldova with around 500 personnel from Moldova, the US, Poland, Georgia and Romania. A territorial dispute over the breakaway Russian-speaking enclave of Transdniestria remains a security concern, particularly given Russia's annexation of Crimea. The military struggles with ageing equipment, and there is limited scope for increased defence expenditure.

**ACTIVE 5,350** (Army 3,250 Air 800 Logistic Support 1,300) Paramilitary 2,400

**RESERVE 58,000** (Joint 58,000)

## ORGANISATIONS BY SERVICE

**Army 1,300; 1,950 conscript** (total 3,250)

### FORCES BY ROLE

#### SPECIAL FORCES

1 SF bn

#### MANOEUVRE

##### Light

3 mot inf bde

1 lt inf bn

##### Other

1 gd bn

#### COMBAT SUPPORT

1 arty bn

1 engr bn

1 NBC coy

1 sigs bn

### EQUIPMENT BY TYPE

RECCE 5 BRDM-2

AIFV 44 BMD-1

APC 164

APC (T) 69: 9 BTR-D; 60 MT-LB (variants)

APC (W) 95: 11 BTR-80; 84 TAB-71

ARTY 146

TOWED 69: 122mm 17 (M-30) M-1938; 152mm 52: 21 2A36; 31 D-20

GUN/MOR • SP 120mm 9 2S9 *Anona*

MRL 220mm 11 9P140 *Uragan*

MOR 57: 82mm 50; 120mm 7 PM-38

AT

MSL • MANPATS 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K114 *Shturm* (AT-6 *Spiral*)

RCL 73mm SPG-9

GUNS 100mm 37 MT-12

AD • GUNS • TOWED 39: 23mm 28 ZU-23; 57mm 11 S-60

RADAR • LAND 5: 2 ARK-1; 3 SNAR-10

## Air Force 800 (incl 250 conscripts)

### FORCES BY ROLE

#### TRANSPORT

1 sqn with An-2 *Colt*; An-72 *Coaler*; Mi-8MTV-1/PS *Hip*; Yak-18

#### AIR DEFENCE

1 regt with S-125 *Neva* (SA-3 *Goa*)

### EQUIPMENT BY TYPE

#### AIRCRAFT

TPT • Light 6: 2 An-2 *Colt*; 2 An-72 *Coaler*; 1 Yak-18

#### HELICOPTERS

TPT • Medium 6: 2 Mi-8PS *Hip*; 4 Mi-8MTV-1 *Hip*

AD • SAM 3 S-125 *Neva* (SA-3 *Goa*)

## Paramilitary 2,400

Ministry of Interior

### OPON 900 (riot police)

Ministry of Interior

## DEPLOYMENT

Legal provisions for foreign deployment:

Constitution: Codified constitution (1994)

Decision on deployment of troops abroad: By the parliament (Art. 66)

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 1; 2 obs

### CÔTE D'IVOIRE

UN • UNOCI 3 obs

### LIBERIA

UN • UNMIL 2 obs

### SERBIA

NATO • KFOR 41

UN • UNMIK 1 obs

### SOUTH SUDAN

UN • UNMISS 3 obs

### UKRAINE

OSCE • Ukraine 28

## FOREIGN FORCES

France OSCE 1

Germany OSCE 1

Kyrgyzstan OSCE 1

Poland OSCE 1

Russia €1,500 (including 380 peacekeepers) Military Air Forces 7 Mi-24 *Hind*/Mi-8 *Hip*

Sweden OSCE 3

Switzerland OSCE 1

Ukraine 10 mil obs (Joint Peacekeeping Force)

United Kingdom OSCE 2

United States OSCE 3

## Russia RUS

Russian Rouble r		2014	2015	2016
GDP	r	71.4tr	74.6tr	
	US\$	1.86tr	1.24tr	
per capita	US\$	12,718	8,447	
Growth	%	0.6	-3.8	
Inflation	%	7.8	15.8	
Def exp [a]	r	3.22tr		
	US\$	84bn		
Def bldgt	r	2.47tr	3.12tr	3.15tr
	US\$	64.5bn	56.1bn	

US\$1=r 38.38 60.40

[a] Calculated to be comparable with the NATO definition of defence expenditure

Population 142,423,773

Ethnic groups: Tatar 4%; Ukrainian 3%; Chuvash 1%; Bashkir 1%; Belarussian 1%; Moldovan 1%; Other 8%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	8.4%	2.4%	3.1%	4.4%	23.9%	4.1%
Female	8.0%	2.2%	3.0%	4.3%	27.0%	9.2%

## Capabilities

The pace and extent of Russia's modernisation of its conventional and strategic forces came under pressure during 2015 as the country's economy faltered and Western sanctions over Crimea remained in place. By the end of 2015, the government intended to conclude the 2016–25 State Armament Programme that lays out its purchasing ambitions for military equipment. The 2011–20 SAP has been more successful than its predecessors, but it has not been fulfilled completely and the follow-on programme may be more modest in ambition. The defence ministry also continues to re-cast elements of the 2008 'New Look' military-reform initiative. At the beginning of August 2015, the Air Force (VVS) absorbed formally the Aerospace Defence Forces (VKO), with the combined service to be known as the Aerospace Forces (VKS). The publicly stated rationale behind this restructuring is to improve Russia's ability to defend against an air and space attack. Precise details and exactly how the merger will be implemented, and the effect of this, remained unclear as of late 2015. Recapitalisation of Russia's strategic-weapons inventory continued with work including the development of a new medium-heavy liquid-fuelled ballistic missile, dubbed *Sarmat*, and the development and test of a hypersonic boost-glide vehicle. Moscow's decision to deploy air-force units to Syria provided the defence ministry with the opportunity to measure the effectiveness at least in part of the modernisation of the service. Ground operations in Ukraine have offered a similar window on the army's performance. (See pp. 163–73.)

**ACTIVE 798,000 (Army 240,000 Navy 148,000 Air 145,000 Strategic Deterrent Forces 80,000 Airborne 34,000 Special Operations Forces 1,000 Command and Support 150,000) Paramilitary 489,000**  
*Conscript liability 12 months.*

## RESERVE 2,000,000 (all arms)

Some 2,000,000 with service within last 5 years; reserve obligation to age 50.

## ORGANISATIONS BY SERVICE

**Strategic Deterrent Forces** €80,000 (incl personnel assigned from the Navy and Air Force)

### Navy

#### EQUIPMENT BY TYPE

##### SUBMARINES • STRATEGIC • SBBN 13:

- 3 *Kalmar* (Delta III) with 16 RSM-50 (SS-N-18 *Stingray*) strategic SLBM
- 6 *Delfin* (Delta IV) with 16 R-29RMU *Sineva* (SS-N-23 *Skiff*) strategic SLBM
- 1 *Akula* (*Typhoon*)† in reserve with capacity for 20 *Bulava* (SS-N-32) strategic SLBM (trials/testing)
- 3 *Borey* with 16 *Bulava* (SS-N-32) strategic SLBM

### Strategic Rocket Force Troops

3 Rocket Armies operating silo and mobile launchers organised in 12 divs. Launch groups normally with 10 silos (6 for RS-20/SS-18), or 9 mobile Inchr, and one control centre

#### EQUIPMENT BY TYPE

##### MSL • STRATEGIC 332

ICBM 332: 54 RS-20 (SS-18 *Satan*) (mostly mod 5, 10 MIRV per msl); 108 RS-12M (SS-25 *Sickle*) (mobile single warhead); 30 RS-18 (SS-19 *Stiletto*) (mostly mod 3, 6 MIRV per msl.); 60 RS-12M2 *Topol-M* (SS-27M1) silo-based (single warhead); 18 RS-12M2 *Topol-M* (SS-27M1) road mobile (single warhead); 58 RS-24 *Yars* (SS-27M2; €3 MIRV per msl); 4 RS-24 *Yars* (SS-27M2; €3 MIRV per msl) silo-based

### Long-Range Aviation Command

#### FORCES BY ROLE

##### BOMBER

- 1 sqn with Tu-160 *Blackjack*
- 3 sqn with Tu-95MS *Bear*

#### EQUIPMENT BY TYPE

##### AIRCRAFT

BBR 76: 16 Tu-160 *Blackjack* each with Kh-55 SM (AS-15A/B *Kent*) strategic ALCM; 60 Tu-95MS/MSM *Bear H* each with up to 6 Kh-55/SM (AS-15A/B *Kent*) strategic ALCM; (Kh-102 likely now in service on Tu-95MS; Tu-160)

### Space Command

#### EQUIPMENT BY TYPE

##### SATELLITES 80

COMMUNICATIONS 51: 13 *Gonets-D/M* (dual-use); 3 Mod *Globus* (*Raduga-1M*); 4 *Meridian*; 3 *Parus*; 19 *Rodnik* (*Strela-3M*); 9 *Strela-3*

NAVIGATION/POSITIONING/TIMING 22 GLONASS

ISR 4: 1 *Bars-M*; 1 *Kondor*; 2 *Persona*

ELINT/SIGINT 3: 2 *Liana* (*Lotos-S*); 1 *Tselina-2*

RADAR 12; Russia leases ground-based radar stations in Baranovichi (Belarus) and Balkhash (Kazakhstan).

It also has radars on its own territory at Lekhtusi (St Petersburg); Armavir (Krasnodar); Olenegorsk (Murmansk); Mishelevka (Irkutsk); Kaliningrad; Pechora (Komi); Yeniseysk (Krasnoyarsk); Baranul (Altayskiy); Orsk (Orenburg) and Gorodets/Kovylkino (OTH)

## Aerospace Defence Command

### FORCES BY ROLE

#### AIR DEFENCE

3 AD div HQ

6 regt with S-300PM (SA-20 *Gargoyle*)

5 regt with S-400 (SA-21 *Growler*); 96K6 *Pantsir-S1* (SA-22 *Greyhound*)

### EQUIPMENT BY TYPE

**AD • SAM • SP** 270: 120 S-300PM (SA-20 *Gargoyle*); 120 S-400 (SA-21 *Growler*); 30 96K6 *Pantsir-S1* (SA-22 *Greyhound*)

**MISSILE DEFENCE** 68 53T6 (ABM-3 *Gazelle*); (32 51T6 (ABM-4 *Gorgon*) in store; probably destroyed)

**RADAR** 1 ABM engagement system located at Sofrino (Moscow)

## Army €230,000 (incl conscripts)

Transformation process continues; 4 military districts (West (HQ St Petersburg), Centre (HQ Yekaterinburg), South (HQ Rostov-on-Don) & East (HQ Khabarovsk)), each with a unified Joint Strategic Command.

### FORCES BY ROLE

#### COMMAND

11 army HQ

#### SPECIAL FORCES

7 (Spetsnaz) SF bde

#### MANOEUVRE

##### Reconnaissance

1 recce bde

##### Armoured

1 (4th) tk div (2 tk regt, 1 arty regt)

3 tk bde (1 armd recce bn; 3 tk bn; 1 MR bn; 1 arty bn; 1 MRL bn; 2 AD bn; 1 engr bn; 1 EW coy; 1 NBC coy)

1 tk bde (forming)

##### Mechanised

2 (2nd & 201st) MR div (2 MR regt, 1 arty regt)

28 MR bde (1 recce bn; 1 tk bn; 3 MR bn; 2 arty bn; 1 MRL bn; 1 AT bn; 2 AD bn; 1 engr bn; 1 EW coy; 1 NBC coy)

2 MR bde (4–5 MR bn; 1 arty bn; 1 AD bn; 1 engr bn)

4 (lt/mtn) MR bde (1 recce bn; 2 MR bn; 1 arty bn)

1 (18th) MGA div (2 MGA regt; 1 arty regt; 1 tk bn; 2 AD bn)

### COMBAT SUPPORT

8 arty bde

4 MRL bde

1 MRL regt

6 SSM bde with 9K720 *Iskander-M/K* (SS-26 *Stone/SSC-7*)

3 SSM bde with 9K79-1 *Tochka-U* (SS-21B *Scarab*)

9 AD bde

4 engr bde

1 MP bde

10 NBC regt

### COMBAT SERVICE SUPPORT

10 log bde

### EQUIPMENT BY TYPE

**MBT** 2,700: 1,300 T-72B/BA; 600 T-72B3; 450 T-80BV/U; 350 T-90/T-90A; (17,500 in store: 2,800 T-55; 2,500 T-62; 2,000 T-64A/B; 7,000 T-72/T-72A/B; 3,000 T-80B/BV/U; 200 T-90)

**RECCE** 1,200+: 100+ *Dozor*; 100+ *Tigr*; 1,000 BRDM-2/2A; (1,000+ BRDM-2 in store)

**AIFV** 5,400: 500 BMP-1; 3,000 BMP-2; 500 BMP-3; 700 BRM-1K; 100 BTR-80A; 600 BTR-82A/AM; (8,500 in store: 7,000 BMP-1; 1,500 BMP-2)

**APC** 6,000+

**APC (T)** 3,500+: some BMO-T; 3,500 MT-LB; (2,000 MT-LB in store)

**APC (W)** 2,500: 800 BTR-60 (all variants); 200 BTR-70 (all variants); 1,500 BTR-80; (4,000 BTR-60/70 in store)

**ARTY** 4,180+

**SP** 1,500: **122mm** 150 2S1; **152mm** 1,350: 800 2S3; 100 2S5; 450 2S19; (4,300 in store: **122mm** 2,000 2S1; **152mm** 1,950: 1,000 2S3; 850 2S5; 150 2S19; **203mm** 320 2S7)

**TOWED** 150: **152mm** 150 2A65; (12,415 in store: **122mm** 8,150: 4,400 D-30; 3,750 M-30 (M-1938); **130mm** 650 M-46; **152mm** 3,575: 1,100 2A36; 600 2A65; 1,075 D-20; 700 D-1 M-1943; 100 ML-20 M-1937; **203mm** 40 B-4M)

**GUN/MOR** 180+

**SP** **120mm** 80+: 30 2S23 NONA-SVK; 50+ 2S34

**TOWED** **120mm** 100 2B16 NONA-K

**MRL** 850+ **122mm** 550 BM-21; **220mm** 200 9P140 *Uragan*;

some TOS-1A; **300mm** 100 9A52 *Smerch*; (3,220 in store: **122mm** 2,420: 2,000 BM-21; 420 9P138; **132mm** 100 BM-13; **220mm** 700 9P140 *Uragan*)

**MOR** 1,500

**SP** (**240mm** 430 2S4 in store)

**TOWED** 1,500: **82mm** 800 2B14; **120mm** 700 2S12; (2,200 in store: **120mm** 1,900: 1,000 2S12; 900 PM-38; **160mm** 300 M-160)

**AT**

#### MSL

**SP** BMP-T with 9K120 *Ataka* (AT-9 *Spiral* 2); 9P149 with 9K114 *Shturm* (AT-6 *Spiral*); 9P157-2 with 9K123 *Khristantema* (AT-15 *Springer*)

**MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K115 *Metis* (AT-7 *Saxhorn*); 9K115-1 *Metis-M* (AT-13 *Saxhorn* 2); 9K135 *Kornet* (AT-14 *Spriggan*)

**RCL** **73mm** SPG-9

**RL** **105mm** RPG-29

**GUNS • TOWED** **100mm** 526 MT-12; (**100mm** 2,000 T-12/MT-12 in store)

**AD**

**SAM** 1,570+

**SP** 1,570+: 350+ 9K317 *Buk-M1/M2* (SA-17 *Grizzly*); 400 9K33M3 *Osa-AKM* (SA-8B *Gecko*); 400 9K35M3 *Strela-10* (SA-13 *Gopher*); 120+ 9K330/331/332 *Tor-M/M1/M2* (SA-15 *Gauntlet*); 250+ 2K22 *Tunguska* (SA-19 *Grison*)

**MANPAD** 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*); 9K333 *Verba*; 9K338 *Igla-S* (SA-24 *Grinch*); 9K34 *Strela-3* (SA-14 *Gremlin*)

**GUNS**

**SP** **23mm** ZSU-23-4

**TOWED** **23mm** ZU-23-2; **57mm** S-60

**UAV • Heavy** Tu-143 *Reys*; Tu-243 *Reys*/Tu-243 *Reys D*; Tu-300 *Korshun* **Light** BLA-07; *Pchela-1*; *Pchela-2*

**MSL • SRBM** 120: 48 9K79-1 *Tochka-U* (SS-21B *Scarab*); 72 9K720 *Iskander-M* (SS-26 *Stone*); (some *Scud* in store)  
**AEV** BAT-2; IMR; IMR-2; IRM; MT-LB  
**ARV** BMP-1; BREM-1/64/K/L; BTR-50PK(B); M1977; MTP-LB; RM-G; T-54/55; VT-72A  
**VLB** KMM; MT-55A; MTU; MTU-20; MTU-72; PMM-2  
**MW** BMR-3M; GMX-3; MCV-2 (reported); MTK; MTK-2

### Reserves

Cadre formations

### FORCES BY ROLE

#### MANOEUVRE

##### Mechanised

13 MR bde

### Navy €148,000 (incl conscripts)

4 major fleet organisations (Northern Fleet, Pacific Fleet, Baltic Fleet, Black Sea Fleet) and Caspian Sea Flotilla

### EQUIPMENT BY TYPE

#### SUBMARINES 63

##### STRATEGIC • SSBN 13:

- 3 *Kalmar* (*Delta* III) with 16 R-29R *Volna* (SS-N-18 *Stingray*) strategic SLBM
- 6 *Delfin* (*Delta* IV) with 16 R-29RMU *Sineva* (SS-N-23 *Skiff*) strategic SLBM
- 1 *Akula* (*Typhoon*)† in reserve for training with capacity for 20 *Bulava* (SS-N-32) strategic SLBM
- 3 *Borey* with 16 *Bulava* (SS-N-32) strategic SLBM

#### TACTICAL 49

##### SSGN 9:

- 8 *Antyey* (*Oscar* II) (of which 3 in reserve/repair) with 2 12-cell Inchr with 3M45 *Granit* (SS-N-19 *Shipwreck*) ASHM, 2 single 650mm TT each with T-65 HWT, 4 single 553mm TT
- 1 *Yasen* (*Graney*) with 1 octuple VLS with 3M55 *Onyx* ASHM; 3M14 *Kalibr* (SS-N-30) SLCM; 8 single 533mm TT

##### SSN 18:

- 2 *Schuka-B* (*Akula* II) with 4 single 533mm TT each with 3M10 *Granat* (SS-N-21 *Sampson*) SLCM, 4 single 650mm TT with T-65 HWT
- 9 *Schuka-B* (*Akula* I) (of which 1 in reserve) with 4 single 533mm TT with 3M10 *Granat* (SS-N-21 *Sampson*) SLCM, 4 single 650mm TT with T-65 HWT (one further boat leased to India for 10 years from 2012)
- 2 *Kondor* (*Sierra* II) with 4 single 533mm TT each with 3M10 *Granat* (SS-N-21 *Sampson*) SLCM, 4 single 650mm TT with T-65 HWT
- 1 *Barracuda* (*Sierra* I) (in reserve) with 4 single 533mm TT with 3M10 *Granat* (SS-N-21 *Sampson*) SLCM, RPK-2 (SS-N-15 *Starfish*) and T-53 HWT, 4 single 650mm TT with RPK-7 (SS-N-16 *Stallion*) ASHM and T-65 HWT
- 4 *Schuka* (*Victor* III) (of which 1 in reserve) with 4 single 533mm TT each with 3M10 *Granat* (SS-N-21 *Sampson*) SLCM, 2 single 650mm TT with T-65 HWT

##### SSK 22:

- 17 *Paltus* (*Kilo*) with 6 single 533mm TT with T-53 HWT
- 4 *Varshavyanka* (*Kilo*) with 6 single 533mm TT with T-53 HWT; 3M54 ASHM; 3M14 *Kalibr* SLCM

- 1 *Lada* (AIP fitted) with 6 single 533mm TT (2 additional vessels in build)

### PRINCIPAL SURFACE COMBATANTS 35

**AIRCRAFT CARRIERS • CV** 1 *Orel* (*Kuznetsov*) with 1 12-cell VLS with 3M45 *Granit* (SS-N-19 *Shipwreck*) ASHM, 4 sextuple VLS with 3K95 *Kindzhal* (SA-N-9 *Gauntlet*) SAM, 2 RBU 12000 *Udov* 1 A/S mor, 8 *Kortik* (CADS-N-1) CIWS with 3M311 (SA-N-11 *Grison*) SAM, 6 AK630 CIWS (capacity 18-24 Su-33 *Flanker D* FGA ac; 15 Ka-27 *Helix* ASW hel, 2 Ka-31R *Helix* AEW hel)

### CRUISERS 6

#### CGHMN 6:

- 2 *Orlan* (*Kirov*) with 10 twin VLS with 3M45 *Granit* (SS-N-19 *Shipwreck*) ASHM, 2 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 12 octuple VLS with *Fort/Port* M (SA-N-6 *Grumble*/SA-N-20 *Gargoyle*) SAM, 2 octuple VLS with 3K95 *Kindzhal* (SA-N-9 *Gauntlet*) SAM, 10 single 533mm ASTT, 1 RBU 12000 *Udov* 1 A/S mor, 2 RBU 1000 *Smerch* 3 A/S mor, 6 *Kortik* (CADS-N-1) CIWS with 3M311 (SA-N-11 *Grison*) SAM, 1 twin 130mm gun (capacity 3 Ka-27 *Helix* ASW hel) (1 non-operational; undergoing extensive refit and expected return to service in 2018)

#### CGHM 4:

- 1 *Berkot-B* (*Kara*)† (scheduled to be decommissioned), with 2 quad Inchr with *Rastrub* (SS-N-14 *Silex*) ASHM/ASW, 2 twin Inchr with 4K60 *Shtorm* (SA-N-3 *Goblet*) SAM, 2 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 quintuple 533mm ASTT, 2 RBU 6000 A/S mor, 2 twin 76mm guns (capacity 1 Ka-27 *Helix* ASW hel)
- 3 *Atlant* (*Slava*) with 8 twin Inchr with *Vulkan* (SS-N-12 mod 2 *Sandbox*) ASHM, 8 octuple VLS with *Fort/Port* M (SA-N-6 *Grumble*/SA-N-20 *Gargoyle*) SAM, 2 single Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 quintuple 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 6 AK650 CIWS, 1 twin 130mm gun (capacity 1 Ka-27 *Helix* ASW hel) (1 currently non-operational; expected return to service in 2016)

### DESTROYERS 18

#### DDGHM 17:

- 8 *Sarych* (*Sovremenny*) (of which 3 in reserve†) with 2 quad Inchr with 3M80 *Moskit* (SS-N-22 *Sunburn*) ASHM, 2 twin Inchr with 3K90 *Uragan*/9K37 *Yezh* (SA-N-7 *Gadfly*/SA-N-12 *Grizzly*) SAM, 2 twin 533mm TT, 2 RBU 1000 *Smerch* 3 A/S mor, 4 AK630 CIWS, 2 twin 130mm guns (capacity 1 Ka-27 *Helix* ASW hel)
- 8 *Fregat* (*Udaloy* I) each with 2 quad Inchr with *Rastrub* (SS-N-14 *Silex*) ASHM/ASW, 8 octuple VLS with 3K95 *Kindzhal* (SA-N-9 *Gauntlet*) SAM, 2 quad 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 4 AK630 CIWS, 2 100mm guns (capacity 2 Ka-27 *Helix* ASW hel)
- 1 *Fregat* (*Udaloy* II) with 2 quad Inchr with 3M80 *Moskit* (SS-N-22 *Sunburn*) ASHM, 8 octuple VLS with 3K95 *Kindzhal* (SA-N-9 *Gauntlet*) SAM, 2 *Kortik* (CADS-N-1) CIWS with 3M311 (SA-N-11 *Grison*) SAM, 10 single 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 1 twin 130mm gun (capacity 2 Ka-27 *Helix* ASW hel)

#### DDGM 1:

- 1 *Komsomolets* *Ukrainy* (*Kashin* mod) with 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*)



AShM, 2 twin Inchr with *Volnya* (SA-N-1 *Goa*) SAM, 5 single 533mm ASTT, 2 RBU 6000 *Smerch 2* A/S mor, 1 twin 76mm gun

#### FRIGATES 10

##### FFGHM 6:

2 *Jastreb* (*Neustrashimy*) with 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) AShM, 4 octuple VLS with 3K95 *Kindzhal* (SA-N-9 *Gauntlet*) SAM, 6 single 533mm ASTT, 1 RBU 12000 *Udov* 1 A/S mor, 2 *Kortik* (CADS-N-1) CIWS with 3M311 (SA-N-11 *Grison*) SAM, 1 100mm gun (capacity 1 Ka-27 *Helix* ASW) (3rd vessel launched, but production halted in 1997; unclear status)

1 *Steregushchiy* (Project 20380) with 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) AShM, 2 quad 324mm ASTT, 1 *Kortik* (CADS-N-1) CIWS with 3M311 (SA-N-11 *Grison*) SAM, 2 AK630 CIWS, 1 100mm gun

3 *Steregushchiy* (Project 20381) with 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) AShM, 1 12-cell VLS with 3K96 *Redut* SAM, 2 quad 324mm ASTT, 1 *Kortik* (CADS-N-1) CIWS with 3M311 (SA-N-11 *Grison*) SAM, 2 AK630 CIWS, 1 100mm gun (4 additional vessels in build, of which two are improved *Steregushchiy* II)

##### FFGM 4:

1 *Gepard* with 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) AShM, 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 AK630 CIWS, 1 76mm gun

1 *Gepard* with 1 8-cell VLS with 3M14 *Kalibr* (SS-N-30) LACM, 2 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) AShM, 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 1 AK630 CIWS, 1 76mm gun

1 *Burevestnik* (*Krivak* I mod)† with 1 quad Inchr with *Rastrub* (SS-N-14 *Silex*) AShM/ASW, 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 quad 533mm ASTT, 2 RBU 6000 *Smerch 2* A/S mor, 2 twin 76mm guns

1 *Burevestnik* M (*Krivak* II) each with 1 quad Inchr with RPK-3 *Rastrub* (SS-N-14 *Silex*) AShM/ASW, 2 twin Inchr with 10 *Osa-M* (SA-N-4 *Gecko*) SAM, 2 quad 533mm ASTT, 2 RBU 6000 *Smerch 2* A/S mor, 2 100mm guns

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##### CORVETTES 46

##### FFSGM 17:

3 *Grad* *Sviyazhsk* (*Buyan-M*) with 1 octuple VLS with 3M55 *Onyx* AShM; 3M14 *Kalibr* (SS-N-30) LACM, 2 sextuple Inchr with 3M47 *Gibka* (SA-N-10 *Grouse*) SAM; 1 AK630-M2 CIWS, 1 100mm gun (9 additional vessels in build)

2 *Sivuch* (*Dergach*) with 2 quad Inchr with 3M80 *Moskit* (SS-N-22 *Sunburn*) AShM, 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 AK630 CIWS, 1 76mm gun

12 *Ovod* (*Nanuchka* III) with 2 triple Inchr with P-120 *Malakhit* (SS-N-9 *Siren*) AShM, 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 1 76mm gun

##### FSM 29:

1 *Albatros* (*Grisha* III) with 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 twin 533mm ASTT, 2 RBU 6000 *Smerch 2* A/S mor. 1 twin 57mm gun

19 *Albatros* (*Grisha* V) with 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 twin 533mm ASTT, 1 RBU 6000 *Smerch 2* A/S mor, 1 76mm gun

3 *Astrakhan* (*Buyan*) with 1 sextuple Inchr with 3M47 *Gibka* (SA-N-10 *Grouse*), 1 A-215 *Grad-M* 122mm MRL, 2 AK630 CIWS, 1 100mm gun

6 *Parchim* II with 2 quad Inchr with *Strela-2* (SA-N-5 *Grail*) SAM, 2 twin 533mm ASTT, 2 RBU 6000 *Smerch 2* A/S mor, 1 AK630 CIWS, 1 76mm gun

##### PCFG 21:

3 *Molnya* (*Tarantul* II) with 2 twin Inchr with P-15M *Termit* (SS-N-2C/D *Styx*) AShM, 1 quad Inchr (manual aiming) with *Strela-2* (SA-N-5 *Grail*) SAM, 2 AK630 CIWS, 1 76mm gun

18 *Molnya* (*Tarantul* III) with 2 twin Inchr with 3M80 *Moskit* (SS-N-22 *Sunburn*) AShM, 1 quad Inchr (manual aiming) with *Strela-2* (SA-N-5 *Grail*) SAM, 2 AK630 CIWS, 1 76mm gun

**PBM** 10 *Grachonok* with 1 quad Inchr with 3M47 *Gibka* (SA-N-10 *Grouse*), (original design was as diving tender)

**PBF** 8: 6 *Raptor*; 2 *Mangust*

**PHG** 3 *Vekhr* (*Matka*) with 2 single Inchr with P-15M *Termit* (SS-N-2C/D *Styx*) AShM, 1 AK630 CIWS, 1 76mm gun

**PHT** 1 *Sokol* (*Mukha*) with 2 quad 406mm TT, 2 AK630 CIWS, 1 76mm gun

#### MINE WARFARE • MINE COUNTERMEASURES 45

**MHO** 2 *Rubin* (*Gorya*) with 2 quad Inchr with *Strela-2* (SA-N-5 *Grail*) SAM, 1 AK630 CIWS, 1 76mm gun

**MSO** 11: 10 *Akoamaren* (*Natya*); 1 *Agat* (*Natya* II) (all with 2 quad Inchr (manual aiming) with *Strela-2* (SA-N-5 *Grail*) SAM, 2 RBU 1200 *Uragan* A/S mor, 2 twin AK230 CIWS

**MSC** 23: 21 *Yakhont* (*Sonya*) with 4 AK630 CIWS (some with 2 quad Inchr with *Strela-2* (SA-N-5 *Grail*) SAM); 2 Project 1258 (*Yevgenya*)

**MHI** 9: 8 *Sappfir* (*Lida*) with 1 AK630 CIWS; 1 *Malakhit* (*Olya*)

#### AMPHIBIOUS

##### LANDING SHIPS • LST 19:

12 Project 775 (*Ropucha* I/II) with 2 twin 57mm guns (capacity either 10 MBT and 190 troops or 24 APC (T) and 170 troops)

3 Project 775M (*Ropucha* III) with 2 AK630 CIWS, 1 76mm gun (capacity either 10 MBT and 190 troops or 24 APC (T) and 170 troops)

4 *Tapir* (*Alligator*) with 2-3 twin Inchr with *Strela-2* (SA-N-5 *Grail*) SAM, 2 twin 57mm guns (capacity 20 tanks; 300 troops)

##### LANDING CRAFT 28

##### LCU 17:

5 *Dyugon*

12 Project 11770 (*Serna*) (capacity 100 troops)

**LCM** 9 *Akula* (*Ondatra*) (capacity 1 MBT)

**LCAC** 2 *Pomornik* (*Zubr*) with 2 AK630 CIWS (capacity 230 troops; either 3 MBT or 10 APC (T))

#### LOGISTICS AND SUPPORT 625

**SSAN** 7: 1 *Orenburg* (*Delta* III Stretch); 1 *Losharik* (one further vessel under construction); 2 Project 1851 (*Paltus*); 3 *Kashalot* (*Uniform*)

**SSA** 1 *Sarov*

**ABU** 12: 8 *Kashtan*; 4 *Sura*

**AE** 8: 6 *Muna*; 1 *Dubnyak*; 1 *Zvezdochka*  
**AEM** 3: 2 *Amga*; 1 *Lama*  
**AG** 1 *Potok*  
**AGB** 4 *Dobrynya Mikitich*  
**AGE** 1 *Tchusovoy*  
**AGI** 15: 2 *Alpinist*; 2 *Balzam*; 3 *Moma*; 7 *Vishnya*; 1 *Yuri Ivanov*  
**AGM** 1 *Marshal Nedelin*  
**AGOR** 7: 1 *Akademik Krylov*; 1 *Seliger*; 2 *Sibiriyakov*; 2 *Vinograd*; 1 *Yantar*  
**AGS** 24: 7 *Kamenka*; 9 *Onega*; 6 Project 19920/19920B; 2 *Vaygach*  
**AGSH** 1 *Samara*  
**AGSI** 43: 8 *Biya*; 19 *Finik*; 6 *Moma*; 12 *Yug*  
**AH** 3 *Ob †*  
**AK** 2 *Irgiz*  
**AOL** 11: 2 *Dubna*; 3 *Uda*; 6 *Altay* (mod)  
**AOR** 4 *Boris Chilikin*  
**AORL** 2: 1 *Kaliningradneft*; 1 *Olekma*  
**AOS** 2 *Luza*  
**AR** ε7 *Amur*  
**ARC** 4: 3 *Emba*; 1 Improved *Klasma*  
**ARS** 26: 1 *Kommuna*; 7 *Goryn*; 4 *Mikhail Rudnitsky*; 14 Project 23040  
**AS** 3 Project 2020 (*Malina*)  
**ASR** 1 *Elbrus*  
**ATF** 56: 1 *Alexander Piskunov*; 1 *Baklan*; ε3 *Katun*; 4 *Ingul*; 2 *Neftegaz*; 13 *Okhtensky*; 13 *Prometey*; 1 *Prut*; 4 *Sliva*; 14 *Sorum*  
**AWT** 2 *Manych*  
**AXL** 12: 10 *Petrushka*; 2 *Smolny* with 2 RBU 2500 A/S mor, 2 twin 76mm guns  
**YDG** 28: 15 *Bereza*; 13 *Pelym*  
**YDT** 91: 40 *Flamingo*; 20 *Nyryat* 2; 28 *Yelva*; 3 Project 11980  
**YGS** 60 GPB-480  
**YO** 36: 5 *Khobi*; 30 *Toplivo*; 1 *Konda*  
**YPB** 30 *Bolva*  
**YPT** 12 *Shelon*  
**YTB** 63: 5 PE-65; 2 Project 745MB/S; 10 Project 16609; 11 *Stividor*; 35 *Sidehole*  
**YTR** 42: 27 *Pozharny*; 15 *Morkov*

## Naval Aviation ε31,000

4 Fleet Air Forces

Flying hours 60+ hrs/year

### FORCES BY ROLE

#### FIGHTER

- 1 sqn (forming) with MiG-29K/KUB *Fulcrum*
- 1 sqn with MiG-31B/BS *Foxhound*
- 1 sqn with Su-27/Su-27UB *Flanker*
- 1 sqn with Su-33 *Flanker D*; Su-25UTG *Frogfoot*

#### FIGHTER/GROUND ATTACK

- 1 regt with MiG-31BM *Foxhound*; Su-24M/M2/MR *Fencer*

#### ANTI-SURFACE WARFARE/ISR

- 1 regt with Su-24M/MR *Fencer*; Su-30SM
- 1 sqn with Su-24M/MR *Fencer*

#### ANTI-SUBMARINE WARFARE

- 2 sqn with Il-18D; Il-20RT *Coot A*; Il-22 *Coot B*; Il-38/Il-38N *May\**
- 8 sqn with Ka-27/Ka-29 *Helix*
- 1 sqn with Mi-14 *Haze A*

- 2 sqn with Tu-142M/MR *Bear F/J\**
- 1 unit with Ka-31R *Helix*

#### MARITIME PATROL/TRANSPORT

- 1 sqn with An-26 *Curl*; Be-12 *Mail\**; Mi-8 *Hip*

#### SEARCH & RESCUE/TRANSPORT

- 1 sqn with An-12PS *Cub*; An-26 *Curl*; Tu-134

#### TRANSPORT

- 1 sqn with An-12BK *Cub*; An-24RV *Coke*; An-26 *Curl*; An-72 *Coaler*; An-140
- 2 sqn with An-26 *Curl*; Tu-134

#### TRAINING

- 1 sqn with L-39 *Albatros*
- 1 sqn with An-140; Tu-134; Tu-154

#### TRANSPORT HELICOPTER

- 1 sqn with Mi-8 *Hip*

#### EQUIPMENT BY TYPE

##### AIRCRAFT 186 combat capable

- FTR** 72: 2 MiG-29K *Fulcrum*; 2 MiG-29KUB *Fulcrum*; 12 MiG-31B/BS *Foxhound*; 20 MiG-31BM *Foxhound*; 18 Su-33 *Flanker D*; 18 Su-27/Su-27UB *Flanker*
- FGA** 44: 41 Su-24M *Fencer*; 3 Su-30SM
- ATK** 5 Su-25UTG *Frogfoot* (trg role)
- ASW** 27 Tu-142M/MR *Bear F/J*
- MP** 26: 3 Be-12 *Mail\**; 1 Il-18D; 17 Il-38 *May\**; 5 Il-38N *May\**

**ISR** 12 Su-24MR *Fencer E\**

**SAR** 3 An-12PS *Cub*

**EW • ELINT** 4: 2 Il-20RT *Coot A*; 2 Il-22 *Coot B*

**TPT** 50: **Medium** 2 An-12BK *Cub*; **Light** 46: 1 An-24RV *Coke*; 27 An-26 *Curl*; 6 An-72 *Coaler*; 2 An-140; 10 Tu-134; **PAX** 2 Tu-154M *Careless*

**TRG** 4 L-39 *Albatros*

#### HELICOPTERS

**ASW** 83: 63 Ka-27 *Helix*; 20 Mi-14 *Haze A*

**EW** 8 Mi-8 *Hip J*

**AEW** 2 Ka-31R *Helix*

**SAR** 56: 16 Ka-27PS *Helix D*; 40 Mi-14PS *Haze C*

**TPT • Medium** 36: 28 Ka-29 *Helix*; 4 Mi-8T *Hip*; 4 Mi-8MT *Hip*

#### MSL

**ASM** Kh-25 (AS-10 *Karen*); Kh-59 (AS-13 *Kingbolt*)

**ARM** Kh-58 (AS-11 *Kilter*); Kh-25MP (AS-12 *Kegler*)

**AAM • IR** R-27T/ET (AA-10B/D *Alamo*); R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **SARH** R-27R/ER (AA-10A/C *Alamo*); R-33 (AA-9 *Amos A*)

## Naval Infantry (Marines) ε35,000

### FORCES BY ROLE

#### SPECIAL FORCES

- 1 (fleet) SF bde (1 para bn, 2–3 underwater bn, 1 spt unit)
- 2 (fleet) SF bde (cadre) (1 para bn, 2–3 underwater bn, 1 spt unit)

#### MANOEUVRE

##### Reconnaissance

1 recce bde

##### Mechanised

3 MR bde

1 MR regt

6 indep naval inf bde

**COMBAT SUPPORT**

- 2 arty bde
- 1 SSM bde with 9K79-1 *Tochka-U* (SS-21B *Scarab*)

**AIR DEFENCE**

- 2 SAM regt with 9K33 *Osa* (SA-8 *Gecko*); *Strela-1/ Strela-10* (SA-9 *Gaskin*/SA-13 *Gopher*)
- 1 SAM regt with S-300PS (SA-10 *Grumble*)
- 1 SAM regt with S-300PM (SA-20 *Gargoyle*); S-300PS (SA-10 *Grumble*)
- 1 SAM regt with S-300PM (SA-20 *Gargoyle*); S-400 (SA-21 *Growler*)
- 2 SAM regt with S-400 (SA-21 *Growler*)

**EQUIPMENT BY TYPE**

- MBT 250: 50 T-72B; 200 T-72B3
- RECCE 60 BRDM-2 with 9K113 *Konkurs* (AT-5 *Spandrel*)
- AIFV 1,000: 400 BMP-2; 600 BTR-82A
- APC 400

- APC (T) 300 MT-LB
- APC (W) 100 BTR-80

**ARTY 365**

- SP 163: 122mm 95 2S1; 152mm 68: 50 2S3; 18 2S19
- TOWED 152mm 100: 50 2A36; 50 2A65
- GUN/MOR 66
- SP 120mm 42: 12 2S23 NONA-SVK; 30 2S9 NONA-S
- TOWED 120mm 24 2B16 NONA-K
- MRL 122mm 36 BM-21

**AT**

- MSL
- SP 9P149 with 9K114 *Shturm* (AT-6 *Spiral*); 9P157-2 with 9K123 *Khrisantema* (AT-15 *Springer*)
- MANPATS 9K113 *Konkurs* (AT-5 *Spandrel*); 9K135 *Kornet* (AT-14 *Spriggan*)
- GUNS 100mm T-12

**AD**

- SAM
- SP 250: 20 9K33 *Osa* (SA-8 *Gecko*); 50 *Strela-1/ Strela-10* (SA-9 *Gaskin*/SA-13 *Gopher*); 60 S-300PM (SA-20 *Gargoyle*); 48 S-300PS (SA-10B *Grumble*); 72 S-400 (SA-21 *Growler*)
- MANPAD 9K338 *Igla-S* (SA-24 *Grinch*)
- GUNS 23mm 60 ZSU-23-4

- MSL • SRBM 12 9K79-1 *Tochka-U* (SS-21B *Scarab*)

**Coastal Missile and Artillery Troops 2,000****FORCES BY ROLE****COASTAL DEFENCE**

- 4 AshM bde
- 2 AshM regt

**EQUIPMENT BY TYPE**

- ARTY • SP 130mm €36 A-222 *Bereg*
- AshM 36+: 24 3K60 *Bal* (SS-C-6 *Sennight*); 12 3K55 *Bastion* (SS-C-5 *Stooge*); some 4K44 *Redut* (SS-C-1 *Sepal*); some 4K51 *Rubezh* (SS-C-3 *Styx*)

**Aerospace Forces €145,000 (incl conscripts)**

- Flying hours 60 to 100 hrs/year (combat aircraft)
- 120+ (transport aircraft)

A joint CIS Unified Air Defence System covers RUS, ARM, BLR, KAZ, KGZ, TJK, TKM, and UZB.

**FORCES BY ROLE****BOMBER**

- 4 sqn with Tu-22M3/MR *Backfire C*
- 3 sqn with Tu-95MS/MSM *Bear*
- 1 sqn with Tu-160 *Blackjack*

**FIGHTER**

- 1 regt with MiG-29/MiG-29UB *Fulcrum*; Su-30SM
- 1 sqn with MiG-29/MiG-29UB *Fulcrum* (Armenia)
- 1 regt with MiG-29SMT/UBT *Fulcrum*
- 1 regt with MiG-31BM *Foxhound*
- 1 regt with MiG-31 *Foxhound*; Su-27/Su-27UB *Flanker*
- 1 regt with MiG-31 *Foxhound*; Su-27SM2 *Flanker*; Su-30M2
- 2 sqn with MiG-31B/BS *Foxhound*
- 2 regt with Su-27/Su-27UB *Flanker*

**FIGHTER/GROUND ATTACK**

- 1 regt with Su-27SM2 *Flanker*; Su-35S *Flanker*; Su-30SM; Su-30M2
- 1 regt with Su-27SM2 *Flanker*; Su-27SM3 *Flanker*; Su-30M2
- 1 regt with Su-25 *Frogfoot*; Su-30SM

**GROUND ATTACK**

- 1 regt with Su-24M/M2 *Fencer*
- 2 sqn with Su-24M/M2 *Fencer*
- 3 regt with Su-25SM/SM3 *Frogfoot*
- 1 sqn with Su-25SM *Frogfoot* (Kyrgyzstan)
- 1 regt with Su-34 *Fullback*

**GROUND ATTACK/ISR**

- 1 regt with Su-34 *Fullback*; Su-24MR *Fencer\**

**ELECTRONIC WARFARE**

- 1 sqn with Mi-8PPA *Hip*

**ISR**

- 2 regt with Su-24MR *Fencer\**
- 1 sqn with Su-24MR *Fencer\**
- 1 flt with An-30 *Clank*

**AIRBORNE EARLY WARNING & CONTROL**

- 1 sqn with A-50/A-50U *Mainstay*

**TANKER**

- 1 sqn with Il-78/Il-78M *Midas*

**TRANSPORT**

- 6 regt/sqn with An-12BK *Cub*; An-26 *Curl*; Tu-134 *Crusty*; Tu-154 *Careless*; Mi-8 *Hip*
- 1 regt with An-124 *Condor*; Il-76MD *Candid*
- 1 regt with An-12BK *Cub*; Il-76MD *Candid*
- 1 sqn with An-22 *Cock*
- 3 regt with Il-76MD *Candid*

**ATTACK HELICOPTER**

- 1 bde with Ka-52A *Hokum B*; Mi-28N *Havoc B*; Mi-35 *Hind*; Mi-26 *Halo*; Mi-8MTV-5 *Hip*
- 2 sqn with Ka-52A *Hokum B*
- 4 sqn with Mi-24 *Hind*
- 3 sqn with Mi-28N *Havoc B*
- 1 sqn with Mi-35 *Hind*

**TRANSPORT HELICOPTER**

- 17 sqn with Mi-8 *Hip*/Mi-26 *Halo*

**AIR DEFENCE**

- 8 AD div HQ
- 4 regt with 9K37/9K317 *Buk* (SA-11 *Gadfly*/SA-17 *Grizzly*); S-300V (SA-12 *Gladiator/Giant*)
- 17 regt with S-300PS (SA-10 *Grumble*); S-300PM (SA-20 *Gargoyle*)
- 2 regt with S-400 (SA-21 *Growler*); 96K6 *Pantsir-S1* (SA-22 *Greyhound*)

**EQUIPMENT BY TYPE****AIRCRAFT** 1,090 combat capable

**BBR** 139: 63 Tu-22M3/MR *Backfire C*; 60 Tu-95MS/MSM *Bear*; 16 Tu-160 *Blackjack*

**FTR** 320: 90 MiG-29 *Fulcrum*; 30 MiG-29UB *Fulcrum*; 40 MiG-31B/31BS *Foxhound*; 40 MiG-31BM *Foxhound*; 100 Su-27 *Flanker*; 20 Su-27UB *Flanker*

**FGA** 357: 28 MiG-29SMT *Fulcrum*; 6 MiG-29UBT *Fulcrum*; 140 Su-24M/M2 *Fencer*; 47 Su-27SM2 *Flanker*; 14 Su-27SM3 *Flanker*; 14 Su-30M2; 15 Su-30SM; 57 Su-34 *Fullback*; 36 Su-35S *Flanker*

**ATK** 195: 80 Su-25 *Frogfoot*; 100 Su-25SM/SM3 *Frogfoot*; 15 Su-25UB *Frogfoot*

**ISR** 85: 4 An-30 *Clank*; 79 Su-24MR *Fencer\**; 2 Tu-214ON

**ELINT** 32: 15 Il-20M *Coot A*; 5 Il-22 *Coot B*; 12 Il-22M *Coot B*

**AEW&C** 18: 15 A-50 *Mainstay*; 3 A-50U *Mainstay*

**C2** 8: 4 Il-80 *Maxdome*; 2 Il-82; 2 Tu-214SR

**TKR** 15: 5 Il-78 *Midas*; 10 Il-78M *Midas*

**TPT** 432: **Heavy** 123: 9 An-124 *Condor*; 4 An-22 *Cock*; 110 Il-76MD/MF *Candid*; **Medium** 65 An-12BK *Cub*; **Light** 226: 115 An-26 *Curl*; 25 An-72 *Coaler*; 5 An-140; 27 L-410;

54 Tu-134 *Crusty*; **PAX** 18 Tu-154 *Careless*

**TRG** 204: 150 L-39 *Albatros*; 54 Yak-130 *Mitten*

**HELICOPTERS**

**ATK** 271+: 12 Ka-50 *Hokum*; 81+ Ka-52A *Hokum B*; 100 Mi-24D/V/P *Hind*; 54+ Mi-28N *Havoc B*; 24+ Mi-35 *Hind*

**EW** 27: 20 Mi-8PPA *Hip*; 7 Mi-8MTRP-1 *Hip*

**TPT** 332: **Heavy** 32 Mi-26/Mi-26T *Halo*; **Medium** 300 Mi-8/Mi-8MT/Mi-8MTSh/Mi-8MTV-5 *Hip*

**TRG** 39: 19 Ka-226; 20 *Ansats-U*

**UAV • ISR Light** some *Pchela-1T*; some *Pchela-1K*

**AD • SAM • SP** 560: 80 9K317 *Buk-M1* (SA-17 *Grizzly*); 400 S-300PS/PM (SA-10B *Grumble*/SA-20 *Gargoyle*); 20 S-300V (SA-12 *Gladiator/Giant*); 48 S-400 (SA-21 *Growler*); 12 96K6 *Pantsir-S1* (SA-22 *Greyhound*)

**MSL**

**AAM • IR** R-27T/ET (AA-10B/D *Alamo*); R-73 (AA-11 *Archer*); R-60T (AA-8 *Aphid*); **SARH** R-27R/ER (AA-10A/C *Alamo*); R-33/33S (AA-9 *Amos A/B*); **ARH** R-77-1 (AA-12B *Adder*); K-37M (AA-13 *Axehead*); **PRH** R-27P/EP (AA-10E/F *Alamo*)

**ARM** Kh-58 (AS-11 *Kilter*); Kh-25MP (AS-12 *Kegler*); Kh-31P/PM (PM entering production) (AS-17A *Krypton*)

**ASM** Kh-25 (AS-10 *Karen*); Kh-59/Kh-59M (AS-13 *Kingbolt*/AS-18 *Kazoo*); Kh-29 (AS-14 *Kedge*); Kh-31A/AM (AM entering production) (AS-17B *Krypton*); Kh-38 (entering production)

**AShM** Kh-22 (AS-4 *Kitchen*); Kh-32 (development being concluded)

**LACM Strategic** Kh-55/55SM (AS-15A/B *Kent*); Kh-102; **Tactical** Kh-101; Kh-555

**BOMBS**

**Laser-guided** KAB-500; KAB-1500L

**TV-guided** KAB-500KR; KAB-1500KR; KAB-500OD; UPAB 1500

**INS/GLONASS guided** KAB-500S

**Airborne Troops** €34,000**FORCES BY ROLE****SPECIAL FORCES**

1 (AB *Recce*) SF bde

**MANOEUVRE****Air Manoeuvre**

4 AB div (2 para/air aslt regt; 1 arty regt; 1 AD regt)

1 indep AB bde

3 air aslt bde

**EQUIPMENT BY TYPE****RECCE** *Tigr*

**AIFV** 1,172: 100 BMD-1; 1,000 BMD-2; 10 BMD-3; 30 BMD-4; 12 BMD-4M; 20 BTR-82AM

**APC • APC (T)** 712: 700 BTR-D; 12 BTR-MDM

**ARTY** 600+

**TOWED 122mm** 150 D-30

**GUN/MOR • SP 120mm** 250 2S9 NONA-S (500 in store: 120mm 500 2S9 NONA-S)

**MOR • TOWED** 200+ 82mm 150 2B14; 120mm 50+ 2B23

**AT****MSL**

**SP** 100 BTR-RD

**MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K115 *Metis* (AT-7 *Saxhorn*); 9K115-1 *Metis-M* (AT-13 *Saxhorn 2*); 9K135 *Kornet* (AT-14 *Spriggan*)

**RCL 73mm** SPG-9

**RL 105mm** RPG-29

**GUNS • SP: 125mm** 36+ 2S25

**AD • SAM**

**SP** 150 BTR-ZD

**MANPAD** 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*); 9K333 *Verba*; 9K338 *Igla-S* (SA-24 *Grinch*); 9K34 *Strela-3* (SA-14 *Gremlin*)

**ARV** BREM-D; BREhM-D

**Special Operations Forces** €1,000**FORCES BY ROLE****SPECIAL FORCES**

2 SF unit

**Russian Military Districts****Western Military District**

HQ at St Petersburg

**Army****FORCES BY ROLE****COMMAND**

3 army HQ

**SPECIAL FORCES**

2 (Spetsnaz) SF bde

**MANOEUVRE****Armoured**

1 tk div

1 tk bde

1 tk bde (forming)

**Mechanised**

1 MR div

4 MR bde

**COMBAT SUPPORT**

2 arty bde

1 MRL bde

2 SSM bde with *Iskander-M*



1 SSM bde with *Tochka*  
 2 AD bde  
 1 engr bde  
 1 MP bde  
 2 NBC regt

**COMBAT SERVICE SUPPORT**

2 log bde

**Reserves****FORCES BY ROLE**

**MANOEUVRE**  
**Mechanised**  
 2 MR bde

**Northern Fleet****EQUIPMENT BY TYPE****SUBMARINES** 34

**STRATEGIC** 9 SSBN (one to transfer to PF)

**TACTICAL** 25: 4 SSGN; 13 SSN; 8 SSK

**PRINCIPAL SURFACE COMBATANTS** 11: 1 CV; 2 CGHMN (one non-operational); 1 CGHM (in repair); 7 DDGHM

**PATROL AND COASTAL COMBATANTS** 8: 2

FSGM; 6 FSM

**MINE WARFARE • MINE COUNTERMEASURES**

12: 1 MHO (in repair); 4 MSO; 7 MSC

**AMPHIBIOUS** 4 LST

**Naval Aviation****FORCES BY ROLE****FIGHTER**

2 sqn with Su-33 *Flanker D*; Su-25UTG *Frogfoot*

**FIGHTER/GROUND ATTACK/ISR**

1 regt with MiG-31BM *Foxhound*; Su-24M/M2/MR *Fencer*

**ANTI-SUBMARINE WARFARE**

1 sqn with Il-20RT *Coot A*; Il-38 *May\**; Tu-134

3 sqn with Ka-27/Ka-29 *Helix*

1 sqn with Tu-142M/MR *Bear F/J*

**EQUIPMENT BY TYPE****AIRCRAFT**

**FTR** 38: 20 MiG-31BM *Foxhound*; 18 Su-33 *Flanker D*

**FGA** 13 Su-24M *Fencer*

**ATK** 5 Su-25UTG *Frogfoot* (trg role)

**ISR** 4 Su-24MR *Fencer\**

**ASW** 13 Tu-142M/MR *Bear F/J*

**EW • ELINT** 3: 2 Il-20RT *Coot A*; 1 Il-22 *Coot B*

**MP** 14 Il-38 *May\**

**TPT** 9: 8 An-26 *Curl*; 1 Tu-134

**HELICOPTERS**

**ASW** Ka-27 *Helix A*

**TPT** Ka-29 *Helix B*; Mi-8 *Hip*

**Naval Infantry****FORCES BY ROLE****MANOEUVRE**

**Mechanised**  
 2 MR bde  
 1 naval inf bde

**AIR DEFENCE**

3 SAM regt

**Coastal Artillery and Missile Troops****FORCES BY ROLE****COASTAL DEFENCE**

1 ASHM bde

**Baltic Fleet****EQUIPMENT BY TYPE**

**SUBMARINES • TACTICAL • SSK** 1

**PRINCIPAL SURFACE COMBATANTS** 8: 2 DDGHM; 6 FFGHM

**PATROL AND COASTAL COMBATANTS** 23: 4

FSGM; 6 FSM; 7 PCFG; 5 PBF; 1 PBM

**MINE WARFARE • MINE COUNTERMEASURES**

12: 5 MSC; 7 MHI

**AMPHIBIOUS** 13: 4 LST; 6 LCU; 1 LCM; 2 LCAC

**Naval Aviation****FORCES BY ROLE****FIGHTER**

1 sqn with Su-27 *Flanker*

**GROUND ATTACK/ISR**

1 sqn with Su-24M/MR *Fencer*

**ANTI-SUBMARINE WARFARE**

1 sqn with Ka-27/Ka-29 *Helix*

**TRANSPORT**

1 sqn with An-26 *Curl*; Tu-134 *Crusty*

**TRANSPORT HELICOPTER**

1 sqn with Mi-8 *Hip*

**EQUIPMENT BY TYPE****AIRCRAFT**

**FTR** 18 Su-27/Su-27UB *Flanker*

**FGA** 10 Su-24M *Fencer*

**ISR** 4 Su-24MR *Fencer\**

**TPT** 8: 6 An-26 *Curl*; 2 Tu-134 *Crusty*

**HELICOPTERS**

**ASW** Ka-27 *Helix*

**TPT • Medium** Ka-29 *Helix*; Mi-8 *Hip*

**Naval Infantry****FORCES BY ROLE****MANOEUVRE**

**Mechanised**

1 MR bde

1 MR regt

1 naval inf bde

**COMBAT SUPPORT**

1 arty bde

1 SSM bde with *Tochka*

**AIR DEFENCE**

1 SAM regt

**Coastal Artillery and Missile Troops****FORCES BY ROLE****COASTAL DEFENCE**

1 ASHM regt



## Military Air Force

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### 6th Air Force & Air Defence Army

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#### FORCES BY ROLE

##### FIGHTER

- 1 regt with MiG-29SMT *Fulcrum*
- 1 regt with MiG-31 *Foxhound*; Su-27 *Flanker*
- 1 regt with Su-27 *Flanker*

##### GROUND ATTACK/ISR

- 1 regt with Su-34 *Fullback*; Su-24MR *Fencer*

##### ISR

- 1 flt with A-30 *Clank*

##### ELECTRONIC WARFARE

- 1 sqn with Mi-8PPA *Hip*

##### TRANSPORT

- 1 regt with An-12 *Cub*; An-26 *Curl*; Tu-134 *Crusty*

##### ATTACK HELICOPTER

- 1 bde with Ka-52A *Hokum B*; Mi-28N *Havoc B*; Mi-35 *Hind*; Mi-26 *Halo*; Mi-8MTV-5 *Hip*
- 2 sqn with Mi-24 *Hind*

##### TRANSPORT HELICOPTER

- 3 sqn with Mi-8 *Hip*

##### AIR DEFENCE

- 1 regt with 9K317 *Buk-M1* (SA-17 *Grizzly*); S-300V (SA-12 *Gladiator/Giant*)
- 4 regt with S-300PS (SA-10B *Grumble*); S-300PM (SA-20 *Gargoyle*)

#### EQUIPMENT BY TYPE

##### AIRCRAFT

- FTR 96: 31 MiG-31 *Foxhound*; 65 Su-27/Su-27UB *Flanker*
- FGA 58: 28 MiG-29SMT *Fulcrum*; 6 MiG-29UBT *Fulcrum*; 24 Su-34 *Fullback*
- ISR 19: 4 An-30 *Clank*; 15 Su-24MR *Fencer\**
- TPT 12 An-12/An-26/Tu-134

##### HELICOPTERS

- ATK 58+: 12 Ka-52A *Hokum B*; 30 Mi-24 *Hind*; 12 Mi-28N *Havoc B*; 4+ Mi-35 *Hind*
- EW 10 Mi-8PPA *Hip*
- TPT • **Medium** 50 Mi-8 *Hip*

- AD • **SAM** • **SP** 9K317 *Buk-M1* (SA-17 *Grizzly*); S-300PS/PM (SA-10B *Grumble*/SA-20 *Gargoyle*); S-300V (SA-12 *Gladiator/Giant*)

## Airborne Troops

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#### FORCES BY ROLE

##### SPECIAL FORCES

- 1 (AB *Recce*) SF bde

##### MANOEUVRE

- Air Manoeuvr**
- 3 AB div

## Central Military District

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HQ at Yekaterinburg

## Army

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#### FORCES BY ROLE

##### COMMAND

- 2 army HQ

##### SPECIAL FORCES

- 2 (Spetsnaz) SF bde

## MANOEUVRE

##### Armoured

- 1 tk bde

##### Mechanised

- 1 (201st) MR div
- 7 MR bde
- 1 (mnt) MR bde

## COMBAT SUPPORT

- 2 arty bde
- 1 MRL bde
- 1 SSM bde with *Iskander-M*
- 2 SSM bde with *Tochka*
- 2 AD bde
- 1 engr bde
- 2 NBC regt

## COMBAT SERVICE SUPPORT

- 2 log bde

## Reserves

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#### FORCES BY ROLE

##### MANOEUVRE

##### Mechanised

- 3 MR bde

## Military Air Force

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### 14th Air Force & Air Defence Army

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#### FORCES BY ROLE

##### FIGHTER

- 1 regt with MiG-31BM *Foxhound*
- 2 sqn with MiG-31B/BS/BM *Foxhound*

##### GROUND ATTACK

- 2 sqn with Su-24M *Fencer*
- 1 sqn with Su-25SM *Frogfoot* (Kyrgyzstan)

##### ISR

- 1 sqn with Su-24MR *Fencer E*

##### TRANSPORT

- 1 regt with An-12 *Cub*; An-26 *Curl*; Tu-134 *Crusty*; Tu-154; Mi-8 *Hip*

##### ATTACK HELICOPTER

- 2 sqn with Mi-24 *Hind*

##### TRANSPORT HELICOPTER

- 2 sqn with Mi-8 *Hip*/Mi-26 *Halo*

##### AIR DEFENCE

- 6 regt with S-300PS (SA-10B *Grumble*)

#### EQUIPMENT BY TYPE

##### AIRCRAFT

- FTR 50 MiG-31B/BS/BM *Foxhound*
- FGA 26 Su-24M *Fencer*
- ATK 5 Su-25 *Frogfoot*
- ISR 9 Su-24MR *Fencer E*
- TPT 36 An-12 *Cub*/An-26 *Curl*/Tu-134 *Crusty*/Tu-154 *Careless*

##### HELICOPTERS

- ATK 24 Mi-24 *Hind*
- TPT 46: 6 Mi-26 *Halo*; 40 Mi-8 *Hip*
- AD • **SAM** • **SP** S-300PS (SA-10B *Grumble*)

## Airborne Troops

---

#### FORCES BY ROLE

##### MANOEUVRE

- Air Manoeuvr**
- 1 AB bde

## Southern Military District

HQ located at Rostov-on-Don

### Army

#### FORCES BY ROLE

##### COMMAND

2 army HQ

##### SPECIAL FORCES

2 (Spetsnaz) SF bde

##### MANOEUVRE

###### Reconnaissance

1 recce bde

###### Mechanised

6 MR bde

1 MR bde (Armenia)

1 MR bde (Abkhazia)

1 MR bde (South Ossetia)

3 (lt/mtn) MR bde

##### COMBAT SUPPORT

1 arty bde

1 MRL bde

1 MRL regt

1 SSM bde with *Iskander-M*

2 AD bde

1 engr bde

3 NBC regt

##### COMBAT SERVICE SUPPORT

2 log bde

### Black Sea Fleet

The Black Sea Fleet is primarily based in the Crimea, at Sevastopol, Karantinnaya Bay and Streletskaya Bay.

#### EQUIPMENT BY TYPE

SUBMARINES • TACTICAL 5 SSK

PRINCIPAL SURFACE COMBATANTS 5: 2 CGHM;

1 DDGM; 2 FFGM

PATROL AND COASTAL COMBATANTS 22: 4

FSGM; 6 FSM; 1 PHM; 5 PCFG; 5 PBM; 3 PBF; 1 PHT

MINE WARFARE • MINE COUNTERMEASURES

10: 1 MHO; 6 MSO; 3 MSC; 1 MHI

AMPHIBIOUS 10: 7 LST; 1 LCM; 2 LCU

### Naval Aviation

#### FORCES BY ROLE

##### FIGHTER

###### ANTI-SURFACE WARFARE/ISR

1 regt with Su-24M/MR *Fencer*; Su-30SM

###### ANTI-SUBMARINE WARFARE

1 sqn with Ka-27 *Helix*

1 sqn with Mi-14 *Haze*

###### MARITIME PATROL/TRANSPORT

1 sqn with An-26 *Curl*; Be-12 *Mail\**; Mi-8

#### EQUIPMENT BY TYPE

##### AIRCRAFT

FGA 21: 18 Su-24M *Fencer*; 3 Su-30SM

ISR 4 Su-24MR *Fencer E*

MP 6 Be-12 *Mail\**

TPT 6 An-26

##### HELICOPTERS

ASW Ka-27 *Helix*

TPT • Medium Mi-8 *Hip* (MP/EW/Tpt)

### Naval Infantry

#### FORCES BY ROLE

##### MANOEUVRE

Mechanised

2 naval inf bde

##### COMBAT SUPPORT

1 arty bde

##### AIR DEFENCE

1 SAM regt

### Coastal Artillery and Missile Troops

#### FORCES BY ROLE

##### COASTAL DEFENCE

2 ASHM bde

### Caspian Sea Flotilla

#### EQUIPMENT BY TYPE

PRINCIPAL SURFACE COMBATANTS 2 FFGM

PATROL AND COASTAL COMBATANTS 11: 3

FSGM; 3 FSM; 1 PCFG; 3 PHG; 1 PBM

MINE WARFARE • MINE COUNTERMEASURES 3:

2 MSC; 1 MHI

AMPHIBIOUS 9: 2 LCM; 7 LCU

### Military Air Force

#### 4th Air Force & Air Defence Army

#### FORCES BY ROLE

##### FIGHTER

1 regt with MiG-29 *Fulcrum*; Su-30SM

1 sqn with MiG-29 *Fulcrum* (Armenia)

##### FIGHTER/GROUND ATTACK

1 regt with Su-27 *Flanker*

1 regt with Su-27SM2 *Flanker*; Su-27SM3 *Flanker*;

Su-30M2

##### GROUND ATTACK

1 regt with Su-24M *Fencer*

2 regt with Su-25SM/SM3 *Frogfoot*

1 regt with Su-34 *Fullback*

##### ISR

1 regt with Su-24MR *Fencer E*

##### TRANSPORT

1 regt with An-12 *Cub*/Mi-8 *Hip*

##### ATTACK HELICOPTER

1 sqn with Ka-52A *Hokum B*

3 sqn with Mi-28N *Havoc B*

1 sqn with Mi-35 *Hind*

##### TRANSPORT HELICOPTER

6 sqn with Mi-8 *Hip*/Mi-26 *Halo*

##### AIR DEFENCE

1 regt with 9K317 *Buk-M1* (SA-17 *Grizzly*)

1 regt with S-300PS (SA-10B *Grumble*)

2 regt with S-300PM (SA-20 *Gargoyle*)

1 regt with S-400 (SA-21 *Growler*); 96K6 *Pantsir-S1*

(SA-22 *Greyhound*)

#### EQUIPMENT BY TYPE

##### AIRCRAFT

FTR 97: 63 MiG-29 *Fulcrum*; 34 Su-27 *Flanker*

FGA 104: 40 Su-24M *Fencer*; 12 Su-27SM2

*Flanker*; 12 Su-27SM3 *Flanker*; 4 Su-30M2; 3 Su-

30SM; 36 Su-34 *Fullback*  
 ATK 85 Su-25SM/SM3 *Frogfoot*  
 ISR 24 Su-24MR *Fencer*\*  
 TPT 12 An-12 *Cub*

#### HELICOPTERS

ATK 64: 16 Ka-52A *Hokum B*; 34 Mi-28N *Havoc*  
 B; 14 Mi-35 *Hind*

TPT 72: **Heavy** 10 Mi-26 *Halo*; **Medium** 62 Mi-8 *Hip*  
**AD • SAM • SP** 9K317 *Buk-M1* (SA-17 *Grizzly*);  
 S-300PS (SA-10B *Grumble*); S-300PM (SA-20  
*Gargoyle*); S-400 (SA-21 *Growler*); 96K6 *Pantsir-S1*  
 (SA-22 *Greyhound*)

### Airborne Troops

#### FORCES BY ROLE

##### MANOEUVRE

**Air Manoeuvr**  
 1 AB div  
 1 air aslt bde

### Eastern Military District

HQ located at Khabarovsk

#### Army

#### FORCES BY ROLE

##### COMMAND

4 army HQ

##### SPECIAL FORCES

1 (Spetsnaz) SF bde

##### MANOEUVRE

###### Armoured

1 tk bde

###### Mechanised

10 MR bde

1 MGA div

##### COMBAT SUPPORT

3 arty bde

1 MRL bde

2 SSM bde with *Iskander-M*

1 SSM bde with *Tochka*

3 AD bde

1 engr bde

3 NBC regt

##### COMBAT SERVICE SUPPORT

4 log bde

#### Reserves

#### FORCES BY ROLE

##### MANOEUVRE

###### Mechanised

8 MR bde

### Pacific Fleet

#### EQUIPMENT BY TYPE

##### SUBMARINES 24

STRATEGIC 4 SSBN

TACTICAL 20: 5 SSGN; 5 SSN; 8 SSK

PRINCIPAL SURFACE COMBATANTS 9: 1 CGHM;

8 DDGHM (of which three in reserve)

PATROL AND COASTAL COMBATANTS 23: 4

FSGM; 8 FSM; 8 PCFG; 3 PBM

MINE WARFARE 8: 2 MSO; 6 MSC  
 AMPHIBIOUS 9: 4 LST; 3 LCM; 2 LCU

### Naval Aviation

#### FORCES BY ROLE

##### FIGHTER

1 sqn with MiG-31B/BS *Foxhound*

##### ANTI-SUBMARINE WARFARE

3 sqn with Ka-27/Ka-29 *Helix*

1 sqn with Il-18D; Il-22 *Coot B*; Il-38 *May\**

1 sqn with Tu-142M/MR *Bear F/J\**

##### TRANSPORT

2 sqn with An-12BK *Cub*; An-26 *Curl*; Tu-134

#### EQUIPMENT BY TYPE

##### AIRCRAFT

FTR 12 MiG-31B/BS *Foxhound*

ASW 14 Tu-142M/MR *Bear F/J\**

MP 15 Il-38 *May\**

EW • ELINT 1 Il-22 *Coot B*

TPT 6: 2 An-12BK *Cub*; 3 An-26 *Curl*; 1 Tu-134

##### HELICOPTERS

ASW Ka-27 *Helix*

TPT • **Medium** Ka-29 *Helix*; Mi-8 *Hip*

### Naval Infantry

#### FORCES BY ROLE

##### MANOEUVRE

###### Mechanised

2 naval inf bde

##### AIR DEFENCE

2 SAM regt

### Coastal Artillery and Missile Troops

#### FORCES BY ROLE

##### COASTAL DEFENCE

1 AShM bde

1 AShM regt

### Military Air Force

#### 11th Air Force & Air Defence Army

#### FORCES BY ROLE

##### FIGHTER

1 regt with MiG-31B/BS *Foxhound*; Su-27SM2

*Flanker*; Su-30M2

1 regt with Su-27SM2 *Flanker*; Su-30M2; Su-30SM;

Su-35S *Flanker*

##### FIGHTER/GROUND ATTACK

1 regt with Su-25 *Frogfoot*; Su-30SM

##### GROUND ATTACK

1 regt with Su-24M/M2 *Fencer*

1 regt with Su-25SM *Frogfoot*

##### ISR

1 regt with Su-24MR *Fencer E*

##### TRANSPORT

2 sqn with An-12 *Cub*/An-26 *Curl*/Tu-134 *Crusty*;

Tu-154 *Careless*

##### ATTACK HELICOPTER

2 sqn with Mi-24 *Hind*

1 sqn with Ka-52A *Hokum B*

**TRANSPORT HELICOPTER**

6 sqn with Mi-8 *Hind*/Mi-26 *Halo*

**AIR DEFENCE**

2 regt with 9K317 *Buk*-M1 (SA-17 *Grizzly*); S-300V (SA-12 *Gladiator/Giant*)

3 regt with S-300PS (SA-10B *Grumble*); S-300PM (SA-20 *Gargoyle*)

1 regt with S-400 (SA-21 *Growler*); 96K6 *Pantsir*-S1 (SA-22 *Greyhound*)

**EQUIPMENT BY TYPE****AIRCRAFT**

FTR 20 MiG-31B/BS *Foxhound*

FGA 132: 44 Su-24M *Fencer*; 10 Su-24M2 *Fencer*; 35 Su-27SM2 *Flanker*; 2 Su-30M2; 15 Su-30SM; 26 Su-35S

ATK 72 Su-25/Su-25SM *Frogfoot*

ISR 28 Su-24MR *Fencer* E

TPT 22 An-12 *Cub*/An-26 *Curl*; 1 Tu-134 *Crusty*; 1 Tu-154 *Careless*

**HELICOPTERS**

ATK 44: 20 Ka-52A *Hokum* B; 24 Mi-24 *Hind*

TPT 60: **Heavy** 4 Mi-26 *Halo*; **Medium** 56 Mi-8 *Hip*

**AD • SAM • SP** 9K317 *Buk*-M1 (SA-17 *Grizzly*); S-300PS/PM (SA-10 *Grumble*/SA-20 *Gargoyle*); S-300V (SA-12 *Gladiator/Giant*); S-400 (SA-21 *Growler*); 96K6 *Pantsir*-S1 (SA-22 *Greyhound*)

**Airborne Troops****FORCES BY ROLE****MANOEUVRE**

**Air Manoeuvre**

2 air aslt bde

**Paramilitary 489,000****Federal Border Guard Service** €160,000

Directly subordinate to the president; now reportedly all contract-based personnel

**FORCES BY ROLE**

10 regional directorates

**MANOEUVRE**

**Other**

7 frontier gp

**EQUIPMENT BY TYPE**

AIFV/APC (W) 1,000 BMP/BTR

ARTY 90:

SP 122mm 2S1

GUN/MOR SP 120mm 2S9 *Anona*

MOR 120mm 2S12

**PRINCIPAL SURFACE COMBATANTS**

**FRIGATES • FFHM** 3 *Nerey* (*Krivak* III) with 1 twin Inchr with *Osa*-M (SA-N-4 *Gecko*) SAM, 2 quad 533mm TT Inchr, 2 RBU 6000 *Smerch* 2 A/S mor, 1 100mm gun (capacity 1 Ka-27 *Helix* A ASW hel)

**PATROL AND COASTAL COMBATANTS** 290

PCM 46:

2 *Molnya* II (*Pauk* II) with 1 quad Inchr with *Strela*-2 (SA-N-5 *Grail*) SAM, 2 twin 533mm TT Inchr, 2 RBU 1200 A/S mor, 1 AK630 CIWS, 1 76mm gun

27 *Svetljak* (*Svetlyak*) with 1 quad Inchr with *Strela*-2 (SA-N-5 *Grail*) SAM) 2 single 406mm TT, 1 AK630 CIWS, 1 76mm gun

17 *Molnya* I (*Pauk* I) with 1 quad Inchr with *Strela*-2 (SA-N-5 *Grail*) SAM, 4 single 406mm TT, 2 RBU 1200 A/S mor, 1 AK630 CIWS, 1 76mm gun

**PHT** 2 *Antares* (*Muravey*)

**PSO** 4 *Komandor*

**PCO** 18: 8 Project 503 (*Alpinist*); 1 *Sprut*; 6 *Rubin* with 1 AK630 CIWS, 1 hel landing platform; 2 *Antur*; 1 *Purga*

**PCC** 13 *Tarantul* (*Stenka*) with 4 406mm TT, 2 twin AK630 CIWS

**PB** 45: 3 Project 14310 (*Mirazh*); 13 Type 1496; 12 *Grif* (*Zhuk*); 17 *Kulik*

**PBR** 25: 3 *Ogonek* with 2 AK630 CIWS; 8 *Piyavka* with 1 AK630 CIWS; 5 *Shmel* with 1 76mm gun; 6 *Moskit* (*Vosh*) with 1 AK630 CIWS, 1 76mm gun; 2 *Slepen* (*Yaz*) with 2 115mm guns; 1 *Gornostay*

**PBF** 137: 1 A-125; 2 *Bogomol* with 2 twin AK630 CIWS, 1 76mm gun; 29 *Chibis*; 44 *Mangust*; 4 *Mustang* (Project 18623); 15 *Saygak*; €40 *Sobol*; 2 *Sokzhoi*

**AMPHIBIOUS • LC • LCAC** 7 *Tsaplya* (used for patrol duties)

**LOGISTICS AND SUPPORT** 42

**AE** 1 *Muna*

**AGB** 5 *Ivan Susanin* (primarily used as patrol ships)

**AGS** 2 *Yug* (primarily used as patrol ships)

**AK** 8 *Neon Antonov*

**AKSL** 6 *Kanin*

**AO** 2: 1 *Baskunchak*; 1 Project 1510

**ATF** 18 *Sorum* (primarily used as patrol ships)

**AIRCRAFT • TPT** €86: 70 An-24 *Coke*/An-26 *Curl*/An-72 *Coaler*/Il-76 *Candid*/Tu-134 *Crusty*/Yak-40 *Codling*; 16 SM-92

**HELICOPTERS:** €200 Ka-28 (Ka-27) *Helix* ASW/Mi-24 *Hind* Atk/Mi-26 *Halo* Spt/Mi-8 *Hip* Spt

**Federal Agency for Special Construction (MOD)** €50,000**Federal Communications and Information Agency** €55,000**FORCES BY ROLE****MANOEUVRE**

**Other**

4 paramilitary corps

28 paramilitary bde

**Federal Protection Service** €10,000–30,000 active

Org include elm of ground forces (mech inf bde and AB regt)

**FORCES BY ROLE****MANOEUVRE**

**Mechanised**

1 mech inf regt

**Air Manoeuvre**

1 AB regt

**Other**

1 (Presidential) gd regt

**Federal Security Service** €4,000 active (armed)**FORCES BY ROLE****MANOEUVRE****Other**

Some cdo unit (including Alfa and Vypmel units)

**Interior Troops** €170,000**FORCES BY ROLE**

7 Regional Commands: Central, Urals, North Caucasus, Volga, Eastern, North-Western and Siberian

**MANOEUVRE****Other**

3 (55th, 59th & ODon) paramilitary div (2–5 paramilitary regt)

18 (OBRON) paramilitary bde (3 mech bn, 1 mor bn)

2 indep paramilitary bde (OBR/OSMBR)

102 paramilitary regt/bn (incl special motorised units)

11 (special) paramilitary unit

**Aviation**

8 sqn

**COMBAT SUPPORT**

1 arty regt

**EQUIPMENT BY TYPE****MBT** 9

**AIFV/APC (W)** 1,650 BMP-1/BMP-2/BTR-80

**ARTY** 35

**TOWED 122mm** 20 D-30

**MOR 120mm** 15 PM-38

**AIRCRAFT** • **TPT** 23: **Heavy** 9 Il-76 *Candid*; **Medium** 2 An-12 *Cub*; **Light** 12 An-26 *Curl*; 6 An-72 *Coaler*

**HELICOPTERS** • **TPT** 70: **Heavy** 10 Mi-26 *Halo*;

**Medium** 60 Mi-8 *Hip*

**Railway Troops (MOD)** €20,000

4 regional commands

**FORCES BY ROLE****COMBAT SERVICE SUPPORT**

10 (railway) tpt bde

**Cyber**

Until 2003, activities within the cyber domain were the responsibility of the Russian SIGINT agency, FAPSI. In 2003, this agency was abolished and its responsibilities divided between the defence ministry and the internal security service (FSB). The first official doctrinal statement on the role of the Russian military in cyberspace, the 'Conceptual Views on the Activity of the Russian Federation Armed Forces in Information Space', was released at the end of 2011, and described cyber-force tasks with little correlation to those of equivalent commands in the West. In particular, the document contains no mention of the possibility of offensive cyber activity. It is also entirely defensive in tone, and focuses on force protection and prevention of information war, including allowing for a military role in negotiating international treaties governing information security. In January 2012, then-CGS Makarov gave a different picture of the three main tasks for any new command: 'disrupting adversary information systems, including by introducing harmful software; defending our own communications and command systems';

and 'working on domestic and foreign public opinion using the media, Internet and more'. The third task is a reminder that, unlike some other nations with advanced cyber capabilities, Russia deals in cyber warfare as an integral component of information warfare. Operations in Crimea from early 2014, and in the wider information space concerning the conflict in Ukraine, demonstrate that Russian thinking and capacity has matured in these areas.

**DEPLOYMENT****ARMENIA**

3,300: 1 mil base with (1 MR bde; 74 T-72; 80 BMP-1; 80 BMP-2; 12 2S1; 12 BM-21); 1 sqn with 18 MiG-29 *Fulcrum*; 2 AD bty with S-300V (SA-12 *Gladiator/Giant*); 1 AD bty with 2K12 *Kub* (SA-6 *Gainful*)

**BELARUS**

1 radar station at Baranovichi (*Volga* system; leased); 1 naval comms site

**BOSNIA-HERZEGOVINA**

OSCE • Bosnia and Herzegovina 2

**CÔTE D'IVOIRE**

UN • UNOCI 9 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 1; 26 obs

**GEORGIA**

7,000; Abkhazia 1 mil base with (1 MR bde; 40 T-90A; 120 BTR-82A; 18 2S3; 12 2S12; 18 BM-21; some S-300 SAM; some atk hel); South Ossetia 1 mil base with (1 MR bde; 40 T-72; 120 BMP-2; 36 2S3; 12 2S12)

**KAZAKHSTAN**

1 radar station at Balkash (*Dnepr* system; leased)

**KYRGYZSTAN**

€500; 13 Su-25SM *Frogfoot*; 2 Mi-8 *Hip* spt hel

**LIBERIA**

UN • UNMIL 3 obs

**MIDDLE EAST**

UN • UNTSO 4 obs

**MOLDOVA/TRANSDNIESTR**

€1,500 (including 380 peacekeepers); 2 MR bn; 100 MBT/AIFV/APC; 7 Mi-24 *Hind*; some Mi-8 *Hip*

**SERBIA**

OSCE • Kosovo 1

**SOUTH SUDAN**

UN • UNMISS 4; 2 obs

**SUDAN**

UN • UNISFA 1

**SYRIA**

4,000: 1 naval inf BG; 7 T-90; €20 BTR-82A; 12 2A65; 4 9A52 *Smerch*; TOS-1A; 12 Su-24M *Fencer*; 12 Su-25SM/UBM; 4 Su-30SM; 4 Su-34; 1 Il-20M; 12 Mi-24P *Hind*; 4 Mi-8AMTSh *Hip*; 3 *Pantsir-S1*; air base at Latakia; naval facility at Tartus



**TAJIKISTAN**

5,000; 1 mil base with (1 (201st) MR div; 40 T-72B1; 60 BMP-2; 80 BTR-80; 40 MT-LB; 18 2S1; 36 2S3; 6 2S12/12 9P140 *Uragan*); 4 Mi-24P *Hind*; 4 Mi-8MTV *Hip*

**UKRAINE**

Crimea: 28,000; 1 recce bde, 2 naval inf bde; 1 arty bde; 1 NBC regt; 40 T-72B3 MBT; 80 BMP-2 AIFV; 200 BTR-82A; 20 BTR-80 APC: 150 MT-LB; 18 2S1 arty; 18 2S19 arty; 12 BM-21 MRL; 1 ASHM bde with 3K60 *Bal*; 3K55 *Bastion*; 1 FGA regt with Su-24M/MR; Su-30SM; 1 FGA regt with Su-27SM2/3; Su-30M2; 1 FGA regt with Su-24M/M2; 1 atk/tpt hel regt; 1 ASW hel regt; 2 AD regt with S-300PS/PM; 1 Fleet HQ located at Sevastopol; 2 radar stations located at Sevastopol (*Dnepr* system) and Mukachevo (*Dnepr* system) Donetsk/Luhansk: 300+ (reported)

OSCE • Ukraine 27

**WESTERN SAHARA**

UN • MINURSO 13 obs

Tajikistan TJK				
Tajikistani Somoni Tr		2014	2015	2016
GDP	Tr	45.6bn	50.3bn	
	US\$	9.24bn	8.05bn	
<i>per capita</i>	US\$	1,113	949	
Growth	%	6.7	3.0	
Inflation	%	6.1	10.8	
Def bdtg [a]	Tr	946m		
	US\$	192m		
FMA (US)	US\$	3.5m	0.7m	
US\$1=Tr		4.93	6.25	

[a] Defence and law-enforcement expenses

Population 8,191,958

Ethnic groups: Tajik 67%; Uzbek 25%; Russian 2%; Tatar 2%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	16.8%	5.0%	5.2%	5.1%	16.3%	1.3%
Female	16.2%	4.8%	5.1%	5.0%	17.3%	1.8%

**Capabilities**

The small Tajik armed forces have little capacity to deploy other than token forces and almost all equipment is of Soviet origin. Without support they would face difficulties in the event of conflict or significant internal unrest, but Tajikistan's membership of the CSTO and the presence of a large, and growing, Russian military deployment in Dushanbe offers reassurance. A 2014 deal on military modernisation with Russia has opened the possibility of military aid from Moscow possibly worth over US\$1bn, and including platforms, weapons and personal equipment. The extended border with Afghanistan, and the possibility of a spillover of violence, is a priority concern, and border deployments have been stepped up in response. However, given the overall weaknesses of the Tajik armed and security forces – which include limited special-forces training, a high num-

ber of conscripts and only modest planning capacity – low-level militant activity linked to drug trafficking could continue to burden and challenge the armed forces.

**ACTIVE 8,800 (Army 7,300 Air Force/Air Defence 1,500) Paramilitary 7,500**

Conscript liability 24 months

**ORGANISATIONS BY SERVICE****Army 7,300****FORCES BY ROLE**  
**MANOEUVRE****Mechanised**

3 MR bde

**Air Manoeuvre**

1 air aslt bde

**COMBAT SUPPORT**

1 arty bde

1 SAM regt

**EQUIPMENT BY TYPE**

MBT 37: 30 T-72; 7 T-62

AIFV 23: 8 BMP-1; 15 BMP-2

APC (W) 23 BTR-60/BTR-70/BTR-80

ARTY 23

TOWED 122mm 10 D-30

MRL 122mm 3 BM-21

MOR 120mm 10

**AD • SAM**

TOWED S-75 *Dvoina* (SA-2 *Guideline*); S-125 *Pechora-2M* (SA-3 *Goa*)

MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

**Air Force/Air Defence 1,500****FORCES BY ROLE****TRANSPORT**

1 sqn with Tu-134A *Crusty*

**ATTACK/TRANSPORT HELICOPTER**

1 sqn with Mi-24 *Hind*; Mi-8 *Hip*; Mi-17TM *Hip H*

**EQUIPMENT BY TYPE****AIRCRAFT**

TPT • Light 1 Tu-134A *Crusty*

TRG 4+: 4 L-39 *Albatros*; some Yak-52

**HELICOPTERS**

ATK 4 Mi-24 *Hind*

TPT • Medium 11 Mi-8 *Hip*/Mi-17TM *Hip H*

**Paramilitary 7,500****Interior Troops 3,800****National Guard 1,200****Emergencies Ministry 2,500****Border Guards****DEPLOYMENT****UKRAINE**

OSCE • Ukraine 7

## FOREIGN FORCES

**Russia** 5,000; 1 mil base with (1 (201st) MR div; 40 T-72B1; 60 BMP-2; 80 BTR-80; 40 MT-LB; 18 2S1; 36 2S3; 6 2S12; 12 9P140 *Uragan*); 4 Mi-24P *Hind*; 4 Mi-8MTV *Hip*

## Turkmenistan TKM

Turkmen New Manat TMM		2014	2015	2016
GDP	TMM	137bn	155bn	
	US\$	47.9bn	44.4bn	
<i>per capita</i>	US\$	8,271	7,534	
Growth	%	10.3	8.5	
Inflation	%	6.0	7.0	
Def exp	TMM	€2.05bn		
	US\$	€719m		
FMA (US)	US\$	0.7m	0.1m	
USD1=TMM		2.85	3.50	

**Population** 5,231,422

**Ethnic groups:** Turkmen 77%; Uzbek 9%; Russian 7%; Kazak 2%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.4%	4.9%	5.3%	5.1%	19.1%	1.8%
Female	13.0%	4.8%	5.2%	5.1%	19.9%	2.4%

## Capabilities

Turkmenistan declared its neutrality in 1999 and enshrined this principle in its 2009 Military Doctrine; it is therefore not a member of the Russian-backed CSTO. The country's largely conscript-based armed forces are poorly equipped and remain reliant on Soviet-era equipment and doctrine. Low levels of training and a lack of available spare parts further limit capability. While the ground forces are shifting from a Soviet divisional structure to an updated brigade system, progress is slow. The air force has a very modest capability, as most of the aircraft the country inherited from the Soviet Union have been stored or scrapped and no significant new procurement has occurred. There are plans to strengthen coastal naval forces by 2015, and some assets have already been procured, leading to a moderate improvement in the Caspian Sea naval presence.

**ACTIVE 36,500 (Army 33,000 Navy 500 Air 3,000)**

*Conscript liability 24 months*

## ORGANISATIONS BY SERVICE

### Army 33,000

5 Mil Districts

#### FORCES BY ROLE

##### SPECIAL FORCES

1 spec ops regt

##### MANOEUVRE

**Armoured**

1 tk bde

**Mechanised**

1 (3rd) MR div (1 tk regt; 3 MR regt, 1 arty regt)

1 (22nd) MR div (1 tk regt; 1 MR regt, 1 arty regt)

4 MR bde

1 naval inf bde

#### Other

1 MR trg div

#### COMBAT SUPPORT

1 arty bde

1 (mixed) arty/AT regt

1 MRL bde

1 AT regt

1 SSM bde with SS-1 *Scud*

2 SAM bde

1 engr regt

#### EQUIPMENT BY TYPE†

**MBT** 654: 4 T-90S; 650 T-72

**RECCE** 200 BRDM-2

**AIFV** 1,106: 600 BMP-1; 430 BMP-2; 4 BMP-3; 8 BMD-1; 60 BRM-1; 4 BTR-80A

**APC (W)** 870: 120 BTR-60 (all variants); 300 BTR-70; 450 BTR-80

**ARTY** 765

**SP 122mm** 40 2S1

**TOWED** 457: **122mm** 350 D-30; **130mm** 6 M-46; **152mm**

101: 17 D-1; 72 D-20; 6 2A36; 6 2A65

**GUN/MOR 120mm** 17 2S9 *Anona*

**MRL** 154: **122mm** 88: 18 9P138; 70 BM-21; **220mm** 60

9P140 *Uragan*; **300mm** 6 9A52 *Smerch*

**MOR** 97: **82mm** 31; **120mm** 66 PM-38

#### AT

##### MSL

**SP** 69: 8 9P122; 8 9P133; 6 9P135; 2 9P148; 36 9P149; 9 9P158

**MANPATS** 9K111 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K115 *Metis* (AT-7 *Saxhorn*)

**GUNS 100mm** 60 MT-12/T-12

#### AD

##### SAM 53+

**SP** 53: 40 9K33 *Osa* (SA-8 *Gecko*); 13 9K35 *Strela-10* (SA-13 *Gopher*)

**MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡; *Mistral* (reported)

##### GUNS 70

**SP** 23mm 48 ZSU-23-4

**TOWED** 57mm 22 S-60

**MSL • SSM** 16 SS-1 *Scud*

## Navy 500

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 19

**PCFG** 2 *Edermen* (RUS *Molnya*) with 4 quad Inchr with 3M24E *Uran* ASHM, 1 quad Inchr (manual aiming)

with 9K32 *Strela-2* (SA-N-5 *Grail*) SAM, 1 76mm gun

**PCC** 4 *Arkadag*

**PBF** 12: 5 *Grif-T*; 5 *Dearsan* 14: 2 *Sobol*

**PB** 1 *Point*

## Air Force 3,000

#### FORCES BY ROLE

##### FIGHTER

2 sqn with MiG-29 *Fulcrum*; MiG-29UB *Fulcrum*;

**GROUND ATTACK**1 sqn with Su-25MK *Frogfoot***TRANSPORT**1 sqn with An-26 *Curl*; Mi-8 *Hip*; Mi-24 *Hind***TRAINING**1 unit with L-39 *Albatros***AIR DEFENCE**Some sqn with S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*); S-200 *Angara* (SA-5 *Gammon*)**EQUIPMENT BY TYPE****AIRCRAFT** 36 combat capableFTR 24: 22 MiG-29A/C *Fulcrum*; 2 MiG-29UB *Fulcrum*ATK 12 Su-25MK *Frogfoot*TPT • **Light** 1 An-26 *Curl*TRG 2 L-39 *Albatros***HELICOPTERS**ATK 10 Mi-24 *Hind*TPT • **Medium** 8 Mi-8 *Hip*AD • **SAM** S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*); S-200 *Angara* (SA-5 *Gammon*)**Ukraine UKR**

Ukrainian hryvnia h		2014	2015	2016
GDP	h	1.57tr	1.98tr	
	US\$	131bn	90.1bn	
<i>per capita</i>	US\$	3,051	2,109	
Growth	%	-6.8	-9.0	
Inflation	%	12.1	50.0	
Def exp [a]	h	52.6bn		
	US\$	4.39bn		
Def bdgt	h	40.5bn	86bn	
	US\$	3.38bn	3.91bn	
FMA (US)	US\$	6m	2m	
US\$1=h		11.99	21.97	

[a] Includes funding from the general budget reserve fund and the special defence and security reserve fund.

**Population** 44,291,413

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.8%	2.4%	3.1%	4.1%	23.5%	5.3%
Female	7.4%	2.3%	3.0%	3.9%	26.6%	10.5%

**Capabilities**

In 2014, Ukrainian armed forces were evicted from Crimea by Russian forces. Air-force and navy units based there lost the majority of their materiel. Ukraine's mobilisation to fight separatists in the east of the country showed that combat capability had been 'hollowed out' by inadequate resourcing and reduced training over many years. In early 2015 President Poroshenko signed a law increasing the maximum size of the military from 184,000 to 250,000. The armed forces still operate mainly Soviet-era equipment, or derivatives of these designs, and Ukraine's defence industry has begun returning a wide range of armoured vehicles to service from storage, including the T-80 MBT. The US has begun supplying non-lethal equipment to the country.

A new National Guard was formed in 2014 and took part in the fighting in the east. The government was able to incorporate many of the volunteer militias into the regular army as motor-rifle battalions and as regiments in the National Guard although some remain outside government control. Meanwhile, conscription was reinstated in May. Following the Minsk II agreement in February 2015, fighting in the east has gradually decreased. Ukraine has stepped up training with NATO and exercises *Saber Guardian/Rapid Trident* and *Sea Breeze* took place in 2015. The September 2015 military doctrine declared that it saw current and future threats to the country coming from Russia, and that Ukraine should modernise its forces and security sector to NATO and EU standards. (See pp. 173–77.)

**ACTIVE 204,000** (Army 145,000 Navy 6,000 Air 45,000 Airborne 8,000) Paramilitary n.k.

*Conscript liability* Army, Air Force 18 months, Navy 2 years. Minimum age for conscription raised from 18 to 20 in 2015.

**RESERVE 900,000** (Joint 900,000)

Military service within 5 years

**ORGANISATIONS BY SERVICE****Army 145,000**

4 regional HQ

**FORCES BY ROLE****SPECIAL FORCES**

2 SF regt

**MANOEUVRE****Armoured**

2 tk bde

**Mechanised**

9 mech bde

3 indep mech bn

1 mtn bde

**Light**

4 mot inf bde

1 lt inf bn

1 mtn regt

**Aviation**

3 avn bde

1 avn regt

**COMBAT SUPPORT**

5 arty bde

3 MRL regt

1 SSM bde

2 AD regt

1 engr regt

2 EW regt

1 CBRN regt

1 sigs bde

1 sigs regt

**Reserves****FORCES BY ROLE****MANOEUVRE****Light**

25+ inf bn

**EQUIPMENT BY TYPE**

**MBT** 788: 710 T-64/T-64BV/BM; 70 T-72; 8 T-80BV; (10 T-84 *Oplot*; 150 T-80; 530 T-72; 640 T-64; 20 T-55 all in store)

**RECCE** 450 BRDM-2

**AIFV** 1,319: 15 BMD-1, 15 BMD-2; 210 BMP-1; 960 BMP-2; 4 BMP-3; 115 BRM-1K; some BTR-3E1; some BTR-4E

**APC** 490

**APC (T)** 15+: 15 BTR-D; some MT-LB

**APC (W)** 350: 5 BTR-60; 235 BTR-70; 110 BTR-80

**ARTY** 1,862

**SP** 541+: **122mm** 247 2S1; **152mm** 288: 235 2S3; 18 2S5; 35 2S19; **203mm** 6+ 2S7 (up to 90 in store)

**TOWED** 515+: **122mm** 75 D-30; **152mm** 440: 180 2A36; 130 2A65; 130+ D-20

**GUN/MOR • 120mm • TOWED** 2 2B16 NONA-K

**MRL** 348: **122mm** 203: 18 9P138; 185 BM-21; **220mm** 70 9P140 *Uragan*; **300mm** 75 9A52 *Smerch*

**MOR** **120mm** 220: 190 2S12; 30 PM-38

**AT**

**MSL • MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K114 *Shturm* (AT-6 *Spiral*)

**GUNS** **100mm** ε500 MT-12/T-12

**HELICOPTERS**

**ATK** 133 Mi-24 *Hind*

**MRH** 1 *Lev-1*

**TPT • Medium** 30 Mi-8 *Hip*

**AD**

**SAM • SP** 9K35 *Strela-10* (SA-13 *Gopher*); 9K33 *Osa* (SA-8 *Gecko*); (Some S-300V (SA-12 *Gladiator*) in store)

**GUNS**

**SP** **30mm** 70 2S6

**TOWED** **23mm** ZU-23-2; **57mm** S-60

**RADAR • LAND** *Small Fred/Small Yawn/SNAR-10 Big Fred* (arty)

**MSL • SRBM** 90 *Tochka* (SS-21 *Scarab*)

**AEV** 53 BAT-2; MT-LB

**ARV** BREM-2; BREM-64; T-54/T-55

**VLB** MTU-20

## **Navy** 6,000 (incl Naval Aviation and Naval Infantry)

After Russia's annexation of Crimea, HQ shifted to Odessa. Several additional vessels remain in Russian possession in Crimea.

**EQUIPMENT BY TYPE**

**PRINCIPAL SURFACE COMBATANTS** 1

**FRIGATES • FFHM** 1 *Hetman Sagaidachny* (RUS *Krivak III*) with 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 quad 533mm ASTT with T-53 HWT, 1 100mm gun, (capacity 1 Ka-27 *Helix* ASW hel)

**PATROL AND COASTAL COMBATANTS** 4

**CORVETTES • FSM** 1 *Grisha* (II/V) with 1 twin Inchr with *Osa-M* (SA-N-4 *Gecko*) SAM, 2 twin 533mm ASTT with SAET-60 HWT, 2 RBU 6000 *Smerch* 2 A/S mor, 1 76mm gun

**PCFGM** 1 *Tarantul II* (FSU *Molnya*) with 2 twin Inchr with P-15 *Termit-R* (SS-N-2D *Styx*) ASHM; 1 quad Inchr (manual aiming) with 9K32 *Strela-2* (SA-N-5 *Grail*) SAM; 1 76mm gun

**PHG** 1 *Matka* (FSU *Vekhr*) with 2 single Inchr with P-15 *Termit-M/R* (SS-N-2C/D *Styx*) ASHM, 1 76mm gun

**PB** 1 *Zhuk* (FSU *Grif*)

**MINE WARFARE • MINE COUNTERMEASURES** 1

**MHI** 1 *Yevgenya* (FSU *Korund*)

**AMPHIBIOUS**

**LANDING SHIPS**

**LSM** 1 *Polnochny C* (capacity 6 MBT; 180 troops)

**LANDING CRAFT • LCU** 3

**LOGISTICS AND SUPPORT** 30

**AG** 2

**AGI** 1 *Muna*

**AGS** 1 *Biya*

**AKL** 1

**AO** 2 *Toplivo*

**AWT** 1 *Sudak*

**AXL** 3 *Petrushka*

**YDT** 13: 1 *Yelva*; 12 other

**YTM** 2

**YTR** 2 *Pozharny*

**YY** 1 *Sokal*

## **Naval Aviation** €1,000

**EQUIPMENT BY TYPE**

**AIRCRAFT**

**ASW** (2 Be-12 *Mail* non-operational)

**TPT • Light** (2 An-26 *Curl* in store)

**HELICOPTERS**

**ASW** 7+: 4+ Ka-27 *Helix A*; 3 Mi-14PS/PL *Haze A/C*

**TPT • Medium** 1 Ka-29 *Helix-B*

## **Naval Infantry** €1,000

**FORCES BY ROLE**

**MANOEUVRE**

**Light**

2 inf bn

**EQUIPMENT BY TYPE**

**AIFV** some BMP-1

**APC • APC (W)** some BTR-60; some BTR-80

**ARTY • TOWED** **152mm** some 2A36

## **Air Forces** 45,000

Flying hours 40 hrs/yr

**FORCES BY ROLE**

**FIGHTER**

4 bde with MiG-29 *Fulcrum*; Su-27 *Flanker*

**FIGHTER/GROUND ATTACK**

2 bde with Su-24M *Fencer*; Su-25 *Frogfoot*

**ISR**

2 sqn with Su-24MR *Fencer E\**

**TRANSPORT**

3 bde with An-24; An-26; An-30; Il-76 *Candid*; Tu-134 *Crusty*

**TRAINING**

Some sqn with L-39 *Albatros*

**TRANSPORT HELICOPTER**

Some sqn with Mi-8; Mi-9; PZL Mi-2 *Hoplite*

**AIR DEFENCE**

11 bde/regt with 9K37M *Buk-M1* (SA-11); S-300P/PS/PT (SA-10)

**EQUIPMENT BY TYPE**

**AIRCRAFT** 202 combat capable

**FTR** 122: 82 MiG-29 *Fulcrum*; 40 Su-27 *Flanker*

FGA 34 Su-24 *Fencer*  
 ATK 28 Su-25 *Frogfoot*  
 ISR 24: 1 An-30 *Clank*; 23 Su-24MR *Fencer E\**  
 TPT 44: **Heavy** 18 Il-76 *Candid*; **Medium** 1 An-70; **Light**  
 25: 3 An-24 *Coke*; 20 An-26 *Curl*; 2 Tu-134 *Crusty*  
 TRG 37 L-39 *Albatros*

#### HELICOPTERS

C2 4 Mi-9  
 TPT 33: **Medium** 30 Mi-8 *Hip*; **Light** 3 PZL Mi-2 *Hoplite*  
 AD • SAM • SP 322: 250 S-300P/PS/PT (SA-10 *Grumble*);  
 72 9K37M *Buk-M1* (SA-11 *Gadfly*)

#### MSL

ASM: Kh-25 (AS-10 *Karen*); Kh-59 (AS-13 *Kingbolt*); Kh-29 (AS-14 *Kedge*);  
 ARM: Kh-58 (AS-11 *Kilter*); Kh-25MP (AS-12 *Kegler*);  
 Kh-28 (AS-9 *Kyle*)  
 AAM • IR R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*)  
 SARH R-27 (AA-10A *Alamo*)

### Special Operations Command ε8,000

#### FORCES BY ROLE:

##### MANOEUVRE

**Air Manoeuvre**  
 1 AB bde  
 4 air mob bde

#### EQUIPMENT BY TYPE

AIFV 75+: 30 BMD-1; 45 BMD-2; some BTR-3E1; some BTR-4  
 APC 150  
 APC (T) 25 BTR-D  
 APC (W) 125: 1 BTR-60; 2 BTR-70; 122 BTR-80

#### ARTY 118

**TOWED** • 122mm 54 D-30  
**GUN/MOR** • SP • 120mm 40 2S9 *Anona*  
**MOR 120mm** 24 2S12

AD • GUNS • SP 23mm some ZU-23-2 (truck mounted)

### Paramilitary

#### National Guard ε52,000

Ministry of Internal Affairs; 5 territorial comd

#### FORCES BY ROLE

##### MANOEUVRE

**Armoured**  
 Some tk bn  
**Mechanised**  
 Some mech bn  
**Light**  
 Some lt inf bn

#### EQUIPMENT BY TYPE

MBT T-64; T-64BV; T-64BM; T-72 (reported)  
 AIFV 51+: BTR-3; BTR-3E1; ε50 BTR-4; 1 BMP-2  
 APC  
 APC (W) BTR-70; BTR-80  
 PPV *Streit Cougar*; *Streit Spartan*  
 ARTY  
 TOWED 122mm some D-30  
 MOR 120mm some  
 AT • RCL 73mm some SPG-9

#### AD

SAM • MANPAD 9K38 *Igla* (SA-18 *Grouse*)  
 GUNS • SP 23mm some ZU-23-2 (truck mounted)

#### AIRCRAFT

TPT • **Light** 24: 20 An-26 *Curl*; 2 An-72 *Coaler*; 2 Tu-134 *Crusty*

HELICOPTERS • TPT **Medium** 7 Mi-8 *Hip*

### Border Guard n.k.

#### FORCES BY ROLE:

##### MANOEUVRE

**Light**  
 some mot inf gp

### Maritime Border Guard

The Maritime Border Guard is an independent subdivision of the State Commission for Border Guards and is not part of the navy.

#### FORCES BY ROLE

##### PATROL

4 (cutter) bde  
 2 rvn bde

##### MINE WARFARE

1 MCM sqn

##### TRANSPORT

3 sqn

##### TRANSPORT HELICOPTER

1 sqn

##### COMBAT SERVICE SUPPORT

1 trg div  
 1 (aux ships) gp

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 26

PCFT 6 *Stenka* with 4 single 406mm TT  
 PCT 3 *Pauk I* with 4 single 406mm TT, 2 RBU-1200  
 A/S mor, 1 76mm gun  
 PHT 1 *Muravey* with 2 single 406mm TT, 1 76mm gun  
 PB 12: 11 *Zhuk*; 1 *Orlan*  
 PBR 4 *Shmel*

##### LOGISTICS AND SUPPORT • AGF 1

##### AIRCRAFT • TPT **Medium** An-8 *Camp*; **Light** An-24

*Coke*; An-26 *Curl*; An-72 *Coaler*

##### HELICOPTERS • ASW: Ka-27 *Helix A*

### DEPLOYMENT

#### Legal provisions for foreign deployment:

**Constitution:** Codified constitution (1996)

**Specific legislation:** 'On the procedures to deploy Armed Forces of Ukraine units abroad' (1518-III, March 2000)

**Decision on deployment of troops abroad:** Parliament authorised to approve decision to provide military assistance, deploy troops abroad and allow foreign military presence in Ukraine (Art. 85, para 23); also, in accordance with Art. 7 of the specific legislation (above), president is authorised to take a decision to deploy troops abroad and at the same time to submit a draft law to the Parliament of Ukraine for approval.

#### AFGHANISTAN

NATO • *Operation Resolute Support* 10



**ARMENIA/AZERBAIJAN**

OSCE • Minsk Conference 1

**CÔTE D'IVOIRE**

UN • UNOCI 34; 1 hel flt

**CYPRUS**

UN • UNFICYP 2

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 253; 11 obs; 2 atk hel sqn; 1 hel sqn

**LIBERIA**

UN • UNMIL 175; 2 obs; 1 hel sqn

**MOLDOVA**

10 obs

**SERBIA**

NATO • KFOR 33

OSCE • Kosovo 1

UN • UNMIK 2 obs

**SOUTH SUDAN**

UN • UNMISS 1; 1 obs

**FOREIGN FORCES**

Albania OSCE 2

Armenia OSCE 2

Austria OSCE 18

Belarus OSCE 2

Belgium OSCE 1

Bosnia-Herzegovina OSCE 14

Bulgaria OSCE 17

Canada OSCE 18 • *Operation Unifier* 200

Croatia OSCE 12

Czech Republic OSCE 18

Denmark OSCE 14

Estonia OSCE 7

Finland OSCE 27

France OSCE 12

Georgia OSCE 8

Germany OSCE 25

Greece OSCE 13

Hungary OSCE 30

Ireland OSCE 13

Italy OSCE 20

Kyrgyzstan OSCE 14

Latvia OSCE 9

Lithuania OSCE 3

Macedonia (FYROM) OSCE 16

Moldova OSCE 28

Mongolia OSCE 1

Montenegro OSCE 1

Netherlands OSCE 9

Norway OSCE 9

Poland OSCE 30

Portugal OSCE 5

Romania OSCE 31

Russia OSCE 27

Slovakia OSCE 7

Slovenia OSCE 2

Spain OSCE 14

Sweden OSCE 19

Switzerland OSCE 14

Tajikistan OSCE 7

Turkey OSCE 12

United Kingdom OSCE 29 • *Operation Orbital* 75

United States OSCE 54 • 310 (trg mission)

Uzbekistan OSCE 1

**TERRITORY WHERE THE GOVERNMENT DOES NOT EXERCISE EFFECTIVE CONTROL**

Following the overthrow of Ukraine's President Yanukovich in February 2014, the region of Crimea requested to join the Russian Federation after a referendum regarded as unconstitutional by the new Ukrainian government. Data presented here represents the de facto situation and does not imply international recognition.

**FOREIGN FORCES**

**Russia** Crimea: 28,000; 1 recce bde, 2 naval inf bde; 1 arty bde; 1 NBC bde; 40 T-72B3 MBT; 80 BMP-2 AIFV; 200 BTR-82A; 20 BTR-80 APC; 150 MT-LB; 18 2S1 arty; 18 2S19 arty; 12 BM-21 MRL; 1 ASHM bde with 3K60 *Bal*; 3K55 *Bastion*; 1 FGA regt with Su-24M/MR; Su-30SM; 1 FGA regt with Su-27SM2/3; Su-30M2; 1 FGA regt with Su-24M/M2; 1 atk/tpt hel regt; 1 ASW hel regt; 2 AD regt with S-300PS/PM; 1 Fleet HQ located at Sevastopol; 2 radar stations located at Sevastopol (*Dnepr* system) and Mukachevo (*Dnepr* system) Donetsk/Luhansk: 300+ (reported)

**Uzbekistan UZB**

Uzbekistani Som s		2014	2015	2016
GDP	s	145tr	176tr	
	US\$	62.6bn	66bn	
<i>per capita</i>	US\$	2,046	2,130	
Growth	%	8.1	6.8	
Inflation	%	8.4	9.8	
Def exp	s	€3.62tr		
	US\$	€1.57bn		
FMA (US)	US\$	2.7m	0.7m	
US\$1=s		2,313.70	2,666.70	

Population 29,199,942

**Ethnic groups:** Uzbek 73%; Russian 6%; Tajik 5%; Kazakh 4%; Karakalpak 2%; Tatar 2%; Korean <1%; Ukrainian <1%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	12.8%	5.0%	5.4%	5.3%	19.3%	2.0%
Female	12.1%	4.8%	5.4%	5.2%	20.0%	2.7%

**Capabilities**

In contrast to most other Central Asian states, Uzbekistan maintains an ambivalent strategic relationship with Russia. Although it still maintains bilateral defence ties with Moscow, uses mainly Soviet-era equipment and is a member

of the SCO, it suspended its membership of the CSTO in mid-2012. The security situation in neighbouring Afghanistan, and the possibility of instability spilling over across Uzbekistan's border, is a primary concern. A sizeable air capability was inherited from the Soviet Union, but without recapitalisation in the intervening period the active inventory has substantially reduced. Flying hours are reported to be low, with logistical and maintenance shortcomings affecting the availability of the remaining aircraft.

**ACTIVE 48,000 (Army 24,500 Air 7,500 Joint 16,000)**

**Paramilitary 20,000**

*Conscript liability 12 months*

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## ORGANISATIONS BY SERVICE

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### Army 24,500

4 Mil Districts; 2 op comd; 1 Tashkent Comd

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bde

##### MANOEUVRE

###### Armoured

1 tk bde

###### Mechanised

11 MR bde

###### Air Manoeuvre

1 air aslt bde

1 AB bde

###### Mountain

1 lt mtn inf bde

##### COMBAT SUPPORT

3 arty bde

1 MRL bde

##### EQUIPMENT BY TYPE

**MBT** 340: 70 T-72; 100 T-64; 170 T-62

**RECCE** 19: 13 BRDM-2; 6 BRM

**AIFV** 399: 120 BMD-1; 9 BMD-2; 270 BMP-2

**APC** 359

**APC (T)** 50 BTR-D

**APC (W)** 259: 24 BTR-60; 25 BTR-70; 210 BTR-80

**PPV** 50 *Maxxpro+*

**ARTY** 487+

**SP** 83+: **122mm** 18 2S1; **152mm** 17+: 17 2S3; 2S5 (reported);

**203mm** 48 2S7

**TOWED** 200: **122mm** 60 D-30; **152mm** 140 2A36

**GUN/MOR** **120mm** 54 2S9 *Anona*

**MRL** 108: **122mm** 60: 24 9P138; 36 BM-21; **220mm** 48

9P140 *Uragan*

**MOR** **120mm** 42: 5 2B11; 19 2S12; 18 PM-120

**AT • MSL • MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*);

9K111 *Fagot* (AT-4 *Spigot*)

**GUNS** **100mm** 36 MT-12/T-12

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### Air Force 7,500

#### FORCES BY ROLE

##### FIGHTER

1 sqn with MiG-29/MiG-29UB *Fulcrum*;

1 sqn with Su-27/Su-27UB *Flanker*

##### FIGHTER/GROUND ATTACK

1 regt with Su-24 *Fencer*; Su-24MP *Fencer F\**

##### GROUND ATTACK

2 sqn with Su-25/Su-25BM *Frogfoot*

##### ELINT/TRANSPORT

1 regt with An-12/An-12PP *Cub*; An-26/An-26RKR *Curl*

##### TRANSPORT

Some sqn with An-24 *Coke*; Tu-134 *Crusty*

##### TRAINING

1 sqn with L-39 *Albatros*

##### ATTACK/TRANSPORT HELICOPTER

1 regt with Mi-24 *Hind*; Mi-26 *Halo*; Mi-8 *Hip*;

1 regt with Mi-6 *Hook*; Mi-6AYa *Hook C*

##### EQUIPMENT BY TYPE

**AIRCRAFT** 45 combat capable

**FTR** 12 MiG-29/MiG-29UB *Fulcrum*; (18 more in store)

**FGA** 13 Su-27/Su-27UB *Flanker*; (11 more in store); (26 Su-17M (Su-17MZ)/Su-17UM-3 (Su-17UMZ) *Fitter* C/G non-operational);

**ATK** 20 Su-25/Su-25BM *Frogfoot*

**EW/Tpt** 26 An-12 *Cub* (med tpt)/An-12PP *Cub* (EW)

**ELINT/Tpt** 13 An-26 *Curl* (lt tpt)/An-26RKR *Curl* (ELINT)

**TPT • Light** 2: 1 An-24 *Coke*; 1 Tu-134 *Crusty*

**TRG** 14 L-39 *Albatros*

##### HELICOPTERS

**ATK** 29 Mi-24 *Hind*

**C2** 2 Mi-6AYa *Hook C*

**TPT** 79 **Heavy** 27: 26 Mi-6 *Hook*; 1 Mi-26 *Halo*; **Medium**

52 Mi-8 *Hip*

##### AD • SAM 45

**TOWED** S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)

**STATIC** S-200 *Angara* (SA-5 *Gammon*)

##### MSL

**ASM** Kh-23 (AS-7 *Kerry*); Kh-25 (AS-10 *Karen*)

**ARM** Kh-25P (AS-12 *Kegler*); Kh-28 (AS-9 *Kyle*); Kh-58 (AS-11 *Kilter*)

**AAM • IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR/ SARH** R-27 (AA-10 *Alamo*)

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## Paramilitary up to 20,000

### Internal Security Troops up to 19,000

Ministry of Interior

### National Guard 1,000

Ministry of Defence

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## DEPLOYMENT

### UKRAINE

OSCE • Ukraine 1

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## FOREIGN FORCES

**Germany** *Operation Resolute Support* 25

Table 9 Selected Arms Procurements and Deliveries, Russia and Eurasia

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Azerbaijan (AZE)</b>								
BMP-3	AIFV	100+	n.k.	RUS	KMZ	n.k.	2015	Deliveries expected to be complete by end of 2016
<b>Belarus (BLR)</b>								
BTR-82A	AIFV	n.k.	n.k.	RUS	VPK	n.k.	2016	For special forces
Yak-130	Trg ac	4	n.k.	RUS	UAC (Irkut)	2015	2016	Order for second batch
Tor-M2K	SAM	5	n.k.	RUS	Almaz-Antey	2015	2016	-
S-300PM	SAM	4 bty	Donation	RUS	Government surplus	2014	2015	Delivery expected before end of 2015
<b>Georgia (GEO)</b>								
VL Mica	SAM	1 bty	n.k.	FRA	MBDA	2015	n.k.	-
<b>Kazakhstan (KAZ)</b>								
BTR-82A	AIFV	190	n.k.	RUS	VPK	2011	2011	Third contract for 90 vehs signed in 2012
S-300PS	SAM	5 bty	n.k.	RUS	Government surplus	2009	2015	Deliveries ongoing
<b>Russia (RUS)</b>								
<i>Bulava</i> (SS-N-32)	SLBM	n.k.	n.k.	RUS	MITT	n.k.	2009	For <i>Borey</i> -class SSBNs
T-72B3	MBT upgrade	n.k.	n.k.	RUS	UKBTM	n.k.	2013	Upgrade of existing T-72 fleet
<i>Armata</i>	AFV	n.k.	n.k.	RUS	UKBTM	2014	2016	Limited pre-production under way
<i>Kurganets-25</i>	AFV	n.k.	n.k.	RUS	KMZ	2014	2016	Limited pre-production under way
<i>Bumerang</i>	AFV	n.k.	n.k.	RUS	VPK	2014	2016	Limited pre-production under way
BTR-82A	AIFV	n.k.	n.k.	RUS	VPK	n.k.	2011	Improved BTR-80A series
BMD-4M	AFV	n.k.	n.k.	RUS	KMZ	n.k.	2015	For airborne troops
BTR-MDM	APC (T)	n.k.	n.k.	RUS	KMZ	n.k.	2015	For airborne troops
2S35 <i>Koalitsiya-SV</i>	Arty (152mm)	n.k.	n.k.	RUS	Uraltransmash	n.k.	2016	-
9K720/728 <i>Iskander</i>	SRBM/GLCM	n.k.	n.k.	RUS	KBM	2005	2006	In service with six brigades by late 2015, some with cruise-missile variant
<i>Borey-A</i> -class	SSBN	5	n.k.	RUS	Sevmash Shipyard	2012	2015	Third of class laid down Dec 2014
<i>Yasen</i> -class	SSN	5	n.k.	RUS	Sevmash Shipyard	1993	2013	Fifth of class laid down Mar 2015
<i>Varshavyanka</i> -class ( <i>Kilo</i> )	SSK	6	n.k.	RUS	Admiralty Shipyards	2010	2014	Fourth of class commissioned Nov 2015
<i>Lada</i> -class	SSK	3	n.k.	RUS	Admiralty Shipyards	1997	2010	Third of class laid down Mar 2015
<i>Admiral Gorshkov</i> -class	DDGHM	6	n.k.	RUS	Severnaya Verf	2005	2014	First vessel in trials as of late 2015
<i>Steregushchiy</i> -class	FFGHM	9	n.k.	RUS	Severnaya Verf/Amur Shipyard	2001	2008	Fifth of class launched May 2015
<i>Gremyashchiy</i> -class	FFGHM	2	n.k.	RUS	Severnaya Verf	2011	2015	Improved <i>Steregushchiy</i> -class. Second of class laid down Jul 2013

Table 9 Selected Arms Procurements and Deliveries, Russia and Eurasia

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<i>Admiral Grigorovich-class (Krivak IV)</i>	FFGHM	6	n.k.	RUS	Yantar Shipyard	2010	2015	Six vessels in build for Black Sea Fleet. First of class in trials as of late 2015
<i>Buyan-M-class</i>	FSGM	12	n.k.	RUS	Zelenodolsk Shipyard	2010	2014	Third of class commissioned Nov 2014
<i>Tu-160 Blackjack</i>	Bbr ac upgrade	15	n.k.	RUS	UAC	2007	2012	Lagging behind original schedule. Deliveries ongoing
<i>MiG-29K Fulcrum D</i>	Ftr ac	24	n.k.	RUS	UAC (MiG)	2012	2013	For navy. Deliveries ongoing
<i>MiG-29SMT Fulcrum</i>	FGA ac	16	R17bn (US\$445m)	RUS	UAC (MiG)	2014	2015	First delivery due by end of 2015
<i>Su-30M2</i>	FGA ac	16	n.k.	RUS	UAC (Sukhoi)	2012	2014	Deliveries ongoing
<i>Su-30SM</i>	FGA ac	80	n.k.	RUS	UAC (Sukhoi)	2012	2012	20 for navy and 60 for air force. Deliveries ongoing
<i>Su-34 Fullback</i>	FGA ac	94	n.k.	RUS	UAC (Sukhoi)	2012	2013	Second order. Deliveries ongoing
<i>Su-35S Flanker</i>	FGA ac	48	See notes	RUS	UAC (Sukhoi)	2009	2012	Part of combined US\$2.5bn order. Deliveries ongoing
<i>Il-76MD-90A</i>	Hvy tpt ac	39	US\$4bn	RUS	Aviastar-SP	2012	2014	Deliveries ongoing
<i>Il-96-400TZ</i>	Tkr ac	2	n.k.	RUS	UAC (Ilyushin)	2015	n.k.	-
<i>Ka-52K Hokum</i>	Atk hel	146	US\$4bn	RUS	Russian Helicopters (Kamov)	2011	n.k.	First hel in tests
<i>Mi-28N Havoc</i>	Atk hel	n.k.	n.k.	RUS	Russian Helicopters (Rostvertol)	2011	n.k.	Officially entered service Dec 2013 with deliveries ongoing
<i>Mi-8AMTSh Hip</i>	Med tpt hel	172	n.k.	Rus	Russian Helicopters (Ulan-Ude)	2010	2010	Deliveries ongoing
<i>Mi-8MTV-5 Hip</i>	Med tpt hel	140	n.k.	RUS	Russian Helicopters (Kazan)	2011	2014	Deliveries ongoing
<i>Tor-M2 (SA-15 Gauntlet)</i>	SAM	n.k.	n.k.	RUS	Almaz-Antey	n.k.	n.k.	Deliveries ongoing
<i>Buk-M2 (SA-17 Grizzly)</i>	SAM	n.k.	n.k.	RUS	Almaz-Antey	n.k.	n.k.	Two bde sets delivered. May be succeeded by <i>Buk-M3</i>
<i>S-400 Triumf (SA-21 Growler)</i>	SAM	n.k.	n.k.	RUS	Almaz-Antey	n.k.	2007	In service with ten regt by late 2015
<i>S-300V4 (SA-23)</i>	SAM	12	n.k.	RUS	Almaz-Antey	2012	n.k.	Three bns
<i>96K6 Pantsir-S1</i>	AD	n.k.	n.k.	RUS	KBP Instrument Design Bureau	n.k.	2010	Delivery in progress to S-400 regts
<i>Kh-38</i>	ASM	n.k.	n.k.	RUS	KTRV	n.k.	n.k.	In production
<b>Ukraine (UKR)</b>								
<i>Gaiduck-class</i>	FFGHM	4	UKR16.2bn (US\$2bn)	UKR	Chernomorsky Shipbuilding	2011	n.k.	Construction resumed in late 2014
<i>Gyurza-M</i>	PBR	2	n.k.	UKR	Leninska Kuznya	2014	n.k.	First of class launched Nov 2015
<i>Centaur-class</i>	PBF	n.k.	n.k.	UKR	Mykolayiv State Enterprise	2015	2020	Based on <i>Gyurza-M</i> . Can carry 32 marines
<i>An-70</i>	Med tpt ac	3	n.k.	UKR	Antonov	1991	2015	First ac entered service Jan 2015 and is in test
<b>Uzbekistan (UZB)</b>								
<i>C-295W</i>	Lt tpt ac	4	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2014	n.k.	First ac in test

## Chapter Six

# Asia

In 2015, the military dimension of the Asia-Pacific's international politics was as prominent as ever, with China adopting an increasingly assertive posture in relation to its territorial claims in the East China and South China seas, the United States maintaining its 'rebalance' towards the region, tensions continuing on the Korean Peninsula and many regional states expanding their capability developments.

### South China Sea

Tensions significantly escalated during 2015 over China's accelerating construction on features it occupied in the South China Sea. In the Spratly Islands, China expanded the existing Cuarteron, Fiery Cross, Gaven, Hughes, Johnson South, Mischief and Subi reefs into islands, while also enlarging Woody Island in the Paracels group to the north. There was an evident military aspect to these activities. Beijing established a 3km-long runway capable of supporting military air operations on Fiery Cross Reef; by July 2015, an apron and taxiway had been added and helipads, satellite-communications antennae and what resembled a radar tower were also visible in satellite imagery. Another airstrip was being built on Johnson South Reef, together with a port and surveillance towers. It was possible that a runway was being built on Subi Reef.

There was speculation that China's new island airfields and radars would ultimately be used to enforce an air-defence identification zone over at least part of the South China Sea. Some analysts viewed the construction effort as part of a wider plan supporting long-term strategic purposes, notably protecting China's sea lanes of communication as well as transit routes and, eventually, deployment areas for its missile submarines as it develops a credible second-strike nuclear deterrent. In May, US Secretary of Defense Ashton Carter stated that Washington opposed 'any further militarization of disputed features' and would 'fly, sail and operate wherever international law allows'. Earlier in the month, it was reported that Carter had asked the US Department of Defense (DoD) to consider expanding US Navy 'freedom of navigation' patrols in the South China Sea, to challenge assertions of sovereignty that

were not recognised in international law. US aircraft were already challenging China's attempts to control airspace over the features that it had recently enlarged and militarised.

Apparently trying to calm criticism, Beijing's foreign ministry claimed in June 2015 that China had almost completed construction on some features. However, this gave Beijing leeway to continue with construction on other reefs or islets; and widely available satellite imagery indicated that it was indeed continuing to build military facilities on Fiery Cross, Johnson South and Subi reefs. Against this background, the US DoD released a new 'Asia-Pacific Maritime Security Strategy' in August 2015. Assistant Secretary of Defense for Asian and Pacific Security Affairs David Shear said the US was 'investing in new cutting-edge capability, deploying our finest maritime capabilities forward, and distributing these capabilities more widely across the region'. In April, it was confirmed that two Littoral Combat Ships (LCSs) would be forward deployed to Singapore's Changi Naval Base by 2016, with four such ships (two *Freedom*-class and two *Independence*-class) deployed there by 2018. In May 2015, the *Freedom*-class LCS, USS *Fort Worth*, was closely followed by a Chinese navy frigate near the Spratly Islands, and US officers said they expected encounters between the US Navy and the People's Liberation Army Navy (PLAN) to become more frequent. By early October, the US Navy was briefing regional allies on its plans to conduct surface patrols close to Chinese-occupied features, and in late October the destroyer USS *Lassen*, supported by maritime-patrol aircraft, entered the 12-nautical-mile territorial waters claimed by China around the Subi and Mischief reefs. The Chinese navy used a destroyer to shadow the US ship. The US emphasised that this 'freedom of navigation' patrol was just the first in a series; the Chinese navy warned that further forays into the waters claimed by China might 'trigger eventualities'.

### Northeast Asia

Further north, in the East China Sea, there were continued brief incursions by the Chinese coast guard into Japanese territorial waters around the Senkaku



Islands, which Beijing claims as the Diaoyu Islands. In August and September 2015, 1,100 Japan Self-Defense Force (JSDF) personnel took part in the *Dawn Blitz* joint exercise in California with the US Marine Corps; the exercise focused on regaining control of a remote island. The latest Japanese defence white paper, published in August 2015, emphasised that the security environment surrounding Japan had become 'increasingly severe' (see pp. 229–30).

Tokyo's security concerns in the Asia-Pacific region focused not only on China, but also North Korea, where leader Kim Jong-un continued in May 2015 to consolidate his leadership with a purge of senior military officers, which claimed the life of defence minister General Hyon Yong-chol. Under Kim, Pyongyang continued its nuclear-weapons development. Satellite images from early 2015 suggested that plutonium production may have restarted at the nuclear reactor at Yongbyon. Chinese experts assessed that an increased capacity for highly enriched uranium production allowed for a North Korean stockpile of up to 20 nuclear weapons that could soon double. In April 2015, Admiral Bill Gortney, Commander of US NORTHCOM and of the North American Aerospace Defense Command, claimed that North Korea had the capability to deliver a nuclear warhead to the continental US using a road-mobile KN-08 missile. In May, Pyongyang released images showing what it claimed was the test-firing of a submarine-launched ballistic missile, although doctoring of the photos led to some doubts.

During August, tensions on the Korean Peninsula escalated after two South Korean soldiers were seriously injured by a landmine close to the Demilitarized Zone. After Seoul began a retaliatory loudspeaker propaganda campaign across the border, and just as the annual *Ulchi Freedom Guardian* military exercise with the US began, the North fired an artillery shell at South Korea and ordered its forces onto a semi-war footing. Seoul's military response involved artillery fire across the border and a joint show of force with the US Air Force. Within days, though, emergency talks resulted in a de-escalation of the crisis.

The 2014 South Korean defence white paper, released in January 2015, was the first under the Park Geun-hye administration and focused on the North Korean threat. The paper closely followed parliamentary approval in December 2014 of a 4.9% increase in the defence budget to 32.4 trillion won (US\$28.9 billion) for 2015. Major defence-procurement developments included Seoul's selection in

June 2015 of the Airbus A330 MRTT as the air force's in-flight refuelling tanker. Meanwhile, there was continuing controversy over the United States' wish to deploy a Terminal High-Altitude Area Defense (THAAD) battery in South Korea. Chinese objections caused the Park administration to prevaricate on the matter, and the US refrained from formally seeking acceptance. By mid-2015, China's stance over the issue contributed to rising South Korean public support for the THAAD deployment, which seemed likely in the medium term.

### Southeast Asia

For several Southeast Asian governments, concern over China's activities and possible further ambitions in the South China Sea has increasingly influenced capability-development efforts. By August 2015, Vietnam had commissioned four of the six Project 636 (*Kilo*-class) submarines ordered from Russia in 2009. These submarines could, in time, provide Vietnam with a strategically important anti-access/area-denial capability in parts of the South China Sea. Moreover, in early 2015 it was revealed that their weapons will include the land-attack version of the *Klub* 3M-14E (SS-N-30) cruise missile. The same missiles may also equip the two Project 11661 (*Gepard*-class) frigates that in mid-2015 were being fitted-out prior to delivery. Meanwhile, talks continued with European and US suppliers over combat aircraft, maritime-patrol aircraft and unmanned aerial vehicles (UAVs).

The Philippines' defence ambitions do not match Vietnam's, though as a major claimant in the Spratly Islands the Philippines is also directly confronted by Chinese pressure in the South China Sea. Manila's procurement of stronger maritime and air capabilities is constrained by a limited budget, and the Aquino administration's 2013–18 military-modernisation programme appeared to have lost momentum by mid-2015. The only significant procurement under the programme was of two former US Coast Guard cutters for the navy and 12 South Korean FA-50PH armed advanced training aircraft, due for delivery from late 2015. In July 2015, the defence department deferred a plan to purchase a shore-based missile system for the island of Palawan in the South China Sea. This was so that the funding could be diverted to the purchase of additional counter-insurgency and counter-terrorism equipment.

Malaysia, another territorial claimant in the South China Sea, was also increasingly concerned about China's activities there. However, the country's

economic slowdown and the government's prioritisation of domestic spending continued to restrict efforts to develop the maritime and air capabilities that the armed forces' leadership saw as a necessary response to China. Long-standing and important Malaysian defence requirements included new combat aircraft to replace the air force's MiG-29s; maritime-patrol and airborne early-warning aircraft; and anti-submarine-warfare helicopters. However, the lion's share of immediate procurement funding was allocated to acquiring four A400M transport aircraft, important for moving forces from the Malaysian peninsula to the vulnerable eastern states of Sabah and Sarawak, in Borneo. The first of these was delivered in March. Further major procurement for the armed forces is only likely under the country's next five-year economic plan, which is to run from 2016 to 2020.

Indonesia does not claim contested features in the South China Sea, but since 2010 it has become concerned over intrusions by Chinese fishing boats and maritime-agency vessels into the exclusive economic zone around its Natuna Islands, off the northwestern coast of Borneo. Developing the country's navy and coast guard, partly to deter and counter such incursions, constitutes one pillar of a grand re-conceptualisation of Indonesia's maritime role under President Joko Widodo. To increase the effectiveness of maritime law enforcement, in December 2014 Jakarta established a unified coast guard, bringing together several agencies that had previously been under separate government ministries but with overlapping responsibilities. A defence white paper (the first since 2008) was due to be released in late 2015 or early 2016.

The Indonesian navy's priority was the expansion of its submarine capability, with an eventual target of 12 boats. Three South Korean *Chang Bogo*-class boats (based on the German Type-209-1400) were due for delivery from 2017, and Defence Minister Ryaacudu also confirmed in September 2015 that the navy planned to purchase Russian *Kilo*-class boats. Air-force plans focused on acquiring new combat aircraft. Another batch of refurbished F-16C/D fighters provided under the US-sponsored Peace BimaSena II programme arrived in May 2015. In early September, the defence ministry announced that Indonesia had selected the Sukhoi Su-35 to replace the air force's ageing F-5Es, due for retirement in 2017.

Singapore continued to develop its armed forces' comprehensive capabilities. In June 2015, Defence Minister Dr Ng Eng Hen revealed that the air force's

fleet of F-16C/Ds would be upgraded in stages, over five to six years from 2016. Improvements will include new active electronically scanned array (AESA) radars, and an improved capacity to employ precision weapons. Earlier in the year, the *Hermes* 450 UAV was declared operational with the air force. In July, the first of eight Littoral Mission Vessels, intended to replace the present patrol vessels, was launched. Developed and built in Singapore, the new 1,250-tonne ships will be equipped with unmanned systems for surveillance and mine countermeasures. They can also be fitted with other mission-specific modules for roles such as humanitarian assistance and disaster relief.

A wide range of exercises continued to play an important part in efforts by the armed forces to maintain and enhance their capability. From September to November 2014, Singapore deployed more than 5,000 personnel to the *Wallaby* exercise in Queensland, Australia. In February 2015, Singaporean combat aircraft deployed to Thailand for the tri-national exercise *Cope Tiger* with the Royal Thai Air Force and US Air Force. From April to May, and again from September to November, more than 950 Singaporean armoured troops were in Germany with their *Leopard* 2SG main battle tanks and *Bionix* infantry fighting vehicles for the latest iteration of the *Panzer Strike* exercise.

The armed forces also deployed operationally. As well as non-combat deployments, in November 2014, the government announced that Singapore would contribute planning staff, imagery analysts and a KC-135R in-flight-refuelling aircraft to the US-led military coalition fighting the Islamic State of Iraq and al-Sham (ISIS) in the Middle East.

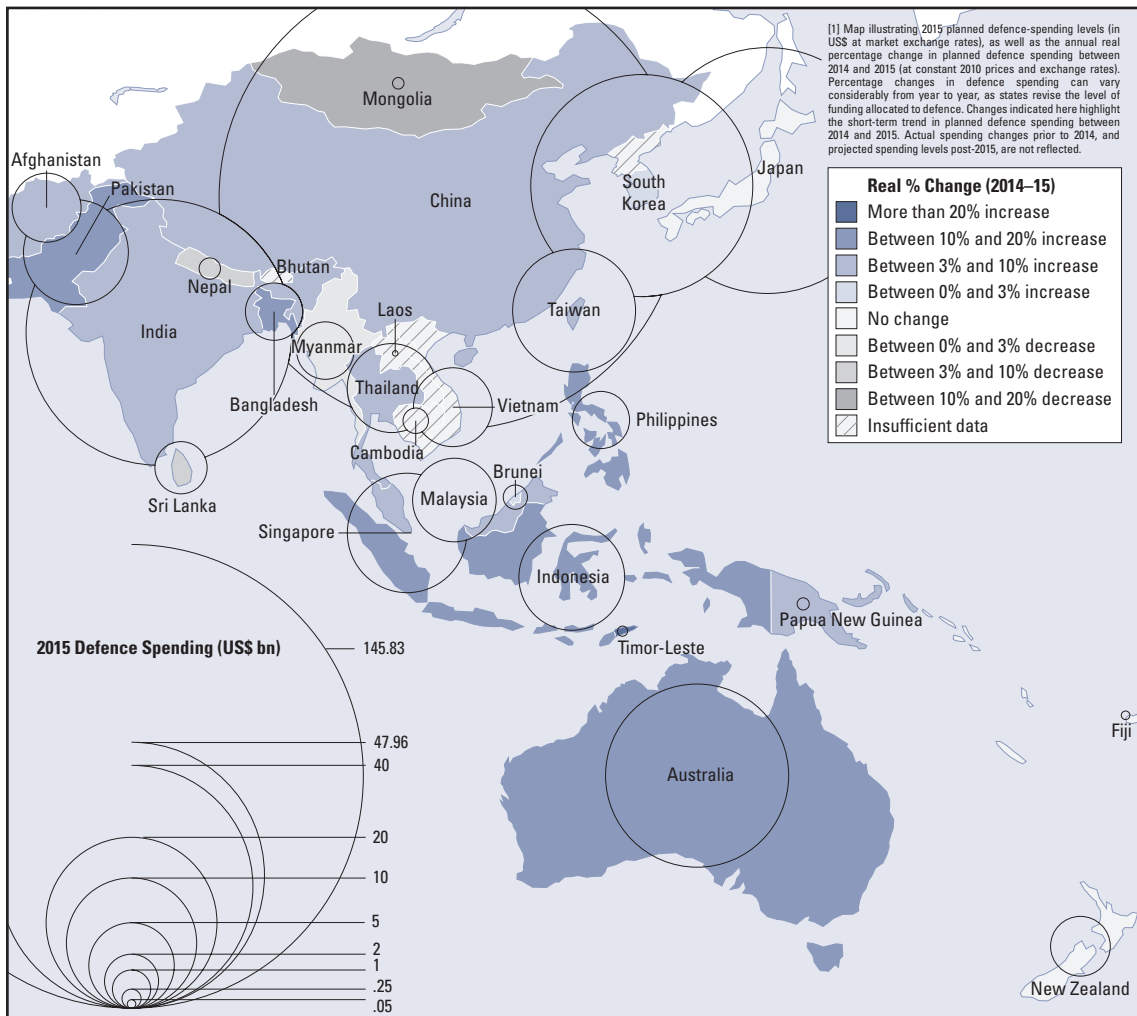
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## DEFENCE ECONOMICS

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### Macroeconomics

Economic growth in Asia, while still healthy by global standards, dipped slightly from 5.6% in 2014 to an IMF-projected 5.4% in 2015. In large measure, this was driven by declining economic activity in China, where 2015 growth was projected to fall to below 7% (to 6.8%) for the first time since 1990. Investment growth has slowed as China attempts to rebalance its economy away from an infrastructure- and construction-dominated growth model towards one based on domestic consumption and services. Meanwhile, the 18-month speculative boom in Chinese equities burst in the third quarter of 2015, when the Shanghai and

Map 5 **Asia Regional Defence Spending**<sup>1</sup>

Shenzhen benchmark indices lost one-third of their value in just a few weeks. The economic transition and financial-market turbulence in China affected commodity markets worldwide. Raw-material imports from Indonesia and Malaysia declined; trade with East Asian neighbours South Korea and Taiwan suffered too.

By contrast, continuing policy reforms in India caused economic activity – particularly investment – to continue to strengthen, with overall 2015 growth expected to rise to 7.3%. Across the region, Asian states generally benefited from lower commodity prices, which are likely to improve most countries' terms of trade as well as boost real incomes and thereby raise domestic demand. However, commodity exporters Australia, Indonesia, Malaysia and Indonesia are likely to be exceptions.

### Regional defence spending

The slight moderation in economic activity had little effect on regional defence spending in 2015, with significant budget increases announced across the region. China announced another large defence-budget hike in March 2015, with a nominal increase of 10.1% to RMB887bn (US\$145.8bn); nominal double-digit budget rises have occurred in each year since 2001, except 2010. In January 2015, Japan announced a record defence budget of ¥4.98tr (US\$41bn), a 2.8% rise on the previous year and its third straight annual increase in outlays. Taiwan announced a 2.6% nominal increase, the first since 2012 after several years of attempting to reduce the government's budget deficit. In April 2015, South Korea released plans for a KRW232.5tr (around US\$205bn) increase in defence allocations between 2016 and 2020 – equiv-

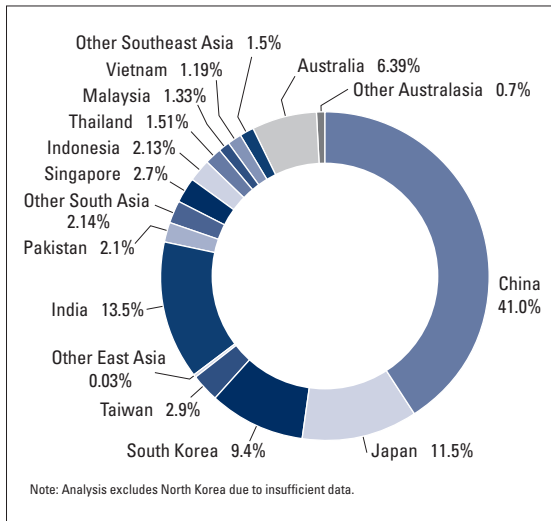


Figure 11 **Asia Defence Spending by Country and Sub-Region**

alent to a projected nominal 7.2% annual increment over the five-year period. This comes as the country modernises its armed forces and increases investment in domestic defence R&D, particularly in air- and missile-defence technologies. Investment in new capability areas was a priority for Singapore; it announced a 5.7% budgetary uplift to fund investments in cyber defence, unmanned systems, robotics and artificial-intelligence technologies.

Multi-year budgetary increases were envisioned by Australia, which was aiming for defence spending to reach 2% of GDP by 2023 (see pp. 218–21). Indonesia aimed to raise defence spending from around Rp100tr (US\$7.4bn, or 0.87% of GDP) in 2015 to a proposed Rp133tr (US\$8.9bn) in 2016. Both states are looking to modernise and expand their armed forces. So, too, is Malaysia, which planned a 10% nominal spending increase for 2015. However, it was unclear what proportion of these increases would be allocated towards funding long-term acquisition requirements. Myanmar's 10% nominal defence-budget increase in 2015 was likely to be oriented towards supporting salaries and operational expenses.

Malaysia also uses a special-funds law that permits natural-resource revenues to be used by the armed forces outside the budgetary process. For example, in 2014–15 the government accepted financial support from Petronas, the state oil and gas company, and SapuraKencana Petroleum, for important defence projects such as the establishment of two 'sea bases'. These bases – one a converted merchant ship, the

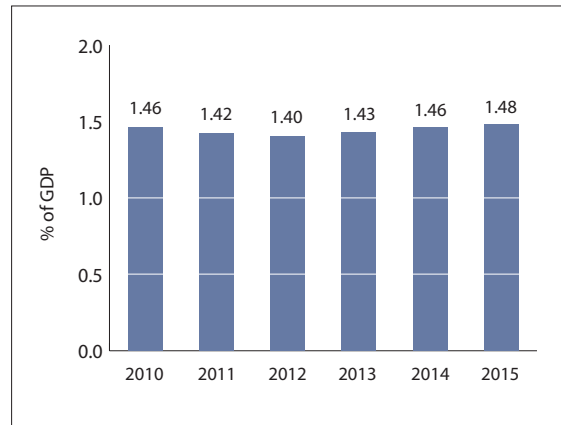


Figure 12 **Asia Regional Defence Expenditure** as % of GDP

other a decommissioned oil rig – are to provide forward-operating locations as part of an effort to prevent the possibility of further incursions from the southern Philippines into Sabah State, following the 2013 Lahud Datu incident when armed intruders sparked a brief but intense conflict there.

Several South Asian states also raised defence outlays in 2015. India announced a 7.7% nominal defence-budget increase in February, while Pakistan announced an 11% increase in June. Sri Lanka budgeted a 12% rise over 2014 levels, but part of this overall increment will be allocated to the police and other security agencies. By contrast, the 3.5% spending rise in Bangladesh in 2015 represented its lowest rate of growth since 2009.

Overall, with growing budgetary outlays in most states, aggregate regional defence spending rose from US\$322bn in 2014 to US\$340bn in 2015. This equated to a real-terms (i.e. after accounting for exchange rate and inflation effects) defence-spending increase of 5.6% in 2015, continuing the recent trend of between 4% and 6% annual spending increments seen since 2012. Real-terms outlays were also boosted by lower inflation in many states – the product of a decline in global commodities prices in 2014 and 2015.

### Regional defence procurement

Sustained, multi-year increases in defence spending in most Asian states partly reflect the elevated outlays on equipment procurement over the past five years, as states recapitalise ageing inventories, invest in new technologies and reorient capabilities from internal to external threats. As shown in Figure 13, Asia contains some of the world's most active armament markets:

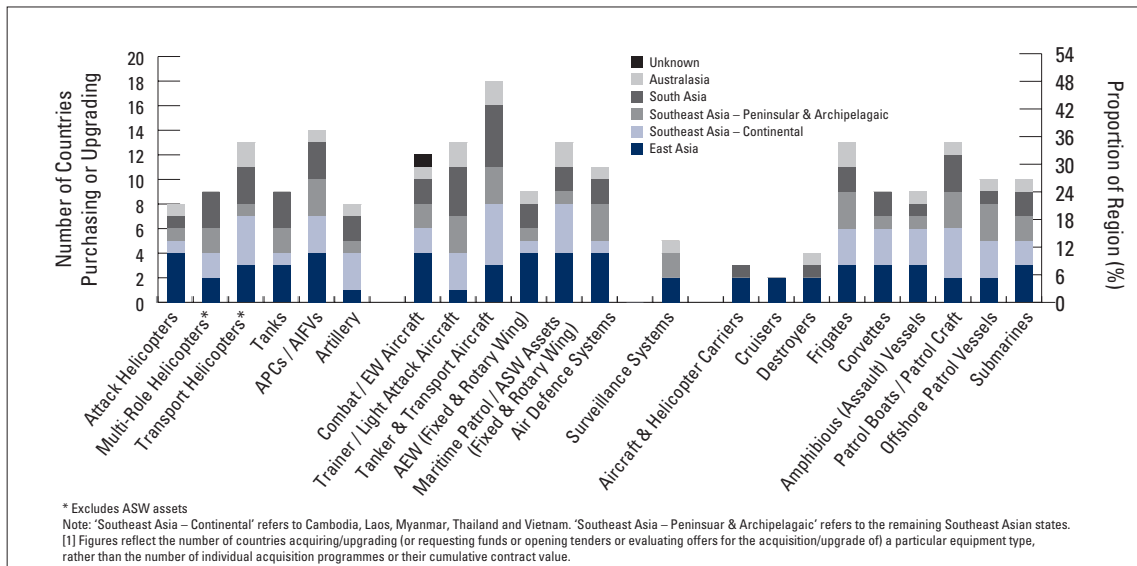


Figure 13 Asia - Selected Procurement & Upgrade Priorities Since 2011<sup>1</sup>

on average, just over one-third of states were active in each of the equipment-platform categories analysed. Overall, regional acquisition priorities have centred on the purchase of naval platforms, including surface, subsurface and anti-submarine-warfare (ASW) platforms; recapitalising and upgrading regional air power; and a heightened emphasis on expeditionary capabilities and air mobility.

#### Maritime-procurement trends

In Asia, most activity in the surface-naval arena has been in the frigate, corvette, offshore-patrol vessel and patrol boat/craft platform categories, with between one-third to one-half of states acquiring these platform types between 2011 and 2015. China and India are particularly active. However, in terms of future procurement, South Korea in 2015 set out its requirement for a third batch of *Incheon*-class frigates, with a view to selecting a supplier in 2016 and the first ship entering service in 2025. Meanwhile, half of all regional states were actively ordering, launching or commissioning patrol boats and patrol craft, such as India, Singapore, the Philippines and Vietnam.

Submarine construction also continued in China, Japan, South Korea and beyond. In late 2014 India's Defence Acquisition Council gave the go-ahead for the US\$12bn tender, under Project 75(I), for six conventional submarines with air-independent propulsion. Meanwhile, India's Defence Research and Development Organisation (DRDO) received approval to start designing indigenous nuclear

submarines. There were reports mid-year that Pakistan was discussing the purchase of up to eight diesel-electric submarines, possibly from China; this would be China's largest arms deal to date, though by the end of the year it was unclear if agreement had been reached. With the increase in regional naval assets, maritime situational awareness has grown in importance. In response, states have been investing in maritime patrol, ASW, and intelligence, surveillance and reconnaissance (ISR) capabilities – in terms of systems as well as platform developments. For instance, Malaysia plans a coastal-surveillance system in eastern Sabah, while Raytheon has been contracted (by the US Defense Threat Reduction Agency) to provide sensing and communications systems to coordinate some National Coast Watch control stations and, under a separate contract, upgrade the communications and surveillance systems on Philippines coast-guard vessels.

#### Aerospace

With many states' combat-aviation fleets ageing, fast-jet acquisitions and upgrades have been prominent in the region. Just under 50% of states acquired such assets. The largest regional spenders, such as China and India, have focused on recapitalising their existing inventories whilst simultaneously developing their domestic aerospace sectors, with varying degrees of success. China is focusing on domestic builds, such as the J-20 and J-10B. However, India is pursuing a multi-pronged approach, upgrading its



existing *Mirage* 2000 and Su-30MKI fleets and, despite delays, continuing joint development on a fifth-generation-fighter programme with Russia. Although India's Medium Multirole Combat Aircraft requirement to purchase 126 *Rafale* aircraft from Dassault stalled – reportedly due to disagreements over costs and offset arrangements – New Delhi announced in April that it would instead pursue a separate, off-the-shelf order for 36 *Rafales*. Other large spenders, such as Japan, South Korea and Australia, have focused on adopting next-generation technology, either through the acquisition of new platforms or via upgrades. All three of these states are purchasing the F-35A; both South Korea and Japan also have indigenous combat-aircraft programmes.

#### *Expeditionary capabilities*

Another procurement trend in Asia has been the improvement in expeditionary capabilities. In many cases, these assets are likely to be dual-use, capable also of HA/DR operations. Many states are acquiring more transport and tanker aircraft, more landing platform and helicopter docks (LPDs and LHDs), and in the case of Japan, V-22 *Osprey* tiltrotor aircraft. Tanker, transport and tanker/transport aircraft were by far the most commonly acquired platform type, with more than two-thirds of countries active in this procurement category. Just over one-third of regional states pursued the acquisition of amphibious capabilities. For instance, China and South Korea launched LPDs, Australia's second *Canberra*-class LHD began sea trials in June, and South Korea ordered another *Dokdo*-class LPD.

## AUSTRALIA

Australia continued to develop increasingly significant military capabilities. This was despite another unexpected change of prime minister, a rapid turnover of defence ministers and other senior defence personnel, some uncertainty over the future level of defence funding and a preoccupation with defence-industrial policy.

In April 2014, then-prime minister Tony Abbott announced that the government would publish a new defence white paper in 2015, just two years after the last white paper by the previous Labor government. Abbott's Liberal-led coalition claimed that the new white paper would be a 'whole-of-government' product reflecting the administration's 'overall strategic, fiscal and broader policy priorities'. It was

intended to 'guide Australia's defence capability for the coming decades'.

Nevertheless, according to the Department of Defence in Canberra, the paper will include a comprehensive review of Australia's strategic environment, including 'changes underway in our region and across the globe'. Crucially, 'a fully-costed Force Structure Review' will assess 'future capability needs and propose a force structure that addresses Australia's defence objectives within an agreed allocation of funding'. The formulation of the white paper has been supported by an expert panel comprising independent, external and international defence and security experts. There has also been a comprehensive consultation process intended to secure input from other government departments, industry, the general public, and Australia's allies and security partners. Once the white paper is released, the government will also publish a ten-year Defence Capability Plan and a Defence Industry Policy Statement.

It would be surprising if the main narrative framing Australia's future defence policy diverged significantly from that of the 2013 or earlier defence white papers. An assessment by Australia's Parliamentary Research Service suggested that the 2015 paper could, among its findings: confirm that the need to defend against a major aggressor remains the primary influence shaping defence policy; emphasise the vital place of the alliance with the United States; stress the importance of closer defence and security engagement with other Asia-Pacific states; highlight new and emerging threats to Australian security, including the challenge posed by China's rise and assertiveness and the danger from ISIS; and display a high degree of continuity in capability-development programmes.

However, the most significant question is the scale of financial provision that new Prime Minister Malcolm Turnbull and Minister for Defence Marise Payne will make to defence.

Both Turnbull and Payne came to office in September 2015, following the Liberal Party's leadership change that ousted Abbott. As part of his election campaign in 2013, Abbott had promised to increase defence spending to 2% of GDP within a decade. Turnbull's commitment to continue increasing defence spending will influence the scale and pace of military-capability development, particularly in terms of equipment acquisition. Procurement projects awaiting decisions include Sea 1000 (the future submarine project, which entered a competitive eval-

uation phase during 2015); Sea 5000 (the future frigate project, for which competitive evaluation was due to begin in October 2015); and Sea 1180 (OPVs).

While future procurement will be focused primarily on naval modernisation and capability development, the Royal Australian Air Force (RAAF) has already benefited from the introduction into service of new platforms including KC-30 in-flight-refuelling tankers, F/A-18F combat aircraft, C-17 strategic transports, C-27J tactical transports and EA-18G *Growler* electronic-warfare aircraft. These new aircraft have collectively helped the RAAF to expand its capabilities, enabling it to play a more active role in high-tempo counter-ISIS air operations in the Middle East.

Over its two years, the Abbott administration also made important additional procurement commitments for the air force. The decision in May 2014 to purchase 58 more F-35A Joint Strike Fighters, bringing the total to which Australia was committed to 72, was a significant step towards ensuring that the RAAF remains in the front rank of Asia-Pacific air forces. However, there was still only a firm Australian order for two F-35As, the first of which embarked on its maiden flight in October 2014. The first RAAF F-35A squadron is scheduled to be operational by 2021, with all 72 aircraft in service by 2023, following the retirement of the F/A-18AM/BM fleet by 2022. Therefore, it is widely assumed that additional F-35As will be ordered in batches in the wake of the 2015 defence white paper. The paper is also expected to discuss the possibility, albeit slight, of Australia ordering the V/STOL F-35B variant for operation from the navy's two *Canberra*-class LHDs.

In September 2015, the government selected a consortium comprising Lockheed Martin, Pilatus and Hawker Pacific to provide basic flying training using PC-21 aircraft, to replace the existing PC-7s. From 2019, a new training system using the PC-21s will allow a 36% increase in the number of pilots graduating annually – an indication of the increasing importance of air power in Australia's defence posture.

Another important dimension of Australia's defence policy under the Abbott government was a further deepening of Canberra's already close defence relations with the US. In June 2014, Abbott and President Barack Obama announced a new series of bilateral agreements. Most notable was the US–Australia Force Posture Agreement, which formalised existing plans for larger US Marine Corps deployments to Darwin, in the Northern Territory, with the aim of building up a rotational presence of up to

2,500 troops from 2017. The agreement also covered US Air Force deployments to northern Australia. US B-52 *Stratofortress* bombers visited Darwin in May and December 2014. In May 2015, US Department of Defense Assistant Secretary for Asian and Pacific Security Affairs David Shear said the US would place 'additional assets in Australia, including B-1 bombers and surveillance aircraft'.

Subsequent Australia–US Ministerial (AUSMIN) meetings further reinforced cooperation. The October 2015 AUSMIN talks resulted in a Joint Statement on Defence Cooperation, in which the two sides underscored their commitment to further enhance interoperability and intelligence cooperation; to strengthen collaboration on policy, planning and capability development; and build cooperation with regional partners. They also agreed to enhance naval cooperation 'across all domains'. Interestingly, the statement from the October 2015 meeting also highlighted the limits to cooperation: while Australia supported US efforts to maintain freedom of navigation and overflight in the South China Sea in the face of China's land-reclamation and other activities there, Australia failed to commit ships to join planned US naval patrols near contested features in the South China Sea.

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## DEFENCE ECONOMICS

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### Defence spending

Australian defence spending has experienced significant change in recent years. The centre-left Labor government, in office from 2007 to 2013, permitted defence outlays to fall from 1.94% of GDP in 2009 to a post-Second World War low of 1.60% of GDP in 2012, as it tried, unsuccessfully, to steer the country back towards the budget surplus it had enjoyed before the 2008 global financial crisis. By contrast, the conservative Liberal–National coalition led by Tony Abbott came to power in 2013 pledging to boost defence funding to 2% of GDP by 2023–24. The commitment to increase defence resourcing reflects Australia's ambition to modernise and moderately expand its armed forces.

### Defence procurement

Although the new Australian 2015 defence white paper had not been released at the time of writing, enough is known to outline its key priorities, and it is widely expected that naval modernisation will form a central plank of the document.

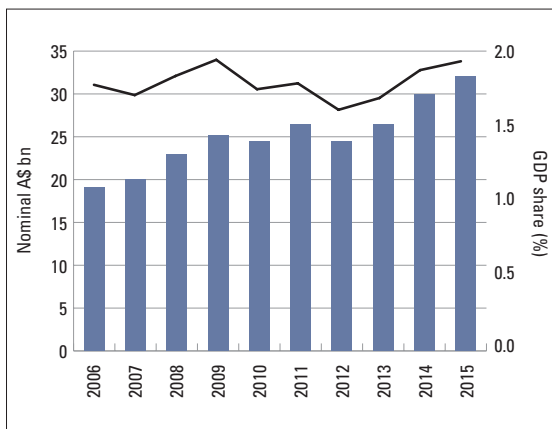


Figure 14 **Australian Defence Budget 2006–15** (A\$ bn)

At least two domestic naval-construction programmes are planned to commence in the coming years. The first, for OPVs, will commence in 2018; the second will build replacements for the current *Anzac*-class frigates from 2020 onwards. Both programmes are planned around ‘continuous-build’ strategies but in both instances such a strategy will require some combination of increased vessel numbers and reduced in-service lives – otherwise, the yards will lie idle for extended periods at the end of each build cycle. Currently, there are three air-warfare destroyers (AWDs) under construction, to replace the oldest three frigates from 2017, while two new Spanish-built LHDs are being fitted out locally.

Another key maritime programme is that to replace Australia’s six *Collins*-class submarines, with Japan, Germany and France competing for a contract estimated at around A\$20bn (around US\$15bn). Throughout 2014, the Abbott government negotiated with Japan to import submarines based on its *Soryu*-class. However, mounting domestic political pressure for a local-build programme saw negotiations opened to international competition in February 2015, with the option of foreign, local and hybrid construction included. Twelve new vessels were originally planned, but it now appears that only ten or even eight will be acquired. It also remains to be seen where the new boats will be built. A decision was due in early 2016.

### Defence industry

The planned increase in naval construction from 2018 will come too late to provide continuity for the shipyards presently working on the AWD and

LHD programmes. Activity and staffing levels at local shipyards have been declining since 2014 and this trend will continue until the new programmes commence. It is hoped that the adoption of continuous-build programmes for the OPVs and new frigates will avoid disruptive gaps in future.

ASC Limited is the government-owned ship-builder responsible for the construction and maintenance of the *Collins*-class boats and it is a key part of the commercial alliance responsible for the current AWD programme. The company has been criticised for delays and rising costs in the AWD programme, which have risen from A\$8bn (US\$6.1bn) to above A\$9bn (US\$6.8bn), and delays have stretched to 30 months. Meanwhile, maintenance of the *Collins*-class fleet has been problematic. Some analysts believe that addressing these issues might require transferring control of ASC to the private sector and establishing workable monopoly-supply arrangements for the new frigates and OPVs.

Australia is highly reliant on overseas suppliers for its defence equipment. Even where platforms are built in Australia – as in the naval sector – the sensors, weapons, communications and propulsion systems are predominantly sourced from abroad. But this is not to suggest that Australia’s defence industry is limited to fabrication and assembly. Many platforms rely on local systems-integration expertise and, in some instances, locally built subsystems. For example, the recent anti-ship missile-defence upgrade for the *Anzac*-class frigates employed locally designed and built active phased array radar.

Around 25,500 people were employed by the Australian defence industry in 2015, according to the defence department, approximately half of whom were engaged by 3,000 small- to medium-sized enterprises. Apart from government-owned ASC, however, the largest firms supplying the defence forces are subsidiaries of foreign corporations. Key players include BAE Systems, Boeing, Lockheed Martin, Northrop Grumman, Saab and Thales. Somewhat of an anomaly is the West Australian shipbuilder Austal – a major supplier to the US Navy through the LCS programme but a minor domestic supplier so far.

A new defence-industry policy has been promised alongside the defence white paper. No dramatic changes are anticipated. Local content will likely continue to be sought in defence programmes, but only where it represents value for money. Similarly,

while Canberra does not demand offsets from its foreign suppliers, it expects foreign defence companies to create opportunities for Australian firms to compete as subcontractors in global supply chains. This strategy has been applied with some success in the F-35 programme.

The critical question for Australian industry is the extent to which future acquisitions will be made off-the-shelf from overseas, including through the US Foreign Military Sales programme. In the last ten years, there have been a large number of such purchases, including P-8 *Poseidon* maritime-patrol aircraft and C-17 *Globemaster* transport aircraft. Given the problems Australia has experienced with its domestic programmes – and, equally, with some developmental foreign programmes such as the *Tiger* attack helicopter and MU90 lightweight torpedo – it is likely that off-the-shelf purchases will continue to figure prominently in Australian procurement. The notable exception is the politically sensitive and labour-intensive area of naval construction.

But local defence industry will continue to play an essential role in providing through-life support. It is not feasible to repair and maintain platforms overseas, given Australia's location, apart from the four-month-long depot-level maintenance of the long-range C-17 *Globemaster* fleet undertaken every five years. Even with a strategy of sustaining platforms locally, Australia's reliance on foreign suppliers will remain high. Although a platform might be repaired in Australia, components often have to be returned to the manufacturer. The situation with munitions is even less favourable. Apart from some locally produced ballistic munitions and explosives, the defence forces are highly dependent on foreign-built precision munitions.

### Future budgetary and procurement uncertainties

As of November 2015, Prime Minister Malcolm Turnbull had not yet reaffirmed his predecessor's commitment to boost defence spending; the promise

#### Afghanistan

In October 2015, President Barack Obama announced he would keep the 9,800 US troops still in Afghanistan in place through most of 2016. This was in response to a request from Kabul, after an uneven fighting season for Afghan forces in which they temporarily lost control of the key provincial capital of Kunduz. The US and NATO continued to train, advise and support Afghan forces, one year after NATO withdrew from its combat role and the Afghan National Security Forces (ANSF) assumed full responsibility for security. A separate US counter-terrorism task force continued its activities. The plan had been to gradually reduce troop numbers so that by the end of 2016 the US military presence in Afghanistan would be no greater than 'a normal embassy presence in Kabul'.

Instead, Obama pressed the pause button on the US drawdown, saying that this would 'allow us to sustain our efforts to train and assist Afghan forces as they grow stronger – not only during this fighting season, but into the next one'. He continued: 'By the end of 2016, we will maintain 5,500 troops at a small number of bases, including at Bagram, Jalalabad in the east, and Kandahar in the south.'

In 2015, the Taliban sought to increase its operational tempo and apply more pressure on the ANSF, aiming to seize and hold more territory. After the Taliban finally admitted in July 2015 that their leader Mullah Omar was dead, his successor, Mullah Mansour, intensified attacks.

When the Taliban captured Kunduz in late September, it took several days to recapture the city and two weeks to finally clear the town, including US air support in the initial phase. Kunduz starkly illustrated the ANSF's weaknesses, including poor intelligence and sub-optimal coordination between the army and police.

While the ANSF still received US close air support, far less was provided than in the past. Yet during the fighting season, Afghan troops experienced more intense combat than ever before. The Afghan Army was under its funded strength, while the air force has also yet to reach full capability. Afghan forces' operational tempo was twice that of 2014, and casualties are believed to have risen proportionately, although figures are unavailable.

Although the Taliban was able to briefly seize Kunduz, the group was unable to permanently evict the ANSF from key population centres. Equally, the ANSF were unable either to evict the Taliban or Afghanistan-based ISIS militants from their heartlands, or to apply sufficient military pressure to the Taliban to force them to a political settlement. The ANSF did, however, succeed whenever they concentrated their forces and thoroughly planned and coordinated operations. Furthermore, their special forces appeared capable of independently attacking insurgent networks. However, the US considers that the ANSF still requires external support in developing its leadership, administration and logistics, as well as its air force.

to spend 2% of GDP on defence is largely perceived as a personal initiative of the previous prime minister.

Although the opposition Labor party agrees in principle with the 2% of GDP target, it has made the ambition contingent on economic conditions and has yet to set a date for achieving this target. Consequently, any change of government could see current plans deferred or amended. Even if the planned funding arrives on schedule, there is a significant risk that the Department of Defence will be unable to spend the money quickly enough.

The Department of Defence began a substantial reorganisation and reform programme in 2015. This means that not only is the previously quasi-independent procurement agency being reabsorbed into the department, but the entire force-planning and procurement process is being redesigned and reconstituted. With several very large projects now taking shape, untested new arrangements will have to deliver these programmes.

Ultimately, realising Australia's ambitious defence plans hinges on its economic prospects. At present, Australia's fiscal situation is far from dire; deficits have averaged 2.4% of GDP over the past five years and gross debt is forecast to peak at 37.5% of GDP in 2017. While this is better than in many other developed economies, Australia's dependence on a narrow range of exports makes such a level of debt risky. The economy depends heavily on international commodity prices, and government revenues are especially sensitive to mining profits. The surge in Chinese domestic infrastructure investment after the 2008 global financial crisis pushed up commodity prices and helped Australia weather the storm. But with Chinese growth slowing and commodity prices depressed, the medium-term outlook for Australia is uncertain at best. For this reason, Australian governments of all complexions can be expected to try to achieve a fiscal surplus as soon as possible. Under current projections, this might be feasible around 2018 or 2019 – just when defence spending is planned to ramp up in earnest to meet the 2% of GDP target. However, adverse developments in the global economy may prove current projections to be overly optimistic. The more China's growth stalls, the starker the choice Canberra will face – between retiring debt to strengthen its economic position, and continuing with ambitious plans for stronger armed forces.

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## CHINA

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### Security developments

China clarified various aspects of its security policies in 2015, including through the release of its latest defence white paper, 'China's Military Strategy', in May; the passage of the National Security Law (NSL) in July; and President Xi Jinping's speech at the 3 September commemorations of the 70th anniversary of the end of the Second World War.

Certain key themes are clearly discernible, for example the importance of the space and cyber domains. In the defence white paper, these two areas are described as 'commanding heights' for national security; in the NSL, they are considered essential to Chinese national security. Indeed, military space activities have continued to progress, with various Earth-observation satellites sent into orbit in the past year and the debut of a new launcher, *Long March-6*. Chinese cyber hackers, meanwhile, were allegedly responsible for a major penetration of the US Office of Personnel Management, accessing some 20–30 million records of current and past US governmental employees.

There is a growing emphasis on maritime security. The defence white paper, for example, observes that the Chinese armed forces will highlight 'maritime military struggle and maritime preparation for military struggle', in line with the 'evolving form of war and national security situation'. Moreover, the NSL emphasises the importance of maintaining national 'maritime rights and interests'. Meanwhile, Chinese naval-modernisation efforts have seen several classes of surface combatants and submarines enter serial production.

These space, cyber and naval improvement efforts are part of the broader modernisation of the People's Liberation Army (PLA). The PLA enjoyed another double-digit increase in its budget for 2015, and these funds not only helped finance the purchase of new ships, aircraft and ballistic missiles – the latter prominently displayed in the September 2015 anniversary parade – but also the programme of improving Chinese military training and recruitment. To be able to conduct the kinds of integrated joint operations likely to be seen in future potential conflicts, the PLA needs to attract better-educated personnel; train them to operate new, sophisticated equipment on a more complex modern battlefield; and retain them for more than a single recruitment cycle.



These efforts at comprehensively modernising the entire PLA are consistent with the larger continuities that have so far marked Xi's defence policies. Xi has continued to support the 'new historic missions' assigned the PLA by his predecessor Hu Jintao. The continued rule of the Chinese Communist Party and the defence of territorial integrity and national sovereignty remain core interests for China's leaders and the national-security establishment. The PLA remains orientated towards fighting and winning 'local wars under informationized conditions', that is wars of limited physical scope and duration where information plays a central role and the ability to gather, transmit and exploit that information more quickly and accurately than an adversary (i.e. 'information dominance') is the key to victory.

In addition, as the recent white paper emphasises, Beijing also remains officially committed to the military strategic guideline of 'active defense'. This means assuming the strategic defensive, while retaining the right to undertake active, perhaps even pre-emptive, measures at operational and tactical levels. Once conflict is perceived to have commenced, however, every effort would be made to secure the strategic initiative.

Despite these broad consistencies in Chinese defence policy, it would appear that Xi has altered the balance of priorities, elevating the national-security element to equal stature with national economic development. At a March meeting with PLA officers during the 12th National People's Congress, Xi said that China's national economic and military development efforts must be 'coordinated, balanced and compatible'. Subsequently, Premier Li Keqiang declared: 'We will coordinate national defense development and economic development, and deepen the integration of the military and civil sectors.' These ideas of coordinated development and civil-military integration were reiterated in the NSL and white paper.

China's construction activities on features it occupies in the South China Sea attracted significant attention from other claimants and the United States. US defence officials estimated that China has reclaimed just under 12 square kilometres of territory. Indeed, the US Asia-Pacific Maritime Security Strategy charged that Chinese reclamation efforts were 17 times that of all other claimants combined, representing 95% of all reclaimed land in the Spratly Islands. The US also calculated that China had carried

out more reclamation in 20 months than other states had in 40 years.

People's Liberation Army Navy (PLAN) forces were also more active in the Indian Ocean littoral in 2015. Nuclear and conventionally powered submarines engaged in patrols and port visits. Chinese officials were also reportedly seeking to establish China's first overseas military base in Djibouti. China also for the first time dispatched a combat battalion on a UN peacekeeping mission, deploying 700 troops to South Sudan. Chinese forces were also operationally deployed farther afield than ever before. A PLAN task force joined Russian units on unprecedented joint naval exercises in the Mediterranean, while a Chinese flotilla entered northern Pacific waters near the Aleutians. In late-year, a significant organisational change was announced that would see the PLA's seven Military Regions become four Strategic Zones, a move that would likely take some time.

## Military services

### *Second Artillery Force*

The PLA's Second Artillery Force is upgrading its full range of ballistic-missile types, as underlined by the systems it chose to display at the Victory Day parade. The DF-16 (NATO reporting name: CSS-11 mod 1), believed to be the successor to the long-serving DF-15 (CSS-7) series of short-range ballistic missiles, seems to have been reclassified as a medium-range missile instead. This suggests a range of at least 1,000km – enough to cover Taiwan, the disputed Senkaku/Diaoyu Islands and Okinawa.

China's anti-ship ballistic-missile programmes have also made progress, with the DF-21D (CSS-5 mod 5) now believed to be in service with two launch brigades. The DF-26 intermediate-range ballistic missile was displayed for the first time in public at the Victory Day parade, where it was reported to not only have an anti-ship role, but also to be nuclear capable. The latest intercontinental ballistic missile (ICBM) – the DF-41 (CSS-X-20) – was not at the parade; it is believed this has yet to complete testing and enter service. The latest modification of the silo-based DF-5B (CSS-4 mod 3) ICBM was displayed instead. This was China's first ballistic missile with multiple independently targeted re-entry vehicles (see pp. 11–15).

### *PLA ground forces*

The Victory Day parade also gave an opportunity to demonstrate the PLA ground forces' modernisation

and mechanisation programmes, although the 112th Mechanised Division, from which the bulk of the armoured vehicles on display were drawn, remains unrepresentative of the wider PLA.

Despite continuing to make progress in both equipment standardisation and mechanisation, the ground forces are clearly a lower priority than other PLA branches in terms of investment in new technology. The bulk of the new armoured fighting vehicles being issued to units remain 'second-tier' models such as the ZTZ-96A main battle tank and the ZBL-92 infantry fighting vehicle/armoured personnel carrier. Vehicle fleets in general remain heavily geared towards legacy platforms. Meanwhile, suggestions in 2014 that the ground forces may gain a separate service headquarters did not appear to have been realised at time of writing.

2015 was the second year of brigade manoeuvre exercises (*Stride 2015*) at the Zhurihe training centre in Inner Mongolia, part of the Beijing Military Region (MR). They reinforced the importance of having a more realistic training environment than that offered by the PLA's traditional practices. The OPFOR 'Blue Force', comprising a brigade from the Beijing MR, is reported to have 'won' the first six exercises against visiting brigades in 2015, to add to considerable success the year before. The 3rd Infantry Brigade, from the 1st Group Army in Nanjing MR, was the first brigade to travel to Zhurihe in 2015, and is also reported to be the first operational Air Assault Brigade in the PLA. Combined with the parachute training being undertaken by the newly converted Special Operations Brigades, and the air force's existing Airborne Corps, this gives the PLA a substantial body of air-manoeuvre forces – a development made possible, in part, by the continuing expansion of helicopter assets.

In contrast to incremental progress on land, the impressive overhaul of army-aviation assets in recent years has enabled the PLA to move beyond expanding and re-equipping the original ten aviation regiments to brigade size, and to establish at least two new formations in southern China: the 11th Brigade with the 14th Group Army in Chengdu MR; and the 12th Brigade with 41st Group Army in Guangzhou MR. This suggests a goal of imitating the US practice of aligning combat-aviation brigades with specific army divisions, by eventually establishing a separate aviation brigade for each of the PLA's 18 group armies.

#### *People's Liberation Army Air Force*

The PLAAF continued to introduce new and upgraded types of combat and support aircraft in 2015, as it moved from being a service previously focused on national air defence to one capable of mounting offensive operations at extended range in a high-threat environment.

The seventh Chengdu J-20 heavy combat aircraft 'prototype' (identification number '2016') joined the flight-test programme in September, and service entry for China's first reduced-signature combat aircraft will probably occur around the turn of this decade, if the present pace of development is sustained. Meanwhile, rival combat-aircraft manufacturer Shenyang continued to work on its J-31/FC-31 medium combat aircraft, with a second prototype of this design believed to be near completion in the third quarter of 2015, and a first flight anticipated in 2016. The extent to which this aircraft is being developed to meet any Chinese fleet requirement remains open to conjecture, though Shenyang is offering the FC-31 as a future export product.

As well as developing more capable combat-aircraft designs, the PLAAF is also pursuing a range of air-to-air and air-to-surface weapons. Key among these are a successor short-range air-to-air missile (AAM), the PL-10, and the PL-15 active-radar guided AAM. The PL-10 is an imaging infrared guided missile that promises to be considerably more capable than any of those now in the PLAAF inventory. The design uses thrust-vector control and is capable of 'high-off bore-sight' engagements, and of engaging targets beyond 90 degrees. As of 2015, a small number of initial-production-standard missiles may have been provided to the air force for evaluation.

An upgraded variant of the Chengdu J-10 *Firebird* combat aircraft, the J-10B, also appeared to be nearing front-line service with the air force in 2015. Modifications to the J-10B include the introduction of a 'divertless' intake and an infrared search-and-track as well as a passive electronically scanned array radar. As of the end of 2015, around 50 J-10B airframes had been manufactured. Shenyang, meanwhile, flew the J-11D prototype in April 2015. The J-11D is a further development on the Russian Sukhoi Su-27 *Flanker* combat aircraft, but equipped with Chinese engines, avionics and weapons systems. Work also continues on addressing China's comparative weakness in terms of local design and the manufacture of military turbofan engines; indeed, the J-11D is likely fitted with the WS-10A turbofan. Meanwhile, in November

2015 it was announced that Russia had agreed to sell 24 Su-35 multi-role combat aircraft to China. The PLAAF will be the first foreign force to receive the aircraft.

In addition, manufacture of the Xian H-6K continued at a modest rate, with two PLAAF divisions now fielding the intermediate-range bomber. The H-6K is the latest iteration of the Russian Tupolev Tu-16 *Badger* design of the 1950s; the PLAAF is thought to be pursuing a successor design.

In 2015, the PLAAF also supplemented its Ilyushin Il-76-based KJ-2000 airborne early-warning aircraft with the KJ-500. The latter uses the Shaanxi Y-9 four-engine turboprop, at least two of which were in service with the air force as of 2015. Development of the Y-20 heavy transport aircraft, intended to succeed the Il-76, continued during the year. Up to five aircraft were thought to be in the flight-test programme as of the fourth quarter of 2015.

A range of special-mission crewed aircraft and UAV projects was also pursued during the year. The GJ-1 armed UAV is now in service with the air force, while the first prototype of the *Divine Eagle* twin-fuselage long-endurance surveillance UAV also appeared to have been completed.

#### *People's Liberation Army Navy*

The PLAN continues to develop a more capable and homogeneous surface fleet able to carry out multi-purpose missions at reach. This follows a long period of experimentation based on short ship-production runs and somewhat disparate procurement, including from foreign sources, designed to raise the navy's technological base.

In line with this, the second Type-052D destroyer was commissioned in August 2015. This type is now in series production (see p. 225). Meanwhile, there were further additions to the apparently successful Type-054A frigate and Type-056 corvette classes. Furthermore, reports persisted of plans and preparations for two significant new surface-ship additions, specifically the Type-055 cruiser and a second, locally designed, aircraft carrier.

However, there was more uncertainty over the pace and extent of China's technical progress in, and plans for, its submarine forces. Four *Jin*-class Type-094 ballistic-missile submarines appear now to be in operation. These are believed capable of accommodating the JL-2 submarine-launched ballistic missile, and there remains an expectation that the type's first operational patrol will soon be completed. Up to four

improved Type-093 nuclear-powered attack submarines also appear to have been finished. But there are reports that the PLAN will adopt new designs for both types of submarine, to try to address the continuing shortfall in critical operating capabilities compared to US and other fleets. Meanwhile, *Yuan*-class diesel-electric submarines continued in series production.

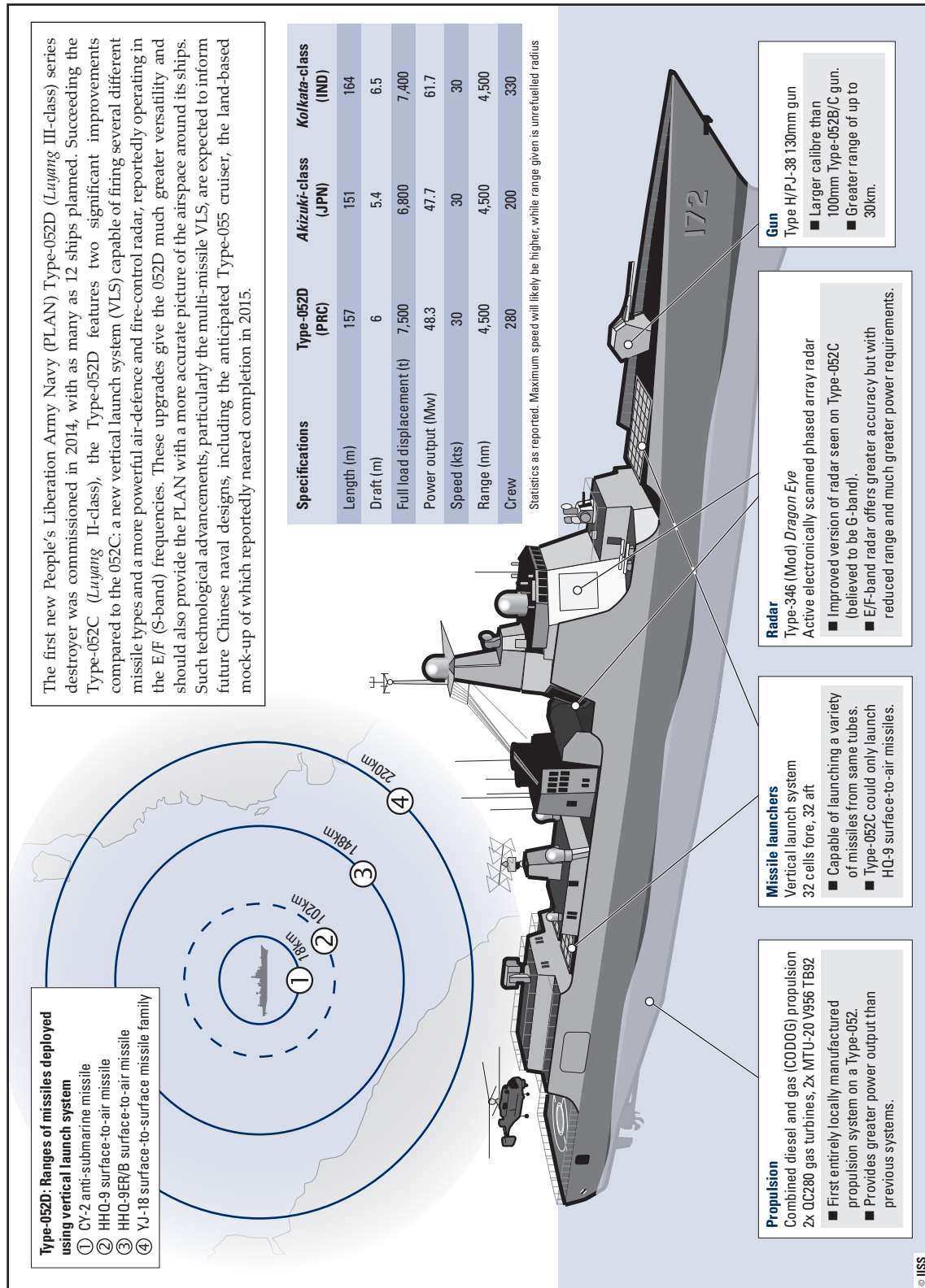
The PLAN, and growing Chinese maritime ambitions, were given prominence in the defence white paper, which underlined that the mission of 'offshore waters defence' is now combined with that of 'open seas protection'. But while major strides have been made in the PLAN's forward presence and projection capabilities, particularly in the area of shipboard air defence, significant challenges and capability deficits persist, not least in ASW.

Meanwhile, there has been debate around the extent to which the new structures and facilities China has built in the South China Sea could support naval and other maritime operations beyond Beijing's declared intent that they will serve to assist maritime safety in the area. Admiral Harry Harris, the commander of US Pacific Command, claimed that the facilities are clearly intended for military use. Further west, China's continued counter-piracy patrols in the Indian Ocean reflect their continuing value in developing the PLAN's skills and experience in long-range presence and power-projection operations.

In terms of naval aviation, the Shenyang J-15 carrier-borne combat aircraft entered low-rate production in 2015. While J-15s have been landing on the aircraft carrier *Liaoning* for several years, the PLAN is some years away from having an operationally capable carrier air wing. At the September Victory Day parade in Beijing, the YJ-12 air-launched, rocket-ramjet anti-ship missile was displayed, while the ASW version of the Shaanxi Y-8 turboprop entered service in mid-2015 – a step towards boosting the PLAN's long-range ASW capability.

Meanwhile, the role and capability of the Chinese coast guard continued to evolve, with the organisation increasingly an instrument not only of maritime safety, law enforcement and surveillance, but also of foreign policy and diplomacy. There were sea trials of a first 10,000-tonne patrol ship, much larger than any other vessel of its type, with at least one more of the class under construction. Further developments included the transfer of at least two Type-053H2G *Jiangwei*-I-class frigates from the PLAN to the coast guard, with most of their fixed armaments removed.

Figure 15 China's New Type-052D Destroyer





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## DEFENCE ECONOMICS

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China's defence economy has been transformed over the past decade and a half, driven by double-digit annual budget hikes and strong political will to see the country become self-reliant in the development and production of advanced weapons systems. The results of these efforts were displayed during the September 2015 Victory Parade, which provided clear evidence of the country's growing defence-industrial and technological expertise. However, almost at the same time, the share prices of many listed defence corporations responsible for this success were performing badly on domestic stock exchanges in Shanghai and Shenzhen, losing in excess of 40% of their value in three months. This was part of a broader Chinese equity-market collapse that commenced in mid-June. These events highlighted both the growing strength and some of the underlying weaknesses of China's defence-economic dynamics.

### Major acquisitions

China's defence-economic renaissance has been driven by leadership concerns over mounting challenges to the country's external security environment as well as by rapid advances in global technology. As a result, investment in defence research, development and acquisition has soared. The existing defence-innovation system is being remade, guided by a well-defined, long-term vision backed up by detailed development plans, as well as by a shift from a 'technology-push' to a 'demand-led' approach to innovation. These developments have occurred alongside greater efforts to acquire and absorb foreign advanced technologies, and to promote the integration of civilian and defence economies.

These efforts have resulted in significant improvements in defence-technological, -economic and -industrial performance. Defence corporations are posting ever-increasing record annual profits, while the armaments R&D pipeline is impressive. For example, the aviation sector is simultaneously engaged in the research, development and acquisition of more than a dozen military aircraft programmes, including fighter, transport and ISR types. Several of these platforms were showcased at the Victory Parade, including the KJ-500 airborne early-warning aircraft, the H-6K bomber and the *Yilong* UAV. The technological self-reliance of China's space and missile industry was also showcased at the parade,

with more than half a dozen short-, medium- and long-range ballistic and cruise missiles on display, including the DF-21D.

Similarly, the shipbuilding industry has at least four active nuclear- and conventional-submarine programmes under way, along with continued research, development and construction of aircraft carriers, destroyers and other surface warships. Meanwhile, Chinese shipbuilders have succeeded over the past decade in substantially reducing their reliance on foreign (primarily Russian) technology transfers to drive domestic industrial development. The US Office of Naval Intelligence (ONI) noted that in recent years the PLAN's 'surface production shifted to platforms using wholly Chinese designs' and that these were 'primarily equipped with Chinese weapons and sensors'. These included the *Luyang*-class (Type-052B/C/D) destroyer series and the upcoming new Type-055 cruiser class, which the ONI considers to be 'comparable in many respects to the most modern Western warships'.

In addition to the hardware on display, President Xi used the military parade to announce that the PLA would reduce its headcount by 300,000, but military officials also indicated that both the size and pace of growth of the defence budget is unlikely to be affected by these cuts, as more investment is required to finance weapons acquisitions.

### Challenges remain

The growing output of the Chinese defence economy is taking place at the same time as it faces a number of structural difficulties. For example, the PLA and defence-industrial regulatory authorities are attempting to replace its top-down, Soviet-era management model with a more competitive and flexible regulatory framework, although these changes continue to be opposed by powerful vested interests. Corruption represents another major problem that the defence economy – and especially the PLA – has had to tackle over recent years. One of the biggest anti-corruption drives in the history of the Chinese defence establishment has so far led to the arrest, investigation or sentencing of at least 40 general-level officers and more than 200 colonels. Most of the publicly reported corruption cases have occurred in the military-logistics and political systems. A ban remains on reporting the extent of the problem in the armaments system, although PLA authorities have highlighted the procurement system as being a high-priority target for further audits and investigations.



Of more immediate concern in the second half of 2015 was the heightened volatility in the listed share prices of the country's defence firms. This presented a significant setback in fledgling efforts by Beijing to use domestic capital markets as a new source of funding for the research, development and acquisition of weapons systems. In 2013, the State Administration for Science, Technology, and Industry for National Defence (SASTIND), the state's chief defence-regulatory agency, permitted defence firms to undertake equity issuance based on their military-asset holdings for the first time (whereas they had previously only been allowed to list their civilian assets). This led to a flurry of share placements amounting to billions of dollars between 2013 and the first half of 2015 by Chinese defence corporations. However, the stock market's sharp 40% fall between June and September 2015, and the widely criticised state-led attempt to stem the decline, left the country's stock exchanges in limbo, such that they could no longer act as a fundraising conduit for defence companies. This meant that these firms will, in the short run at least, have to look elsewhere for new funding, for example from bank loans or bond issuance.

### Future technology developments

The May 2015 defence white paper highlighted several technology trends likely of relevance for China's long-term weapons development. This includes the proliferation of long-range, precise, smart, stealthy and unmanned weapons; the emergence of new domains, particularly outer space and cyberspace; and the change in the nature of warfare towards 'informationization'. The white paper points out that the 'major powers' – primarily the US, but also Russia and others – in the vanguard of this process are 'speeding up their military transformation and force restructuring'.

There are indicators that China is planning a new defence science-and-technology development strategy in response. At a keynote speech to the All-Army Armament Conference in December 2014, Xi said that 'facing the new situation and new tasks, the strategic guidance for armament building must adapt to the times'. He added that both the 'present time and for a period to come mark a window of strategic opportunity for our military's armament building and also a crucial stage for making leapfrog developments'.

In June 2015, SASTIND announced it was establishing a defence science-and-technology develop-

ment-strategy committee to conduct research and provide policy input on long-term defence R&D. In the same month, SASTIND director Xu Dazhe disclosed that SASTIND had formulated a 'Defence Science and Technology Industry 2025' plan. He indicated this was connected with a 'Made in China 2025' initiative unveiled by the State Council in May 2015, which aims to turn the country into an advanced manufacturing power. The defence industry features prominently in 'Made in China 2025', especially in the space and aviation sectors. There is speculation that the development of advanced military turbofan engines is a key priority for both 'Defence Science and Technology Industry 2025' and 'Made in China 2025'.

## INDIA

### Reforming India's defence industries

Since the government of Narendra Modi came to power in 2014, the 'Make in India' initiative has become a new mantra for India's defence industry. The sector is still dominated by large, though inefficient, government-owned Defence Public Sector Undertakings (DPSUs) and Ordnance Factories (OFs) (see *The Military Balance 2014*, pp. 214–15). The government has undertaken a host of reform measures under the 'Make in India' initiative, in addition to placing India's domestic industrial base, particularly the private sector, at the heart of the procurement process. The reform measures adopted so far have centred on India's foreign direct investment (FDI) cap; the country's industrial and export license regimes; and creating a level playing field between the private and public sector.

*The Military Balance 2015* (pp. 220–21) detailed measures relating to licensing and FDI. Further reforms have since been undertaken. For example, the validity of industrial licences – which permit firms to undertake production activities, and which the Modi administration initially increased from two to three years – has been further increased to seven years, with the option of an extension for another three. The licensing process has been streamlined by removing annual production-capacity requirements. Licence holders are also allowed to sell their defence items to various government entities outside the defence ministry and to other licensed companies, without prior defence-ministry approval. These measures are designed to reduce government interference, as well as to allow more time for defence companies to clear any hurdles needed before starting production (such

## India's defence spending

The FY2015/16 Indian defence budget was increased by 7.7% to INR2.47 trillion (US\$38.2 billion). Of this sum, 61.7% (INR1.52tr, or US\$23.5bn) was allocated for current expenditure and the remaining 39.3% (INR0.95tr, or US\$14.7bn) for capital outlays. However, the budget excludes military pension allocations of INR545bn (US\$8.4bn).

This increase was due to growth in current-expenditure disbursements, most of which is spent on salaries and other running costs. Importantly, this current-expenditure-driven growth in the defence budget – increasingly the norm in recent years – has put pressure on the government's ability to commit new capital for defence procurement.

Of the INR774bn (US\$12bn) allocated for capital procurement in FY2015/16, only 8% (INR61bn, or US\$940m) was available for signing new contracts. Pressure on procurement funding is likely to intensify further from FY2016/17 due to the impact of the Central Pay Commission (CPC), a body convened once a decade to recommend a comprehensive review of salary and other benefits for all central-government employees, including the defence forces. In FY2008/09, when the recommendations of the previous CPC were implemented, defence expenditure rose by 35% (compared to 9% growth in the overall defence budget), with increased pay and allowances constituting 87% of the rise.

As shown in Figure 16, of the defence budget's major stakeholders, the army had the largest share in FY2015/16

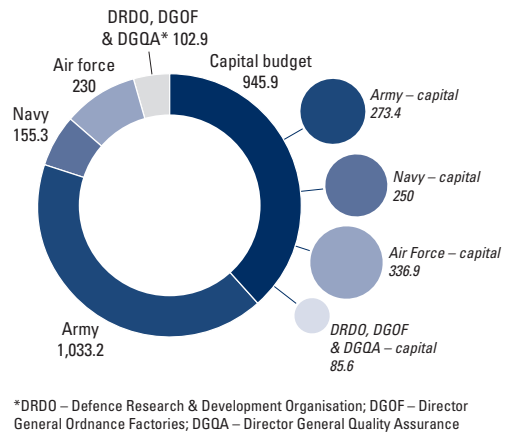


Figure 16 **Composition of Indian Defence Budget 2015 (INR bn)**

with an allocation of INR1.31tr (US\$20.3bn), followed by the air force (INR566.9bn, or US\$8.8bn) and the navy (INR405.3bn, or US\$6.3bn). Of the army budget, however, 79% is taken up by current expenditure, compared to 41% and 38% for the air force and navy respectively. In terms of the capital budget, while the army and navy have received an increase in their respective procurement budgets, the air force has seen a reduction. This comes at a time when the government has announced its intent to acquire a reduced number of 36 Dassault *Rafale* combat aircraft, instead of the 126 originally intended.

as land acquisition and environmental clearance) before their existing licences expire.

As part of the 'Make in India' initiative, the government released a defence-export strategy in September 2014, alongside a detailed set of standard operating procedures (SOPs) for the defence ministry to issue 'no objection certificates' (NOCs) regulating the export of military stores. This export strategy creates new institutional mechanisms, such as a committee under the chairmanship of the head of the Department of Defence Production. Financial and diplomatic support will also be provided to boost arms exports. The SOPs, which were further streamlined in July 2015, list military equipment (in 16 broad categories) for which export clearance may be given. The strategy also lays out detailed NOC procedures in five parts, depending upon the sensitivity of the item and the nature of export concerned. The previous requirement, that end-use certificates for exported parts, components and subsystems be signed or

stamped by the government of the importing state, has been dispensed with.

### *Encouraging domestic private-sector involvement*

In another significant development, the finance ministry in April 2015 withdrew the central excise-duty and customs-duty exemptions enjoyed by DPSUs and OFs for products they make for the armed forces. The withdrawal is intended to provide a level playing field with the private sector, which had long complained that the duty exemptions gave an unfair strategic advantage to government-owned companies, allowing them to quote a lower price in an open tender (see *The Military Balance 2013*, pp. 261–64).

From the domestic defence industry's perspective, perhaps of greater importance is the 'Make in India' initiative's emphasis on local production, particularly through private-sector participation. The Modi government cleared 39 capital-procurement proposals in its first year, of which 32 proposals – worth a total

INR889bn (US\$13.7bn, some 96% of the value of all 39) – were categorised as ‘Buy (Indian)’ and ‘Buy and Make (Indian)’ – the top two domestic-industry-focused procurement categories in the defence ministry’s defence-procurement procedure (DPP). In almost all of the major procurement proposals, scope is provided for private-sector participation, in some cases exclusively, for example, in the INR500bn (US\$7.7bn) P-75(I) project to acquire six conventional submarines. The Modi administration changed the previous government’s decision to import two submarines from abroad and licence-manufacture four additional boats in public-sector shipyards. Instead it decided to construct all six submarines in domestic shipyards, with the provision that private-sector firms would be given a fair chance to compete for contracts. In the case of the INR250bn (US\$3.9bn) LPD project, the new government has decided to issue the tender exclusively to private shipyards. The Modi administration has also attempted to operationalise the existing ‘Make’ procedure, wherein the government bears up to 80% of private-sector R&D costs for ‘high-technology complex systems’. This has not been utilised despite first being promulgated in 2006. The first developmental contracts under the ‘Make’ procedure were those awarded to two consortiums in February 2015 to develop an INR500bn (US\$7.7bn) battlefield-management system. One of the consortiums comprises two private companies: L&T (Larsen and Toubro) and TATA.

In addition, the government has set in motion a process for periodically revising the defence-procurement procedure. A ten-member committee of experts was set up in May 2015 to suggest amendments to the procedure, with a focus on facilitating the ‘Make in India’ strategy. The committee’s report, submitted in July 2015, contained 43 recommendations. Its major focus was to further intensify private-sector participation by according it ‘strategic partner’ status and removing procedural hurdles to private-sector firms undertaking activities in the defence sector.

Meanwhile, the DRDO signed a technology-transfer agreement with L&T for the commercial production of the *Lakshya* pilotless target aircraft. This is the first time that technology for a high-value product developed by the DRDO has been provided to a private-sector firm for licensed production. All of these developments mean that the private sector, which was hitherto excluded from large procurement cases in favour of either direct import or manufacture by public-sector entities, now has a chance to

play a significant role in India’s defence-production sector.

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## JAPAN

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### Defence-policy developments

Sino-Japanese tensions, on the increase in recent years, began to ease somewhat from late 2014. Prime Minister Shinzo Abe and President Xi Jinping held their first bilateral meeting in Beijing in November 2014, and Chinese maritime incursions around the disputed Senkaku/Diaoyu Islands decreased for the first time since their ‘nationalisation’ in 2012. Nonetheless, Tokyo remained concerned by the surrounding security environment and continued to move ahead with defence-policy and legislative reforms to enable it to play a more proactive international security role, as well as to strengthen the US–Japan alliance.

Japan’s 2015 defence white paper, released in July as the government was trying to pass new security legislation, continued to emphasise the risks posed by China and North Korea as the rationale behind building a stronger deterrence posture. The white paper noted China’s construction of an offshore gas platform in the East China Sea since 2013 and the increasing number of Japan Air Self-Defense Force (JASDF) scrambles to intercept Chinese aircraft around the Senkaku/Diaoyu Islands. Overall, it claimed that China was engaged in activities in the South China Sea and East China Sea ‘to alter the status quo by force’.

In April, the US–Japan defence guidelines were revised for the first time since 1997. Within the context of the bilateral security treaty, these outline the extent of Japanese support for the United States to respond to security contingencies. The 2015 revisions expanded the range of Japanese support to include ISR; ballistic-missile defence; maritime security; asset protection; joint use of facilities; peacekeeping operations; HADR; and defence activities in cyberspace and outer space. The revised guidelines stress a concept of ‘seamless cooperation’ and a ‘whole of government approach’, removing the previous rigid separation of bilateral cooperation into ‘peacetime’, ‘Japan’ and ‘regional’ contingencies. The intention is that military cooperation will operate more smoothly across all potential scenarios and levels of conflict escalation.

The new guidelines stress that bilateral cooperation should now be global and not necessarily geographically restricted to Japan or the surrounding

region, as they were in the past. Even more significantly, after the ban on collective self-defence was repealed in July 2014, they also outline the areas in which Japan can now exercise force to defend the US, even if Japan itself is not directly attacked but believes that its own security is endangered. The Japan Maritime Self-Defense Force can, for example, protect US shipping; intercept ballistic missiles; and provide logistical support during conflict.

A raft of new security legislation proceeded through the National Diet between May and September, including:

- The Law on Response to Contingencies, enabling Japan's exercise of the right of collective self-defence in scenarios in which an attack on another state in a close relationship with Japan poses a clear danger to the Japanese people's 'right to life, liberty and the pursuit of happiness, where there is no other appropriate means to repel the attack, and where the use of force is restricted to the minimum necessary to repel the attack';
- The Law to Ensure Security in Contingencies Significantly Affecting Japan, replacing the 1999 Regional Contingencies Law and designed to boost Japanese non-combat logistical support for the US and other states;
- The International Peace Support Law, removing the need for Japan to enact separate laws for each JSDF deployment providing logistical support to multinational forces;
- Revisions to the International Peace Cooperation Law enabling the JSDF to use force in pursuing certain UN peacekeeping duties rather than solely for the defence of JSDF personnel.

The Abe administration found it hard to win decisively the parliamentary debate, or indeed public

support for its efforts. It has argued that the exercise of collective self-defence is limited and proportionate in scope. Nevertheless the eventual passing of the legislation in mid-September was met with widespread public protests, amid concern that the new laws could lead to global military deployments and commitments.

Meanwhile, efforts continued to build up JSDF capabilities and a robust defence-technology base. The Ministry of Defense (MoD) requested a 2.2% budget increase in 2015, which would mark a fourth year of consecutive increases since Abe came to power and the largest budget in post-war Japanese history. The MoD is establishing a new Defence Equipment Agency to improve capability procurement.

In April 2015 – in line with the Three Principles on the Transfer of Defence Technology and Equipment, which in 2014 relaxed rules on overseas defence transfers – the National Security Council approved Japan's participation in the competitive tender to provide new submarines for Australia. Mitsubishi Heavy Industries and Kawasaki Heavy Industries are seeking to export technology from the *Soryu*-class attack submarines as part of the bid. Japan has been considered a front-runner, although the Japanese position appears to have been weakened by doubts as to whether it would allow production of the submarines in Australia and Japanese defence manufacturers' lack of experience in competitive international bidding, compared to German and French rivals.

Japan also remains interested in exporting its US-2 search-and-rescue aircraft to India, but negotiations are being slowed by discussions over whether Japan will allow licensing for local or co-production. Meanwhile, 70 of Kawasaki's new P-1 maritime-patrol aircraft are destined for the JASDF, but the P-1 is also being offered on the export market. Two aircraft flew to the United Kingdom in July to take part in an air display and, presumably, demonstrate the aircraft to potential customers.

## Afghanistan AFG

New Afghan Afghani Afs		2014	2015	2016
GDP	Afs	1.17tr	1.17tr	
	US\$	20.4bn	19.7bn	
per capita	US\$	654	615	
Growth	%	1.3	2.0	
Inflation	%	4.7	-1.9	
Def exp	Afs	153bn		
	US\$	2.76bn		
Def bdgt [a]	Afs	189bn	192bn	
	US\$	3.29bn	3.23bn	

US\$1=Afs 57.39 59.57

[a] Security expenditure. Includes expenditure on Ministry of Defence, Ministry of Interior, Ministry of Foreign Affairs, National Security Council and the General Directorate of National Security. Also includes donor funding.

Population 32,564,342

Ethnic groups: Pashtun 38%; Tajik 25%; Hazara 19%; Uzbek 12%; Aimaq 4%; Baluchi 0.5%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	21.3%	6.2%	5.1%	3.9%	13.0%	1.2%
Female	20.7%	6.0%	4.9%	3.8%	12.6%	1.3%

## Capabilities

In their first fighting season since ISAF troops withdrew from their combat role, the Afghan National Security Forces (ANSF) were tested by an intensified Taliban offensive. A rushed response to the Taliban's July offensive in Helmand Province and failure to properly defend Kunduz in October were indicative of forces that needed to improve their intelligence, logistics, planning and coordination. The ANSF have suffered from an exponentially increasing attrition rate due to casualties and desertions while insurgent forces have regained large rural territories, and have ramped up the pace of spectacular attacks in population centres. This pattern led the US to reduce the planned drawdown of its military footprint after 2016. While the ANSF still received close air support from the US, less was provided than before. Afghan troops saw more intense combat than they had previously experienced: their operational tempo was twice that of 2014. Casualties rose proportionately, reaching an all-time high. The US assessed in June that the Afghan Army was at 87% of its funded strength of 203,000 personnel. The Afghan Air Force has also yet to reach full capability, though equipment deliveries continued. The arrival of MD 530F armed helicopters and the expected delivery in early 2016 of EMB-314 *Super Tucano* light attack aircraft will dramatically increase potential close-air-support capability. Acquisition of a fourth and final C-130H *Hercules* transport aircraft and renewal of the entire fleet of troop-transport and logistics vehicles will improve air and land mobility across the operational theatre.

**ACTIVE 160,500 (Army 154,000 Air Force 6,500)**  
**Paramilitary 148,300**

## ORGANISATIONS BY SERVICE

### Afghan National Army (ANA) 154,000

5 regional comd.

#### FORCES BY ROLE

##### SPECIAL FORCES

1 spec ops div (1 SF gp; 1 mech inf bn (2 mech inf coy), 2 cdo bde (1 mech inf coy, 4 cdo bn))

##### MANOEUVRE

###### Mechanised

2 (1st MSF) mech bde (2 mech inf bn)

1 (2nd MSF) mech bde (3 mech inf bn)

###### Light

1 (201st) corps (3 inf bde (4 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 inf bde (3 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 engr bn, 1 int bn, 2 MP coy, 1 sigs bn)

1 (203rd) corps (2 inf bde (5 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 2 inf bde (4 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 engr bn, 1 int bn, 2 MP coy, 1 sigs bn)

1 (205th) corps (4 inf bde (4 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 engr bn, 1 int bn, 2 MP coy, 1 sigs bn)

2 (207th & 209th) corps (3 inf bde (4 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 engr bn, 1 int bn, 2 MP coy, 1 sigs bn)

1 (215th) corps (3 inf bde (4 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 inf bde (2 inf bn, 1 cbt spt bn, 1 CSS bn), 1 engr bn, 1 int bn, 2 MP coy, 1 sigs bn)

1 (111st Capital) div (1 inf bde (1 tk bn, 1 mech inf bn, 2 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 inf bde (4 inf bn, 1 sy coy, 1 cbt spt bn, 1 CSS bn), 1 int bn)

#### EQUIPMENT BY TYPE

MBT 20 T-55/T-62 (24 more in store+)

APC 951

APC (T) 173 M113A2+

APC (W) 623 MSFV (inc variants)

PPV 155 *Maxxpro* being delivered

ARTY 775

TOWED 109: 122mm 85 D-30+; 155mm 24 M114A1+

MOR 82mm 666: 521 2B14+; 105 M-69+; 40 M252+

MW Bozena

### Afghan Air Force (AAF) 6,500

Including Special Mission Wing

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT 51: **Medium** 4 C-130H *Hercules*; **Light** 44: 6 Cessna 182; 25 Cessna 208B; 13 PC-12 (Special Mission Wing);

PAX 3 B-727

##### HELICOPTERS

ATK 11 Mi-35 *Hind*

MRH 101: 3 *Cheetal*; 16 MD-530F (11 armed); 82 Mi-17

*Hip H* (incl 30 Special Mission Wing hel)

### Paramilitary 148,300

#### Afghan National Police 148,300

Under control of Interior Ministry. Includes Afghan Uniformed Police (AUP), Afghan National Civil Order Police (ANCOP), Afghan Border Police (ABP), Police



Special Forces (GDPSU) and Afghan Anti-Crime Police (AACP).

## FOREIGN FORCES

All *Operation Resolute Support* unless otherwise specified.

**Albania** 44

**Armenia** 121

**Australia** 250 • UNAMA 2 obs

**Austria** 10

**Azerbaijan** 94

**Belgium** 43

**Bosnia-Herzegovina** 53

**Bulgaria** 110

**Croatia** 107

**Czech Republic** 236 • UNAMA 1 obs

**Denmark** 160

**Estonia** 4

**Finland** 80

**Georgia** 885; 1 lt inf bn

**Germany** 850; 1 bde HQ; CH-53G *Stallion*; *Heron* UAV • UNAMA 3 obs

**Greece** 4

**Hungary** 97

**Ireland** 7

**Italy** 740; 1 mtn inf bde HQ; 1 mtn inf regt(-); 1 avn bn(-); AW129 *Mangusta*; CH-47 *Chinook*; NH90

**Latvia** 25

**Lithuania** 70

**Macedonia (FYROM)** 39

**Mongolia** 120 • UNAMA 1 obs

**Montenegro** 17

**Netherlands** 83

**New Zealand** 7

**Norway** 56

**Poland** 180 • UNAMA 1 obs

**Portugal** 10 • UNAMA 1 obs

**Romania** 618 • UNAMA 1 obs

**Slovakia** 39

**Slovenia** 7

**Spain** 20

**Sweden** 32

**Turkey** 503 • UNAMA 1 obs

**Ukraine** 10

**United Kingdom** 450; 1 inf bn(-)

**United States** 6,834; 1 div HQ; 2 div HQ (fwd); 1 lt inf bde HQ; 1 air aslt bde HQ; 2 inf bn; 2 para bn; 1 cbt avn bde; F-16C/D *Fighting Falcon*; EC-130H *Compass Call*, C-130 *Hercules*, AH-64 *Apache*; OH-58 *Kiowa*; CH-47 *Chinook*; UH-60 *Black Hawk*; HH-60 *Pave Hawk*; RQ-7B *Shadow*; MQ-1 *Predator*; MQ-9 *Reaper* • *Operation Freedom's Sentinel* 3,000

## Australia AUS

Australian Dollar A\$	2014	2015	2016
<b>GDP</b>	A\$ 1.6tr	1.64tr	
	US\$ 1.44tr	1.24tr	
<b>per capita</b>	US\$ 61,066	51,642	
<b>Growth</b>	% 2.7	2.4	
<b>Inflation</b>	% 2.5	1.8	
<b>Def bdgt</b>	A\$ 26.5bn	30bn	32.1bn
	US\$ 23.9bn	22.8bn	
<b>US\$1=A\$</b>	1.11	1.32	

**Population** 22,751,014

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	9.2%	3.2%	3.6%	3.6%	23.4%	7.2%
<b>Female</b>	8.7%	3.0%	3.4%	3.5%	22.9%	8.3%

## Capabilities

Australia possesses capable, well-trained and -equipped armed forces, which have also considerable recent operational experience. Its primary military ally remains the US, a relationship it views as central to regional security. It is also forging closer defence ties with Japan and India. A defence white paper was due to be released during the fourth quarter of 2015, supported by a force-structure review and a ten-year defence-capability plan. This is the country's third such paper in six years, the first of which was released in 2009 and the second in 2013. Australian Air Force engagement in the Middle East continued with *Operation Okra*, which began in Iraq in October 2014, before being extended to cover Syria in September 2015. Air missions against ISIS are being carried out using six F/A-18 *Hornet* aircraft, a KC-30A tanker transport and an E-7A *Wedgetail* airborne early-warning aircraft. Recapitalisation of the air force's inventory continued in 2015 with the delivery of the last of eight C-17 airlifters, while the service will add a further two KC-30A tankers to its fleet of five in 2018. The first of its P-8A maritime-patrol aircraft will be delivered in the third quarter of 2016. There are plans to re-equip the navy with new surface combatants and a replacement for the *Collins*-class submarines. Designs have been proposed by manufacturers from France, Germany and Japan, with a possible selection in the first quarter of 2016. (See pp. 217-21.)

**ACTIVE 56,750 (Army 29,000 Navy 13,550 Air 14,200)**

**RESERVE 23,100 (Army 14,100 Navy 4,700 Air 4,300)** Integrated units are formed from a mix of reserve and regular personnel. All ADF operations are now controlled by Headquarters Joint Operations Command (HQJOC).

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

**SATELLITES • COMMUNICATIONS** 1 *Optus* C1 (dual use for civil/mil comms)

**Army 29,000****Forces Command****FORCES BY ROLE****COMMAND**

1 (1st) div HQ

**MANOEUVRE****Mechanised**

3 (1st, 3rd &amp; 7th) mech inf bde (1 armd cav regt, 2 mech inf bn, 1 arty regt, 1 cbt engr regt, 1 sigs regt, 1 CSS bn)

**Amphibious**

1 (2nd RAR) amph bn

**Aviation**

1 (16th) avn bde (1 regt (2 ISR hel sqn), 1 regt (3 tpt hel sqn), 1 regt (1 spec ops hel sqn, 1 avn sqn))

**COMBAT SUPPORT**1 (6th) cbt spt bde (1 STA regt (1 STA bty, 1 UAV bty, 1 CSS bty), 1 AD/FAC regt (integrated), 1 engr regt (2 (construction) engr sqn, 1 EOD sqn), 1 int bn)  
1 EW regt**COMBAT SERVICE SUPPORT**

1 (17th) CSS bde (3 log bn, 3 med bn, 1 MP bn)

**Special Operations Command****FORCES BY ROLE****SPECIAL FORCES**1 (SAS) SF regt  
1 (SF Engr) SF regt  
2 cdo bn**COMBAT SUPPORT**

3 sigs sqn (incl 1 reserve sqn)

**COMBAT SERVICE SUPPORT**

1 CSS sqn

**Reserve Organisations****Force Command 16,200 reservists****FORCES BY ROLE****COMMAND**

1 (2nd) div HQ

**MANOEUVRE****Reconnaissance**

3 (regional force) surv unit (integrated)

**Light**

6 inf bde (total: 3 recce regt, 3 recce sqn, 12 inf bn, 6 arty bty)

**COMBAT SUPPORT**

3 cbt engr regt

1 sigs regt

**COMBAT SERVICE SUPPORT**

6 CSS bn

**Special Operations Command****FORCES BY ROLE****SPECIAL FORCES**

1 cdo bn

**EQUIPMENT BY TYPE****MBT** 59 M1A1 *Abrams***AIFV** 253 ASLAV-25 (all variants)**APC** 1,426**APC (T)** 431 M113AS4**PPV** 995 *Bushmaster* IMV**ARTY** 242**TOWED** 155mm 54 M777A2**MOR** 81mm 188**AT****MSL** • **MANPATS** *Javelin***RCL** • **84mm** *Carl Gustav***AMPHIBIOUS** 13 LCM-8 (capacity either 1 MBT or 200 troops)**HELICOPTERS****ATK** 22 *Tiger***TPT** 107: **Heavy** 11: 4 CH-47D *Chinook*; 7 CH-47F *Chinook*;**Medium** 67: 33 NH90 TTH (MRH90 TTH); 34 S-70A*Black Hawk*; **Light** 29 Bell 206B-1 *Kiowa***UAV** • **ISR** • **Medium** 10 RQ-7B *Shadow* 200**AD** • **SAM** • **MANPAD** RBS-70**RADAR** • **LAND** 34: 3 *Giraffe*; 31 LCMR**ARV** 39: 15 ASLAV-F; 17 ASLAV-R; 7 M88A2**VLB** 5 *Biber***MW** 20: 12 *Husky*; 8 MV-10**Navy 13,550**

Fleet Comd HQ located at Sydney. Naval Strategic Comd HQ located at Canberra

**EQUIPMENT BY TYPE****SUBMARINES** • **TACTICAL** • **SSK** 6 *Collins* with 6 single 533mm TT with Mk48 *Sea Arrow* ADCAP HWT/UGM-84C *Harpoon* AShM**PRINCIPAL SURFACE COMBATANTS 11****FRIGATES** • **FFGHM** 113 *Adelaide* (Mod) with 1 Mk13 GMLS with RGM-84C *Harpoon* AShM/SM-2 MR SAM, 1 8 cell Mk41 VLS with RIM-162 *Evolved Sea Sparrow* SAM, 2 triple Mk32 324mm ASTT with MU90 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 2 S-70B *Seahawk* ASW hel)  
8 *Anzac* (GER MEKO 200) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 8 cell Mk41 VLS with RIM-162 *Evolved Sea Sparrow* SAM, 2 triple 324mm ASTT with MU90 LWT, 1 127mm gun (capacity 1 S-70B *Seahawk* ASW hel) (capability upgrades in progress)**PATROL AND COASTAL COMBATANTS 15****PHC** 13 *Armidade***PCO** 2 *Cape***MINE WARFARE** • **MINE COUNTERMEASURES** • **MHO** 6 *Huon***AMPHIBIOUS****PRINCIPAL AMPHIBIOUS SHIPS 2****LHD** 1 *Canberra* (capacity 8 hel; 4 LCM; 100 veh; 1,000 troops) (2nd vessel due to commission Dec 2015)**LSD** 1 *Choules* (*UK Bay*) (capacity 1 med hel; 2 LCVP; 24 MBT; 350 troops)**LANDING CRAFT 17****LCM** 12 LCM-1E**LCVP** 5**LOGISTICS AND SUPPORT 37****AGHS** 2 *Leeuwin* with 1 hel landing platform**AGS** 4 *Paluma***AORH** 1 *Success***AOR** 1 *Sirius*

The following vessels are operated by a private company, DMS Maritime:

**AE** 3 *Wattle*

AOL 4 *Warrigal*  
 ASR 3  
 AX 2: 1 AXL; 1 AXS  
 YDT 4  
 YPT 3  
 YTL 4  
 YTM 6

## Naval Aviation 1,350

### FORCES BY ROLE

#### ANTI SUBMARINE WARFARE

1 sqn with NH90 (MRH90)  
 1 sqn with S-70B2 *Seahawk*

#### TRAINING

1 OCU sqn with MH-60R *Seahawk*  
 1 sqn with AS350BA *Ecureuil*; Bell 429

### EQUIPMENT BY TYPE

#### HELICOPTERS

ASW 24: 15 MH-60R *Seahawk*; 9 S-70B2 *Seahawk*  
 TPT 16: **Medium** 6 NH90 (MRH90); **Light** 10: 6 AS350BA *Ecureuil*; 4 Bell 429

## Clearance Diving Branch

### FORCES BY ROLE

#### SPECIAL FORCES

2 diving unit

## Air Force 14,200

Flying hours 175 hrs/year on F/A-18 *Hornet*

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

3 sqn with F/A-18A/B *Hornet*  
 2 sqn with F/A-18F *Super Hornet*

#### ANTI SUBMARINE WARFARE

2 sqn with AP-3C *Orion*

#### ISR

1 (FAC) sqn with PC-9/A(F)

#### AIRBORNE EARLY WARNING & CONTROL

1 sqn with B-737-700 *Wedgetail* (E-7A)

#### TANKER/TRANSPORT

1 sqn with A330 MRTT (KC-30A)

#### TRANSPORT

1 VIP sqn with B-737BBJ; CL-604 *Challenger*  
 1 sqn with Beech 350 *King Air*  
 1 sqn with C-17A *Globemaster*  
 1 sqn (forming) with C-27J *Spartan*  
 1 sqn with C-130J-30 *Hercules*

#### TRAINING

1 OCU with F/A-18A/B *Hornet*  
 1 sqn with Beech 350 *King Air*  
 2 (LIFT) sqn with *Hawk* MK127\*

#### ISR UAV

1 flt with *Heron*

### EQUIPMENT BY TYPE

#### AIRCRAFT 148 combat capable

FGA 97: 55 F/A-18A *Hornet*; 16 F/A-18B *Hornet*; 24 F/A-18F *Super Hornet*; 2 F-35A *Lightning II* (in test)  
 ASW 16 AP-3C *Orion*  
 EW 1 EA-18G *Growler*  
 AEW&C 6 B-737-700 *Wedgetail* (E-7A)  
 TKR/TPT 5 A330 MRTT (KC-30A)

TPT 43: **Heavy** 8 C-17A *Globemaster*; **Medium** 14: 2 C-27J *Spartan*; 12 C-130J-30 *Hercules*; **Light** 16 Beech 300 *King Air*; PAX 5: 2 B-737BBJ (VIP); 3 CL-604 *Challenger* (VIP)  
 TRG 96: 33 *Hawk* Mk127\*; 63 PC-9/A (incl 4 PC-9/A(F) for tgt marking)

UAV • ISR • **Heavy** 4 *Heron*

RADAR • AD RADAR 7

OTH-B 3 *Jindalee*

Tactical 4 AN/TPS-77

#### MSL

AAM • IIR AIM-9X *Sidewinder*; ASRAAM; ARH AIM-120B/C-5 AMRAAM

ASM AGM-154 JSOW

AShM AGM-84A *Harpoon*

LACM Tactical AGM-158 JASSM

#### BOMBS

Laser-guided *Paveway II/IV*; Laser JDAM (being delivered)

INS/GPS-guided JDAM; JDAM-ER (in development)

## Paramilitary

### Maritime Border Command

Has responsibility for operational coordination and control of both civil and military maritime-enforcement activities within Australia's EEZ. At any one time, 7 *Armidade*-class patrol boats, 1 major fleet unit and 3 AP-3C *Orion* aircraft are also assigned.

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 11

PSO 1 *Ocean Shield* with 1 hel landing platform

PCO 8: 1 *Thaiyuk*; 1 *Triton* (leased) with 1 hel landing platform; 6 *Cape*

PCC 2 *Bay*

AIRCRAFT • TPT • **Light** 10 DHC-8

HELICOPTERS • TPT 2: **Medium** 1 Bell 214; **Light** 1 AS350 *Ecureuil*

## Cyber

The Cyber Security Operations Centre is important in addressing the cyber-security threat. Hosted at the Australian Signals Directorate, the centre continues to work closely within Defence and with other government agencies to ensure that Australia is both protected against emerging cyber threats and adequately positioned to meet the government's requirement to implement the Top 4 Strategies to Mitigate Targeted Cyber Intrusions — a mandatory requirement after 2013, under the Financial Management and Accountability Act 1997. Partial implementation of the Australian Signals Directorate's top four mitigations was achieved in 2014. The defence department said it was implementing the remaining mitigation strategies in 2015.

## DEPLOYMENT

### Legal provisions for foreign deployment:

Constitution: Constitution (1900)

Decision on deployment of troops abroad: By government exercising its executive power under Section 61 of the Australian Constitution.

### AFGHANISTAN

NATO • ISAF 250

UN • UNAMA 2 obs

**ARABIAN SEA**

Combined Maritime Forces • CTF-150 1 FFGHM

**EGYPT**MFO (*Operation Mazurka*) 25**IRAQ***Operation Okra* 380**MALAYSIA**120; 1 inf coy (on 3-month rotational tours); 2 AP-3C *Orion* (on rotation)**MIDDLE EAST**

UN • UNTSO 12 obs

**PAPUA NEW GUINEA**

33; 1 trg unit

**SOUTH SUDAN**

UN • UNMISS 17; 1 obs

**UNITED ARAB EMIRATES***Operation Accordion* 400: 1 tpt det with 2 C-130J-30 *Hercules*  
*Operation Okra* 400; 1 FGA det with 6 F/A-18A *Hornet*; 1 B-737-700 *Wedgetail* (E-7A); 1 A330 MRTT (KC-30A)**FOREIGN FORCES**

New Zealand 9 (air navigation trg)

Singapore 230: 1 trg sqn at Pearce with PC-21 trg ac; 1 trg sqn at Oakey with 12 AS332 *Super Puma*; AS532 *Cougar*

United States US Pacific Command: 180; 1 SEWS at Pine Gap; 1 comms facility at NW Cape; 1 SIGINT stn at Pine Gap • US Strategic Command: 1 detection and tracking radar at Naval Communication Station Harold E Holt

**Bangladesh BGD**

Bangladeshi Taka Tk		2014	2015	2016
GDP	Tk	14.3tr	16.2tr	
	US\$	184bn	202bn	
<i>per capita</i>	US\$	1,162	1,266	
Growth	%	6.3	6.5	
Inflation	%	7.0	6.4	
Def Exp	Tk	139bn		
	US\$	1.79bn		
Def bdgt	Tk	152bn	178bn	184bn
	US\$	1.95bn	2.22bn	
FMA (US)	US\$	2.5m	2m	2m
US\$1=Tk		77.72	79.94	

Population 168,957,745

Religious groups: Muslim 90%; Hindu 9%; Buddhist 1%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	16.0%	4.9%	4.0%	3.5%	17.6%	2.5%
Female	15.6%	5.2%	4.8%	4.3%	18.9%	2.6%

**Capabilities**

Bangladesh has a limited military capability optimised for border and domestic security, but forces have shown themselves capable of mobilising and deploying quickly to tackle internal-security tasks. The country's long record of service in UN missions has brought it considerable peacekeeping experience. The armed forces also reportedly retain extensive business interests, in real estate, banks and other businesses. Bangladesh is undertaking a major naval recapitalisation and expansion programme in order to protect its large EEZ. The navy will receive second-hand Italian *Minerva*-class and new Chinese-built corvettes, as well as two second-hand Chinese Type-035G submarines due in late 2015. Substantial efforts have been taken to strengthen a nascent shipbuilding industry with the assistance of foreign partners. Following Chinese-designed *Padma*-class patrol vessels and Indonesian Landing Craft Tank, the main Bangladeshi shipyard is now constructing high-speed patrol vessels with the Indonesian firm DEW, reportedly in order to equip its newly established naval special-forces unit.

**ACTIVE 157,050 (Army 126,150 Navy 16,900 Air 14,000) Paramilitary 63,900****ORGANISATIONS BY SERVICE****Army 126,150****FORCES BY ROLE  
COMMAND**

7 inf div HQ

**SPECIAL FORCES**

1 cdo bn

**MANOEUVRE****Armoured**

1 armd bde

6 indep armd regt

**Light**

18 inf bde

1 (composite) bde

**Aviation**

1 avn regt (1 avn sqn; 1 hel sqn)

**COMBAT SUPPORT**

20 arty regt

1 AD bde

1 engr bde

1 sigs bde

**EQUIPMENT BY TYPE**

MBT 276: 174 Type-59; 58 Type-69/Type-69G; 44 Type-90-II (MBT-2000)

LT TK 8 Type-62

RECCE 5+ BOV M11

AIFV 155 BTR-80A

APC 151

APC (T) 134 MT-LB

APC (W) 17 *Cobra*

ARTY 841+

SP 155mm 6+ NORA B-52

TOWED 363+: 105mm 170: 56 Model 56A1; 114 Model 56/L 10A1 pack howitzer; 122mm 131: 57 Type-54/54-1

(M-30); 20 Type-83; 54 Type-96 (D-30), 130mm 62 Type-59-1 (M-46)

**MOR** 472: **81mm** 11 M29A1; **82mm** 366 Type-53/87/M-31 (M-1937); **120mm** 95 MO-120-AM-50 M67/UBM 52

**AT**

**MSL** • **MANPATS** 9K115-2 *Metis* M1 (AT-13 *Saxhorn-2*)  
**RCL** 106mm 238 M40A1

**AMPHIBIOUS • LANDING CRAFT** 3: 1 **LCT**; 2 **LCVP**

**AIRCRAFT** • **TPT** • **Light** 6: 5 Cessna 152; 1 PA-31T

*Cheyenne*

**HELICOPTERS**

**MRH** 2 AS365N3 *Dauphin*

**TPT** • **Light** 3 Bell 206L-4 *Long Ranger*

**AD • SAM**

SP FM-90

**MANPAD** QW-2; HN-5A (being replaced by QW-2)

**GUNS** • **TOWED** 166: **37mm** 132 Type-65/74; **57mm** 34 Type-59 (S-60)

**AEV** MT-LB

**ARV** 3+: T-54/T-55; Type-84; 3 Type-654

**VLB** MTU

**Navy 16,900****EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS • FRIGATES** 5

**FFGHM** 1 *Bangabandhu* (ROK *Modified Ulsan*) with 2 twin Inchr with *Otomat* Mk2 ASHM, 1 octuple HQ-7 SAM, 2 triple 324mm TT with A244 LWT, 1 76mm gun (capacity: 1 AW109E hel)

**FFG** 3:

2 *Abu Bakr* (ex-PRC *Jianghu* III) with 2 twin Inchr with C-802A ASHM, 2 RBU 1200 A/S mor, 2 twin 100mm gun

1 *Osman* (ex-PRC *Jianghu* I) with 2 quad Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 2 RBU 1200 A/S mor, 2 twin 100mm gun

**FF** 1 *Umar Farooq†* (UK *Salisbury* – trg role) with 3 *Squid* A/S Mor, 1 twin 115mm gun

**PATROL AND COASTAL COMBATANTS** 48

**CORVETTES** • **FSG** 4:

2 *Durjoy* with 2 twin Inchr with C-704 ASHM, 1 76mm gun

2 *Bijoy* (ex-UK *Castle*) with 2 twin Inchr with C-704 ASHM, 1 76mm gun, 1 hel landing platform

**PSOH** 2 *Somudra Joy* (ex-USCG *Hero*) with 1 76mm gun, hel landing platform

**PCFG** 4 *Durdarsha* (ex-PRC *Huangfeng*) with 4 single Inchr with HY-2 (CSS-N-2 *Safflower*) ASHM

**PCO** 6: 1 *Madhumati* (*Sea Dragon*) with 1 57mm gun; 5 *Kapatakhaya* (ex-UK *Island*)

**PCC** 8:

2 *Meghna* with 1 57mm gun (fishery protection)

1 *Nirbhoy* (ex-PRC *Hainan*) with 4 RBU 1200 A/S mor; 2 twin 57mm gun

5 *Padma*

**PBFG** 5 *Durbar* (PRC *Hegu*) with 2 single Inchr with SY-1 ASHM

**PBFT** 4 *Huchuan* (PRC) with 2 single 533mm TT each with YU 1 Type-53 HWT

**PBF** 4 *Titas* (ROK *Sea Dolphin*)

**PB** 11: 1 *Barkat* (ex-PRC *Shanghai* III); 2 *Karnaphuli*; 1 *Salam* (ex-PRC *Huangfen*); 7 *Shaheed Daulat* (PRC *Shanghai* II)

**MINE WARFARE • MINE COUNTERMEASURES** 5

**MSO** 5: 1 *Sagar*; 4 *Shapla* (ex-UK *River*)

**AMPHIBIOUS**

**LANDING SHIPS** • **LSL** 1

**LANDING CRAFT** 14

**LCT** 2

**LCU** 4 (of which 2†)

**LCVP** 3†

**LCM** 5 *Darshak* (*Yuchin*)

**LOGISTICS AND SUPPORT** 12

**AG** 1

**AGHS** 2: 1 *Agradoot*; 1 *Anushandhan*

**AOR** 2 (coastal)

**AOT** 1 *Khan Jahangir Ali*

**AR** 1†

**ATF** 1†

**AX** 1 *Shaheed Ruhul Amin*

**YTM** 3

**Naval Aviation****EQUIPMENT BY TYPE**

**AIRCRAFT** • **TPT** • **Light** 2 Do-228NG (MP)

**HELICOPTERS** • **TPT** • **Light** 2 AW109E *Power*

**Special Warfare and Diving Command 300****Air Force 14,000****FORCES BY ROLE****FIGHTER**

1 sqn with MiG-29B/UB *Fulcrum*

**FIGHTER/GROUND ATTACK**

1 sqn with F-7MB/FT-7B *Airguard*

1 sqn with F-7BG/FT-7BG *Airguard*

1 sqn with F-7BGI/FT-7BGI *Airguard*

**GROUND ATTACK**

1 sqn (forming) with Yak-130 *Mitten*

**TRANSPORT**

1 sqn with An-32 *Cline*

1 sqn with C-130B *Hercules*

1 sqn with L-410UVP

**TRAINING**

1 sqn with K-8W *Karakorum\**; L-39ZA *Albatros\**

1 sqn with PT-6

**TRANSPORT HELICOPTER**

2 sqn with Mi-17 *Hip* H; Mi-17-1V *Hip* H; Mi-171Sh

1 sqn with Bell 212

1 trg sqn with Bell 206L *Long Ranger*

**EQUIPMENT BY TYPE†**

**AIRCRAFT** 75 combat capable

**FTR** 53: 9 F-7MB *Airguard*; 11 F-7BG *Airguard*; 12 F-7BGI *Airguard*; 5 FT-7B *Airguard*; 4 FT-7BG *Airguard*; 4 FT-7BGI *Airguard*; 6 MiG-29 *Fulcrum*; 2 MiG-29UB *Fulcrum*

**TPT** 8: **Medium** 4 C-130B *Hercules*; **Light** 4: 3 An-32 *Cline†*; 1 L-410UVP

**TRG** 32: 9 K-8W *Karakorum\** being delivered; 7 L-39ZA *Albatros\**; 10 PT-6; 6 Yak-130 *Mitten\**

**HELICOPTERS**

**MRH** 14: 12 Mi-17 *Hip* H; 2 Mi-17-1V *Hip* H (VIP)



TPT 8: Medium 2 Mi-171Sh; Light 6: 2 Bell 206L Long Ranger; 4 Bell 212

MSL • AAM • IR R-3 (AA-2 Atoll)†; R-73 (AA-11 Archer); PL-5; PL-7; SARH R-27R (AA-10A Alamo)

## Paramilitary 63,900

**Ansars 20,000+**

Security Guards

**Rapid Action Battalions 5,000**

Ministry of Home Affairs

### FORCES BY ROLE

#### MANOEUVRE

##### Other

14 paramilitary bn

**Border Guard Bangladesh 38,000**

### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

1 rvn coy

##### Other

54 paramilitary bn

**Coast Guard 900**

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 9

PB 4: 1 *Ruposhi Bangla*; 1 *Shaheed Daulat*; 2 *Shetgang*

PBR 5 *Pabna*

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 903; 11 obs; 1 inf bn; 1 sigs coy; 1 med coy

### CÔTE D'IVOIRE

UN • UNOCI 1,421; 13 obs; 2 mech inf bn; 1 sigs coy; 1 log coy; 1 fd hospital

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 1,784; 16 obs; 1 mech inf bn; 2 engr coy; 1 avn coy; 2 hel coy

### HAITI

UN • MINUSTAH 110; 1 hel sqn

### LEBANON

UN • UNIFIL 286; 1 FFG; 1 FSG

### LIBERIA

UN • UNMIL 292; 8 obs; 1 engr coy; 1 log pl

### MALI

UN • MINUSMA 1,578; 2 obs; 1 inf bn; 1 engr coy; 1 rvn coy; 2 sigs coy; 1 tpt coy

### SOUTH SUDAN

UN • UNMISS 482; 6 obs; 1 engr coy; 1 rvn coy

### SUDAN

UN • UNAMID 370; 7 obs; 1 inf coy

## WESTERN SAHARA

UN • MINURSO 20; 9 obs; 1 fd hospital

## Brunei BRN

Brunei Dollar B\$		2014	2015	2016
GDP	B\$	21.7bn	15.8bn	
	US\$	17.1bn	11.6bn	
<i>per capita</i>	US\$	41,460	27,759	
Growth	%	-2.3	-1.2	
Inflation	%	-0.2	0.0	
Def bdtg	B\$	719m	537m	
	US\$	568m	396m	
US\$1=B\$		1.27	1.36	

Population 429,646

Ethnic groups: Malay, Kedayan, Tutong, Belait, Bisaya, Dusun, Murut 66.3%; Chinese 11.2%; Iban, Dayak, Kelabit 6%; Other 11.8%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	12.3%	4.2%	4.3%	4.8%	21.9%	2.1%
Female	11.5%	4.1%	4.5%	5.1%	23.0%	2.2%

## Capabilities

The Royal Brunei Armed Forces are an important source of employment in the oil-rich state. While professional and well trained, their limited size means they could offer little resistance on their own to a determined aggressor. While the defence budget was reduced in 2015, this arose from the transfer of the bulk of procurement funding to the Ministry of Finance, and lower oil and gas prices are putting pressure on Brunei's defence-planning targets. The sultanate has long-established defence relations with the UK and Singapore, and the UK and Brunei have renewed for another five years a long-standing agreement to station UK troops in the sultanate. Brunei continues to deploy small peacekeeping contingents, under Malaysian command, to Lebanon (UNIFIL) and the southern Philippines (IMT).

**ACTIVE 7,000 (Army 4,900 Navy 1,000 Air 1,100)**

**Paramilitary 2,250**

**RESERVE 700 (Army 700)**

## ORGANISATIONS BY SERVICE

### Army 4,900

#### FORCES BY ROLE

##### MANOEUVRE

##### Light

3 inf bn

##### COMBAT SUPPORT

1 cbt spt bn (1 armd recce sqn, 1 engr sqn)

##### Reserves 700

#### FORCES BY ROLE

##### MANOEUVRE

##### Light

1 inf bn

**EQUIPMENT BY TYPE**LT TK 20 *Scorpion* (16 to be upgraded)

APC (W) 45 VAB

ARTY • MOR 81mm 24

ARV 2 *Samson***Navy 1,000****FORCES BY ROLE****SPECIAL FORCES**

1 SF sqn

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 12**CORVETTES • FSG 4 *Darussalam* with 2 twin Inchr with MM-40 *Exocet* Block II AShM, 1 57mm gun, 1 hel landing platformPCC 4 *Ijtihad*PBF 1 *Mustaed*PB 3 *Perwira*AMPHIBIOUS • LANDING CRAFT • LCU 4: 2 *Teraban*; 2 *Cheverton Loadmaster***Air Force 1,100****FORCES BY ROLE****MARITIME PATROL**

1 sqn with CN-235M

**TRAINING**1 sqn with PC-7; Bell 206B *Jet Ranger II***TRANSPORT HELICOPTER**

1 sqn with Bell 212; Bell 214 (SAR)

1 sqn with Bo-105

1 sqn with S-70i *Black Hawk***AIR DEFENCE**1 sqn with *Rapier*1 sqn with *Mistral***EQUIPMENT BY TYPE****AIRCRAFT**

MP 1 CN-235M

TRG 4 PC-7

**HELICOPTERS**TPT 23: **Medium** 5: 1 Bell 214 (SAR); 4 S-70i *Black Hawk*;**Light** 18: 2 Bell 206B *Jet Ranger II*; 10 Bell 212; 6 Bo-105 (armed, 81mm rockets)AD • SAM 12+: *Rapier*; 12 *Mistral***Paramilitary €2,250****Gurkha Reserve Unit 400–500****FORCES BY ROLE****MANOEUVRE****Light**

2 inf bn(-)

**Royal Brunei Police 1,750****EQUIPMENT BY TYPE**PATROL AND COASTAL COMBATANTS • PB 10: 3 *Bendaharu*; 7 PDB-type**DEPLOYMENT****LEBANON**

UN • UNIFIL 29

**PHILIPPINES**

IMT 6

**FOREIGN FORCES****Singapore** 1 trg camp with infantry units on rotation; 1 trg school; 1 hel det with AS332 *Super Puma***United Kingdom** 550; 1 Gurhka bn; 1 trg unit; 1 hel flt with 3 hel**Cambodia CAM**

Cambodian Riel r		2014	2015	2016
GDP	r	66.8tr	72.8tr	
	US\$	16.6bn	17.7bn	
<i>per capita</i>	US\$	1,081	1,140	
Growth	%	7.0	7.0	
Inflation	%	3.9	1.1	
Def exp	r	€1.8tr		
	US\$	€446m		
FMA (US)	US\$	0.5m		
US\$1=r		4,037.53	4,107.90	

Population 15,708,756

Ethnic groups: Khmer 90%; Vietnamese 5%; Chinese 1%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	15.9%	4.5%	5.2%	5.1%	16.3%	1.5%
Female	15.6%	4.6%	5.3%	5.2%	18.2%	2.5%

**Capabilities**

Despite their name, which reflects Cambodia's formal status as a constitutional monarchy, and the integration in the early 1990s of two non-communist resistance armies, the Royal Cambodian Armed Forces are essentially the modern manifestation of the armed forces of the former People's Republic of Kampuchea, established in 1979 following Vietnam's invasion. The establishment of a defence relationship with Vietnam and strengthened ties with China have helped improve maintenance and support, despite a flare-up during 2015 in border tensions with the former. Minor skirmishes on the border with Thailand since 2008 have provided little indication of a capacity for high-intensity combat. Cambodia contributes personnel to peacekeeping missions including in the CAR (MINUSCA) and Mali (MINUSMA). A training relationship also exists with the US, and the latest iteration of the *Angkor Sentinel* exercise was held in March at the Peacekeeping Operations Center in Kampong Speu Province.

**ACTIVE 124,300 (Army 75,000 Navy 2,800 Air 1,500 Provincial Forces 45,000) Paramilitary 67,000**

*Conscript liability* Authorised but not implemented since 1993

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## ORGANISATIONS BY SERVICE

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### Army €75,000

6 Military Regions (incl 1 special zone for capital)

#### FORCES BY ROLE

##### SPECIAL FORCES

1 (911th) AB/SF Bde

##### MANOEUVRE

###### Light

2 (2nd & 3rd Intervention) inf div (3 inf bde)

5 (Intervention) indep inf bde

7 indep inf bde

###### Other

1 (70th) sy bde (4 sy bn)

17 (border) sy bn

##### COMBAT SUPPORT

2 arty bn

1 AD bn

4 fd engr regt

##### COMBAT SERVICE SUPPORT

1 (construction) engr regt

2 tpt bde

##### EQUIPMENT BY TYPE

MBT 200+: 50 Type-59; 150+ T-54/T-55

LT TK 20+: Type-62; 20 Type-63

RECCE 4+ BRDM-2

AIFV 70 BMP-1

APC 230+

APC (T) M113

APC (W) 230: 200 BTR-60/BTR-152; 30 OT-64

ARTY 433+

TOWED 400+ 76mm ZIS-3 (M-1942)/122mm D-30/

122mm M-30 (M-1938)/130mm Type-59-I

MRL 33+: 107mm Type-63; 122mm 13: 8 BM-21; 5 RM-70;

132mm BM-13-16 (BM-13); 140mm 20 BM-14-16 (BM-14)

MOR 82mm M-37; 120mm M-43; 160mm M-160

AT • RCL 82mm B-10; 107mm B-11

AD

MSL • MANPAD 50 FN-6; FN-16 (reported)

GUNS • TOWED 14.5mm ZPU-1/ZPU-2/ZPU-4; 37mm

M-1939; 57mm S-60

ARV T-54/T-55

MW Bozena; RA-140 DS

### Navy €2,800 (incl 1,500 Naval Infantry)

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 16

PBF 3 *Stenka*

PB 11: 4 (PRC 46m); 3 (PRC 20m); 2 *Shershen*; 2 *Turya*

PBR 2 *Kaoh Chhlam*

AMPHIBIOUS • CRAFT

LCU 1

### Naval Infantry 1,500

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 (31st) nav inf bde

##### COMBAT SUPPORT

1 arty bn

### Air Force 1,500

#### FORCES BY ROLE

##### ISR/TRAINING

1 sqn with P-92 *Echo*; L-39 *Albatros*\*

##### TRANSPORT

1 VIP sqn (reporting to Council of Ministers) with An-24RV *Coke*; AS350 *Ecureuil*; AS355F2 *Ecureuil* II

1 sqn with BN-2 *Islander*; Y-12 (II)

##### TRANSPORT HELICOPTER

1 sqn with Mi-26 *Halo*; Mi-17 *Hip* H; Mi-8 *Hip*; Z-9

##### EQUIPMENT BY TYPE

AIRCRAFT 5 combat capable

TPT • Light 10: 2 An-24RV *Coke*; 1 BN-2 *Islander*; 5 P-92 *Echo* (pilot trg/recce); 2 Y-12 (II)

TRG 5 L-39 *Albatros*\*

##### HELICOPTERS

MRH 14: 3 Mi-17 *Hip* H; 11 Z-9

TPT 10: Heavy 2 Mi-26 *Halo*; Medium 4 Mi-8 *Hip*; Light

4: 2 AS350 *Ecureuil*; 2 AS355F2 *Ecureuil* II

### Provincial Forces 45,000+

Reports of at least 1 inf regt per province, with varying numbers of inf bn (with lt wpn)

### Paramilitary

Police 67,000 (including gendarmerie)

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## DEPLOYMENT

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#### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 217; 6 obs; 1 engr coy

#### LEBANON

UN • UNIFIL 184; 1 engr coy

#### MALI

UN • MINUSMA 303; 1 engr coy; 1 EOD coy

#### SOUTH SUDAN

UN • UNMISS 147; 4 obs; 1 fd hospital

#### SUDAN

UN • UNAMID 2 obs

UN • UNISFA 3 obs

## China, People's Republic of PRC

Chinese Yuan Renminbi Y		2014	2015	2016
GDP	Y	63.6tr	69.2tr	
	US\$	10.4tr	11.4tr	
per capita	US\$	7,572	8,280	
Growth	%	7.3	6.8	
Inflation	%	2.0	1.5	
Def exp	Y	€1.1tr		
	US\$	€180bn		
	US\$ [a]	€314bn		
Def bdg [b]	Y	806bn	887bn	
	US\$	131bn	146bn	
US\$1=Y	MER	6.14	6.08	
	PPP	3.52	3.55	

[a] PPP estimate

[b] Includes central-government expenditure only

**Population** 1,374,626,494

**Ethnic groups:** Tibetan, Uighur and other non-Han 8%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.2%	3.4%	3.9%	4.7%	25.3%	4.8%
Female	7.9%	2.9%	3.6%	4.6%	24.4%	5.2%

## Capabilities

Despite slowing economic growth, China remains committed to developing and modernising its military capabilities. The latest 2014 defence white paper, published in English in 2015, outlined the importance of power-projection capabilities to the People's Liberation Army, emphasising the requirements for offensive and defensive air operations, and 'open seas protection'. To this end, the navy and air force have continued to receive the majority of equipment investment. The navy has almost fully modernised its main 'surface action groups', while the air force has begun to introduce into service improved indigenous aircraft designs, such as the J-10B. China's Second Artillery Force, described as 'lean and effective' in the white paper, is also undergoing a period of sustained modernisation, reflected in the introduction into service of a new intermediate-range ballistic-missile type, and a new intercontinental-ballistic-missile variant capable of carrying multiple warheads. An entirely new road-mobile ICBM design is currently in testing. In an attempt to match this new equipment with improved training, PLA exercises have begun to be adapted to increase realism and to integrate multiple services in joint operations. Without evidence from active operations, however, the actual extent of improvements remains difficult to assess. (See pp. 11–15 and pp. 221–27.)

**ACTIVE 2,333,000** (Army 1,600,000 Navy 235,000  
Air Force 398,000 Strategic Missile Forces 100,000)  
**Paramilitary 660,000**

*Conscript liability* Selective conscription; all services 2 years

## RESERVE €510,000

Overall organisation: army leadership is exercised by the four general headquarters/departments. A military region exercises direct leadership over the army units under it. The navy, air force and Second Artillery Force each have a leading body consisting of the headquarters, political department, logistics department and armaments department. These direct the military, political, logistical and equipment work of their respective troops, and take part in the command of joint operations.

## ORGANISATIONS BY SERVICE

### Strategic Missile Forces (100,000+)

#### Offensive

The Second Artillery Force organises and commands its own troops to launch nuclear counter-attacks with strategic missiles and to conduct operations with conventional missiles. Org as launch bdes subordinate to 6 army-level msl bases (1 in Shenyang & Beijing MR, 1 in Jinan MR, 1 in Nanjing MR, 2 in Guangzhou MR and 1 in Lanzhou MR). Org varies by msl type.

#### FORCES BY ROLE

##### MISSILE

- 1 ICBM bde with DF-4
- 2 ICBM bde with DF-5A
- 1 ICBM bde with DF-5B
- 1 ICBM bde with DF-31
- 2 ICBM bde with DF-31A
- 1 IRBM bde with DF-26
- 1 MRBM bde with DF-16
- 1 MRBM bde with DF-21
- 5 MRBM bde with DF-21A
- 3 MRBM bde with DF-21C
- 2 MRBM bde with DF-21D
- 4 SRBM bde with DF-11A
- 3 SRBM bde with DF-15B
- 2 GLCM bde with DH-10
- 2 SSM trg bde

##### MSL • STRATEGIC 467

**ICBM** 62: €10 DF-4 (CSS-3); €20 DF-5A (CSS-4 Mod 2); €8 DF-31 (CSS-10 Mod 1); €24 DF-31A (CSS-10 Mod 2)

**IRBM** €16 DF-26

**MRBM** 146: €12 DF-16 (CSS-11 Mod 1); €80 DF-21/DF-21A (CSS-5 Mod 1/2); €36 DF-21C (CSS-5 Mod 4); €18 DF-21D (CSS-5 Mod 5 – ASBM)

**SRBM** 189: €108 DF-11A (CSS-7 Mod 2); €81 DF-15B (CSS-6 Mod 3)

**LACM** €54 DH-10

#### Navy

#### EQUIPMENT BY TYPE

##### SUBMARINES • STRATEGIC • SSBN 4:

- 4 *Jin* with up to 12 JL-2 (CSS-NX-14) strategic SLBM (operational status unknown)

## Air Force

### FORCES BY ROLE

#### BOMBER

3 regt with H-6K

### EQUIPMENT BY TYPE

AIRCRAFT • BBR ε50 H-6K

MSL • LACM Strategic CJ-20

## Defensive

### EQUIPMENT BY TYPE

RADAR • STRATEGIC: 4+ large phased array radars; some detection and tracking radars

## Space

### EQUIPMENT BY TYPE

#### SATELLITES 77

COMMUNICATIONS 5 *Zhongxing* (dual-use telecom satellites for civ/mil comms)

NAVIGATION/POSITIONING/TIMING 18: 6 *Beidou-2*(M); 5 *Beidou-2*(G); 7 *Beidou-2*(IGSO)

ISR 39: 1 *Haiyang 2A*; 36 *Yaogan Weixing* (remote sensing); 2 *Zhangguo Ziyuan* (ZY-2 – remote sensing)

ELINT/SIGINT 15: 8 *Shijian 6* (4 pairs – reported ELINT/SIGINT role); 7 *Shijian 11* (reported ELINT/SIGINT role)

## People's Liberation Army ε800,000; ε800,000 conscript (total ε1,600,000)

7 military region commands are subdivided into a total of 28 military districts.

### FORCES BY ROLE

#### COMMAND

7 mil region

18 (Group) army HQ

#### SPECIAL FORCES

10 SF bde

2 SF gp (regt)

#### MANOEUVRE

##### Armoured

1 armd div (3 armd regt, 1 arty regt, 1 AD regt)

16 armd bde

##### Mechanised

6 mech inf div (1 armd regt, 2 mech inf regt, 1 arty regt, 1 AD regt)

1 (high alt) mech inf div (1 armd regt, 2 mech inf regt, 1 arty regt, 1 AD regt)

20 mech inf bde

1 (high alt) mech inf bde

##### Light

1 mot inf div (1 armd regt, 3 mot inf regt, 1 arty regt, 1 AD regt)

6 mot inf div (1 armd regt, 2 mot inf regt, 1 arty regt, 1 AD regt)

4 (high alt) mot inf div (1 armd regt, 2 mot inf regt, 1 arty regt, 1 AD regt)

20 mot inf bde

2 (high alt) mot inf bde

##### Amphibious

1 amph armd bde

2 amph mech div (1 armd regt, 2 mech inf regt, 1 arty regt, 1 AD regt)

## Mountain

5 mtn inf bde

### Other

1 (OPFOR) mech inf bde

1 mech gd div (1 armd regt, 2 mech inf regt, 1 arty regt, 1 AD regt)

1 sy gd div (4 sy regt)

59 (border) sy regt

1 (border) sy gp

### Aviation

7 avn bde

5 avn regt

4 trg avn regt

### COMBAT SUPPORT

19 arty bde

2 MRL bde

19 (coastal defence) ASHM regt

22 AD bde

2 engr bde

19 engr regt

10 EW regt

50 sigs regt

## Reserves

### FORCES BY ROLE

#### MANOEUVRE

##### Armoured

2 armd regt

##### Light

18 inf div

4 inf bde

3 indep inf regt

#### COMBAT SUPPORT

3 arty div

7 arty bde

17 AD div

8 AD bde

8 AD regt

15 engr regt

1 ptn br bde

3 ptn br regt

10 chem regt

10 sigs regt

#### COMBAT SERVICE SUPPORT

9 log bde

1 log regt

### EQUIPMENT BY TYPE

MBT 6,540: 1,800 Type-59; 650 Type-59-II; 600 Type-59D; 200 Type-79; 300 Type-88A/B; 1,000 Type-96; 1,200 Type-96A; 40 Type-98A; 500 Type-99; 250 Type-99A

LT TK 650: 250 Type-05 AAV (ZTD-05); 250 Type-62; 150 Type-63A

RECCE 250 Type-09 (ZTL-09)

AIFV 3,950: 500 Type-04 (ZBD-04); 350 Type-04A (ZBD-04A); 300 Type-05 AAV (ZBD-05); 400 Type-09 (ZBL-09); 600 Type-86; 650 Type-86A; 550 Type-92; 600 Type-92B

APC 5,020

APC (T) 4,150: 2,400 Type-63/Type-63C; 1,750 Type-89

APC (W) 870: 700 Type-92A; 120 Type-09A (ZBL-09A); 50 Type-93



**ARTY** 13,178+

**SP** 2,280: **122mm** 1,600: 700 Type-89; 300 Type-07 (PLZ-07); 150 Type-07B (PLZ-07B); 300 Type-09 (PLC-09); 150 Type-09 (PLL-09); **152mm** 390 Type-83A/B; **155mm** 290 Type-05 (PLZ-05)

**TOWED** 6,140: **122mm** 3,800 Type-54-1 (M-1938)/Type-83/Type-60 (D-74)/Type-96 (D-30); **130mm** 234 Type-59 (M-46)/Type-59-I; **152mm** 2,106 Type-54 (D-1)/Type-66 (D-20)

**GUN/MOR** **120mm** 300: 200 Type-05 (PLL-05); 100 Type-05A (PLZ-05A)

**MRL** 1,872+

**SP** 1,818+: **107mm** some; **122mm** 1,643: 1,250 Type-81; 375 Type-89 (PHZ-89); 18 Type-10 (PHZ-10); **300mm** 175 Type-03 (PHL-03)

**TOWED** • **107mm** 54 Type-63

**MOR** 2,586

**TOWED** **82mm** Type-53 (M-37)/Type-67/Type-82/Type-87; **100mm** Type-89

**AT**

**MSL**

**SP** 924: 450 HJ-8 (veh mounted); 24 HJ-10; 450 ZSL-02B **MANPATS** HJ-73A/B/C; HJ-8A/C/E

**RCL** 3,966: **75mm** Type-56; **82mm** Type-65 (B-10)/Type-78; **105mm** Type-75; **120mm** Type-98

**GUNS** 1,788

**SP** 480 **100mm** 250 Type-02 (PTL-02); **120mm** 230 Type-89 (PLZ-89)

**TOWED** • **100mm** 1,308 Type-73 (T-12)/Type-86

**AIRCRAFT** • **TPT** 8 **Medium** 4 Y-8; **Light** 4 Y-7

**HELICOPTERS**

**ATK** 200: 100 Z-10; 100 Z-19

**MRH** 351: 22 Mi-17 *Hip* H; 3 Mi-17-1V *Hip* H; 38 Mi-17V-5 *Hip* H; 25 Mi-17V-7 *Hip* H; 8 SA342L *Gazelle*; 21 Z-9A; 31 Z-9W; 10 Z-9WA; 193 Z-9WZ

**TPT** 362: **Heavy** 85: 4 Mi-26 *Halo*; 9 Z-8A; 72 Z-8B; **Medium** 209: 50 Mi-8T *Hip*; 140 Mi-171; 19 S-70C2 (S-70C) *Black Hawk*; **Light** 68: 53 AS350 *Ecureuil*; 15 H120 *Colibri*

**UAV** • **ISR** • **Heavy** BZK-005; BZK-009; WZ-5 **Medium** ASN-105; ASN-206; BZK-006; BZK-007; **Light** ASN-104; W-50

**AD**

**SAM**

**SP** 312: 24 9K331 *Tor*-M1 (SA-15 *Gauntlet*); 30 HQ-6D; 200 HQ-7A; 40 HQ-16A; 18 HQ-17

**MANPAD** HN-5A/HN-5B; FN-6/QW-1/QW-2

**GUNS** 7,376+

**SP** 376: **25mm** 270 Type-04A; **35mm** 100 Type-07; **37mm** 6 Type-88

**TOWED** 7,000+: **25mm** Type-87; **35mm** Type-99 (GDF-002); **37mm** Type-55 (M-1939)/Type-65/Type-74; **57mm** Type-59 (S-60); **100mm** Type-59 (KS-19)

**RADAR** • **LAND** *Cheetah*; RASIT; Type-378

**MSL**

**AShM** HY-1 (CSS-C-2 *Silkworm*); HY-2 (CSS-C-3 *Seersucker*); HY-4 (CSS-C-7 *Sadsack*); YJ-62

**ASM** AKD-8; AKD-9; AKD-10

**ARV** Type-73; Type-84; Type-85; Type-97; Type-654

**VLB** KMM; MTU; TMM; Type-84A

**MW** Type-74; Type-79; Type-81-II; Type-84

**Navy** €200,000; 35,000 conscript (total 235,000)

The PLA Navy is organised into five service arms: submarine, surface, naval aviation, coastal defence and marine corps, as well as other specialised units. There are three fleets: the Beihai Fleet (North Sea), Donghai Fleet (East Sea) and Nanhai Fleet (South Sea).

**EQUIPMENT BY TYPE****SUBMARINES** 61

**STRATEGIC** • **SSBN** 4:

4 *Jin* (Type-094) with up to 12 JL-2 (CSS-NX-14) strategic SLBM (operational status unknown)

**TACTICAL** 57

**SSN** 5:

3 *Han* (Type-091) with 6 single 533mm TT with YJ-82 (CSS-N-7) AShM

2 *Shang* (Type-093) with 6 single 533mm TT with YJ-82 (CSS-N-7) AShM

**SSK** 51:

4 *Kilo* (2 Project 877 & 2 Project 636) with 6 single 533mm TT

8 *Kilo* (Project 636N) with 6 single 533mm TT with 3M54 *Klub* (SS-N-27B *Sizzler*) AShM

12 *Ming* (8 Type-035G, 4 Type-035B) with 8 single 533mm TT

12 *Song* (Type-039G) with 6 single 533mm TT with YJ-82 (CSS-N-7) AShM

4 *Yuan* (Type-039A) with 6 533mm TT with YJ-82 (CSS-N-7) AShM

11 *Yuan* II (Type-039B) with 6 533mm TT with YJ-82 (CSS-N-7) AShM

**SSB** 1 *Qing* (Type-032) (SLBM trials)

**PRINCIPAL SURFACE COMBATANTS** 74

**AIRCRAFT CARRIERS** • **CV** 1

1 *Liaoning* with 4 18-cell GMLS with HQ-10 SAM, 2 RBU 6000 *Smerch* 2 A/S mor, 3 Type 1130 CIWS (capacity 18-24 J-15 ac; 17 Ka-28/Ka-31/Z-8S/Z-8JH/Z-8AEW hel)

**DESTROYERS** 19

**DDGHM** 17:

2 *Hangzhou* (RUS *Sovremenny*) with 2 quad Inchr with 3M80/3M82 *Moskit* (SS-N-22A/B *Sunburn*) AShM, 2 3K90 *Uragan* (SA-N-7 *Gadfly*) SAM, 2 twin 533mm ASTT, 2 RBU 1000 *Smerch* 3 A/S mor, 2 CADS-N-1 *Kashtan* CIWS, 2 twin 130mm gun (capacity 1 Z-9C/Ka-28 *Helix* A hel)

2 *Hangzhou* (RUS *Sovremenny*) with 2 quad Inchr with 3M80/3M82 *Moskit* (SS-N-22A/B *Sunburn*) AShM, 2 *Yezh* (SA-N-12 *Grizzly*) SAM, 2 twin 533mm ASTT, 2 RBU 1000 *Smerch* 3 A/S mor, 4 AK630 CIWS, 1 twin 130mm gun (capacity 1 Z-9C/Ka-28 *Helix* A hel)

2 *Luyang* (Type-052B) with 4 quad Inchr with YJ-83 AShM, 2 single Inchr with *Yezh* (SA-N-12 *Grizzly*) SAM, 2 triple 324mm TT with Yu-7 LWT, 2 Type 730 CIWS, 1 100mm gun (capacity 1 Ka-28 *Helix* A hel)

6 *Luyang* II (Type-052C) with 2 quad Inchr with YJ-62 AShM, 8 sextuple VLS with HHQ-9 SAM, 2 triple 324mm TT with Yu-7 LWT, 2 Type 730 CIWS, 1 100mm gun (capacity 2 Ka-28 *Helix* A hel)

2 *Luyang* III (Type-052D) with 8 octuple VLS with YJ-18 (CSS-N-13) AShM/LACM; HHQ-9 SAM, 1 24-cell GMLS with HQ-10 SAM, 2 triple 324mm TT with Yu-7 LWT, 1 Type 730 CIWS, 1 130mm gun (capacity 2 Ka-28 *Helix* A hel)

1 *Luhai* (Type-051B) with 4 quad Inchr with YJ-83 AShM, 1 octuple Inchr with HQ-7 SAM, 2 triple 324mm ASTT with Yu-7 LWT, 1 twin 100mm gun (capacity 2 Z-9C/Ka-28 *Helix* A hel)

2 *Luhu* (Type-052) with 4 quad Inchr with YJ-83 AShM, 1 octuple Inchr with HQ-7 SAM, 2 triple 324mm ASTT with Yu-7 LWT, 2 FQF 2500, 2 Type 730 CIWS, 1 twin 100mm gun (capacity 2 Z-9C hel)

#### DDGM 2:

2 *Luzhou* (Type-051C) with 2 quad Inchr with YJ-83 AShM; 6 sextuple VLS with S-300FM (SA-N-20 *Grumble*) SAM, 2 Type 730 CIWS, 1 100mm gun, 1 hel landing platform

#### FRIGATES 54

##### FFGHM 32:

2 *Jiangkai* (Type-054) with 2 quad Inchr with YJ-83 AShM, 1 octuple Inchr with HQ-7 SAM, 2 triple 324mm TT with Yu-7 LWT, 2 RBU 1200 A/S mor, 4 AK630 CIWS, 1 100mm gun (capacity 1 Ka-28 *Helix* A/Z-9C hel)

20 *Jiangkai* II (Type-054A) with 2 quad Inchr with YJ-83 AShM, 1 32-cell VLS with HQ-16 SAM (reported), 2 triple 324mm TT with Yu-7 LWT, 2 RBU 1200 A/S mor, 2 Type 730 CIWS, 1 76mm gun (capacity 1 Ka-28 *Helix* A/Z-9C hel) (4 additional vessels launched)

10 *Jiangwei* II (Type-053H3) with 2 quad Inchr with YJ-83 AShM, 1 octuple Inchr with HQ-7 SAM, 2 RBU 1200 A/S mor, 1 twin 100mm gun (capacity 2 Z-9C hel)

##### FFGH 1:

1 *Jianghu* IV (Type-053H1Q – trg role) with 1 triple Inchr with HY-2 (CSS-N-2) AShM, 4 RBU 1200 A/S mor, 1 100mm gun (capacity 1 Z-9C hel)

##### FFGM 4:

2 *Luda* III (Type-051DT) with 4 quad Inchr with YJ-83 AShM, 1 octuple Inchr with HQ-7 SAM, 2 FQF 2500, 2 130mm gun, 3 twin 57mm gun

2 *Luda* III (Type-051G) with 4 quad Inchr with YJ-83 AShM, 1 octuple Inchr with HQ-7 SAM, 2 FQF 2500, 2 triple 324mm ASTT, 2 twin 100mm gun

##### FFG 17:

2 *Jianghu* I (Type-053H) with 2 triple Inchr with SY-1 (CSS-N-1) AShM, 4 RBU 1200 A/S mor, 2 100mm gun

6 *Jianghu* II (Type-053H1) with 2 triple Inchr with HY-2 (CSS-N-2) AShM, 2 RBU 1200 A/S mor, 1 twin 100mm gun (capacity 1 Z-9C hel)

1 *Jianghu* III (Type-053H2) with 2 quad Inchr with YJ-83 AShM, 2 RBU 1200, 2 twin 100mm gun

6 *Jianghu* V (Type-053H1G) with 2 quad Inchr with YJ-83 AShM, 2 RBU 1200, 2 twin 100mm gun

2 *Luda* II (Type-051) with 2 triple Inchr with HY-2 (CSS-N-2) AShM, 2 triple 324mm ASTT, 2 FQF 2500, 2 twin 130mm gun, (mine-laying capability)

#### PATROL AND COASTAL COMBATANTS 199+

##### CORVETTES • FSGM 22:

18 *Jiangdao* I (Type-056) with 2 twin Inchr with YJ-83 AShM, 1 8-cell GMLS with HQ-10 SAM, 2 triple ASTT, 1 76mm gun, 1 hel landing platform

4 *Jiangdao* II (Type-056A) with 2 twin Inchr with YJ-83 AShM, 1 8-cell GMLS with HQ-10 SAM, 2 triple ASTT, 1 76mm gun, 1 hel landing platform

PCFG 65+ *Houbei* (Type-022) with 2 quad Inchr with YJ-83 AShM

##### PCG 28

6 *Houjian* (Type-037/II) with 2 triple Inchr with YJ-8 (CSS-N-4) AShM

22 *Houxin* (Type-037/IG) with 2 twin Inchr with YJ-8 (CSS-N-4) AShM

##### PCC 50

2 *Haijiu* (Type-037/I) with 4 RBU 1200 A/S mor, 1 twin 57mm gun

30 *Hainan* (Type-037) with 4 RBU 1200 A/S mor, 2 twin 57mm gun

18 *Haiqing* (Type-037/IS) with 2 Type-87

PB 34+ *Haizui/Shanghai* III (Type-062/I)

#### MINE WARFARE 49

##### MINE COUNTERMEASURES 48

MCO 12: 4 *Wochi*; 6 *Wochi* mod; 2 *Wozang*

MSO 14 T-43

MSC 16 *Wosao*

MSD 6 *Wonang* (Type-529)

MINELAYERS • ML 1 *Wolei* with 1 twin 57mm gun

#### AMPHIBIOUS

##### PRINCIPAL AMPHIBIOUS SHIPS • LPD 3 *Yuzhao*

(Type-071) with 4 AK630 CIWS, 1 76mm gun (capacity 2 LCAC or 4 UCAC plus supporting vehicles; 500–800 troops; 2 hel)

##### LANDING SHIPS 47

###### LSM 31:

10 *Yubei* (Type-074A) (capacity 10 tanks or 150 troops)

1 *Yudeng* (Type-073) with 1 twin 57mm gun (capacity 6 tk; 180 troops)

10 *Yuhai* (Type-074) (capacity 2 tk; 250 troops)

10 *Yunshu* (Type-073A) (capacity 6 tk)

###### LST 16:

6 *Yuting* (capacity 10 tk; 250 troops; 2 hel)

10 *Yuting* II (capacity 4 LCVP; 10 tk; 250 troops)

##### LANDING CRAFT 73

LCU 56 *Yunnan*

LCAC 5: 3 *Yuyi*; 2 *Zubr*

UCAC 12

#### LOGISTICS AND SUPPORT 171

ABU 4 *Yannan*

AG 3: 1 *Darong*; 1 *Kandao*; 1 *Kanwu*

AGE 3 *Kancha*

AGI 5: 1 *Dadie*; 1 Type-815; 3 Type-815A

AGM 3 *Yuan Wang* (space and missile tracking)

AGOR 4: 2 *Dahua*; 2 *Shupang*

AGS 8: 2 *Kanyang*; 2 *Yanjui*; 4 *Yanlai*

AGT 11: 2 *Dachou*; 9 *Damen*

AH 8: 5 *Ankang*; 1 *Anwei*; 2 *Qiongsha* (hospital conversion)

AK 10: 1 *Danyao*; 2 *Dayun*; 6 *Hongqi*; 1 *Yudao*

AKR 1

**AORH** 7: 2 *Fuchi* (Type-903); 2 *Fuchi* mod (Type-903A); 2 *Fuqing*; 1 *Fusu*  
**AOT** 32: 4 *Fubai*; 6 *Fuchang*; 13 *Fujian*; 8 *Fulin*; 1 *Shengli*  
**ARC** 6 *Youdian*  
**ARS** 5: 1 *Dadao*; 1 *Dadong*; 3 *Dasan*  
**AS** 6: 4 *Dalang*; 2 *Dazhou*  
**ASR** 6: 3 *Dalao*; 3 *Dajiang* (capacity 2 Z-8)  
**ATF** 26: 10 *Hujiu*; 13 *Roslavl*; 3 *Tuqiang*  
**AWT** 14: 3 *Fujian*; 4 *Fulin*; 3 *Fushi*; 3 *Guangzhou*; 1 *Jinyou*  
**AX** 3: 1 *Daxin*; 1 *Shichang*; 1 *Xuxiake*  
**YDG** 6: 1 *Dazar*; 5 *Yanci*  
**MSL** • **AShM** 72 YJ-62 (coastal defence) (3 regt)

## Naval Aviation 26,000

### FORCES BY ROLE

#### BOMBER

1 regt with H-6DU/G  
 1 regt with H-6G

#### FIGHTER

1 regt with J-8F  
 1 regt with J-15

#### FIGHTER/GROUND ATTACK

1 regt with J-10A/S  
 3 regt with J-11B/BS  
 1 regt with Su-30MK2

#### ATTACK

2 regt with JH-7  
 3 regt with JH-7A

#### ELINT/ISR/AEW

1 regt with Y-8J/JB/W/X; Y-9JB

#### TRANSPORT

1 regt with Y-7; Y-7H; Y-8  
 1 regt with Y-7; Y-8; Z-8; Z-9

#### TRAINING

1 regt with CJ-6A  
 2 regt with HY-7  
 1 regt with JL-8  
 1 regt with JL-9  
 1 regt with Mi-8 *Hip*; Z-9C  
 1 regt with Y-5

#### HELICOPTER

1 regt with Mi-8; Ka-28; Ka-31  
 1 regt with SH-5; AS365; Ka-28; Z-9; Z-8A/JH/S

### EQUIPMENT BY TYPE

#### AIRCRAFT 346 combat capable

**BBR** 30 H-6G  
**FTR** 24 J-8F *Finback*  
**FGA** 254: 120 JH-7/JH-7A; 16 J-10A; 8 J-10S; 72 J-11B/BS; 14 J-15; 24 Su-30MK2 *Flanker*  
**ASW** 3 SH-5  
**ELINT** 7: 4 Y-8JB *High New 2*; 3 Y-8X  
**AEW&C** 14: 4 Y-8J; 6 Y-8W *High New 5*; 4 Y-9JB  
**ISR** 7 HZ-5  
**TKR** 3 H-6DU  
**TPT** 66: **Medium** 4 Y-8; **Light** 62: 50 Y-5; 4 Y-7; 6 Y-7H; 2 Yak-42  
**TRG** 106+: 38 CJ-6; 5 HJ-5\*; 21 HY-7; 14 JJ-6\*; 4 JJ-7\*; 12 JL-8\*; 12+ JL-9

#### HELICOPTERS

**ASW** 44: 19 Ka-28 *Helix A*; 25 Z-9C  
**AEW** 10+: 9 Ka-31; 1+ Z-8 AEW

**SAR** 6: 4 Z-8JH; 2 Z-8S

**TPT** 43: **Heavy** 35: 15 SA321 *Super Frelon*; 20 Z-8/Z-8A; **Medium** 8 Mi-8 *Hip*

**UAV** • **ISR Heavy** BZK-005; **Medium** BZK-007

#### MSL

**AAM** • **IR** PL-5; PL-8; PL-9; R-73 (AA-11 *Archer*); **IR/SARH** R-27 (AA-10 *Alamo*); **SARH** PL-11; **ARH** R-77 (AA-12 *Adder*); PL-12

**ASM** Kh-31A (AS-17B *Krypton*); KD-88

**AShM** YJ-12 (entering service); YJ-61; YJ-8K; YJ-83K

**ARM** YJ-91

#### BOMBS

**Laser-guided**: LS-500J

**TV-guided**: KAB-500KR; KAB-1500KR

## Marines €10,000

### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

2 mne bde (1 spec ops bn, 1 SF amph recce bn, 1 recce bn, 1 tk bn, 2 mech inf bn, 1 arty bn, 1 AT/AD bn, 1 engr bn, 1 sigs bn)

### EQUIPMENT BY TYPE

**LT TK** 73 Type-05 AAV (ZTD-05)

**AIFV** 152 Type-05 AAV (ZBD-05)

**ARTY** 40+

**SP 122mm** 40+: 20+ Type-07; 20+ Type-89

**MRL 107mm** Type-63

**MOR 82mm**

#### AT

**MSL** • **MANPATS** HJ-73; HJ-8

**RCL 120mm** Type-98

**AD** • **SAM** • **MANPAD** HN-5

## Air Force 398,000

The PLAAF organises its command through seven military-region air forces (MRAF) – Shenyang, Beijing, Lanzhou, Jinan, Nanjing, Guangzhou and Chengdu – five corps deputy leader-grade command posts (Datong, Kunming, Wuhan, Xian and Fuzhou); four corps deputy leader-grade bases (Nanning, Urumqi, Shanghai and Dalian); and four division leader-grade command posts (Lhasa, Hetian, Zhangzhou and Changchun). Each MRAF, CP and base is responsible for all subordinate combat organisations (aviation, SAM, AAA and radar) in its area of operations. The regiments of four air divisions have been reorganised into new brigades, and MRAF training formations have been consolidated into three new flying academies.

**Flying hours** Ftr, ground attack and bbr pilots average 100–150 hrs/yr. Tpt pilots average 200+ per year. Each regt has two quotas to meet during the year – a total number of hours, and the percentage of flight time dedicated to tactics trg.

### FORCES BY ROLE

#### BOMBER

1 regt with H-6M  
 2 regt with H-6H  
 3 regt with H-6K

**FIGHTER**

6 regt with J-7 *Fishbed*  
 5 regt with J-7E *Fishbed*  
 4 regt with J-7G *Fishbed*  
 1 regt with J-8B *Finback*  
 1 regt with J-8F *Finback*  
 2 regt with J-8H *Finback*  
 1 regt with Su-27SK/UBK *Flanker*  
 6 regt with J-11/Su-27UBK *Flanker*  
 2 regt with J-11B/BS  
 2 bde with J-7G *Fishbed*; J-10A/S *Firebird*

**FIGHTER/GROUND ATTACK**

2 regt with Su-30MKK *Flanker*  
 7 regt with J-10/J-10A/J-10S *Firebird*  
 1 regt with J-10B/S *Firebird*  
 1 regt (forming) with J-10B/S *Firebird*  
 2 bde with J-7E *Fishbed*; J-11B/BS; Q-5D/E *Fantan*  
 2 bde with J-8H *Finback*; J-11B/BS; JH-7A

**FIGHTER/GROUND ATTACK/ISR**

2 bde with J-7E *Fishbed*; J-8H *Finback*; JZ-8F *Finback\** Su-30MKK

**GROUND ATTACK**

4 regt with JH-7A  
 4 regt with Q-5C/D/E *Fantan*

**ELECTRONIC WARFARE**

1 regt with Y-8CB/G/XZ  
 1 regt with Y-8/Y-8CB/Y-8G

**ISR**

1 regt with JZ-8F *Finback\**  
 1 regt with Y-8H1

**AIRBORNE EARLY WARNING & CONTROL**

1 regt with KJ-200; KJ-500; KJ-2000; Y-8T

**COMBAT SEARCH & RESCUE**

1 regt with Mi-171; Z-8

**TANKER**

1 regt with H-6U

**TRANSPORT**

1 (VIP) regt with B-737; CRJ-200/700  
 1 (VIP) regt with B-737; Tu-154M; Tu-154M/D  
 1 regt with Il-76MD/TD *Candid*  
 1 regt with Il-76MD *Candid*; Il-78 *Midas*  
 1 regt with Mi-17V-5; Y-7  
 1 regt with Y-5/Y-7/Z-9  
 1 regt with Y-5/Y-7  
 3 regt with Y-7  
 1 regt with Y-8  
 1 regt with Y-8; Y-9

**TRAINING**

2 regt with J-7; JJ-7  
 5 bde with CJ-6/6A/6B; JL-8\*; Y-5; Y-7; Z-9

**TRANSPORT HELICOPTER**

1 regt with AS332 *Super Puma*; H225 (VIP)

**ISR UAV**

1 regt with *Gongji-1*

**AIR DEFENCE**

3 SAM div  
 2 mixed SAM/ADA div  
 9 SAM bde  
 2 mixed SAM/ADA bde  
 2 ADA bde  
 9 indep SAM regt

1 indep ADA regt

4 indep SAM bn

**EQUIPMENT BY TYPE****AIRCRAFT** 2,306 combat capable

**BBR** 120: ε70 H-6H/M; ε50 H-6K

**FTR** 842: 216 J-7 *Fishbed*; 192 J-7E *Fishbed*; 120 J-7G *Fishbed*; 24 J-8B *Finback*; 24 J-8F *Finback*; 96 J-8H *Finback*; 95 J-11; 43 Su-27SK *Flanker*; 32 Su-27UBK *Flanker*

**FGA** 626: 78 J-10; 144 J-10A; 53 J-10B; 48 J-10S; 110 J-11B/BS; 120 JH-7A; 73 Su-30MKK *Flanker*

**ATK** 120 Q-5C/D/E *Fantan*

**EW** 13: 4 Y-8CB *High New 1*; 7 Y-8G *High New 3*; 2 Y-8XZ *High New 7*

**ELINT** 4 Tu-154M/D *Careless*

**ISR** 51: 24 JZ-8 *Finback\**; 24 JZ-8F *Finback\**; 3 Y-8H1

**AEW&C** 10: 4 KJ-200; 2 KJ-500; 4 KJ-2000

**C2** 5: 2 B-737; 3 Y-8T *High New 4*

**TKR** 11: 10 H-6U; 1 Il-78 *Midas*

**TPT** 325+ **Heavy** 16+ Il-76MD/TD *Candid*; **Medium** 43+: 40 Y-8; 3+ Y-9; **Light** 239: 170 Y-5; 41 Y-7/Y-7H; 20 Y-11; 8 Y-12 **PAX** 27: 9 B-737 (VIP); 5 CRJ-200; 5 CRJ-700; 8 Tu-154M *Careless*

**TRG** 950+: 400 CJ-6/6A/6B; 200 JJ-7\*; 350 JL-8\*; some JL-9

**HELICOPTERS**

**MRH** 22: 20 Z-9; 2 Mi-17V-5 *Hip H*

**TPT** 31+: **Heavy** 18+ Z-8 (SA321) **Medium** 13+: 6+ AS332 *Super Puma* (VIP); 3 H225 (VIP); 4+ Mi-171

**UAV** • **ISR** • **Heavy** CH-1 *Chang Hong*; *Chang Kong* 1; 4+ *Gongji-1*; **Light** *Harpy*

**AD**

**SAM** 600+

**SP** 300+: 24 HD-6D; 60+ HQ-7; 32+ HQ-9; 24 HQ-12 (KS-1A); 32 S-300PMU (SA-20 *Gargoyle*); 64 S-300PMU1 (SA-20 *Gargoyle*); 64 S-300PMU2 (SA-20 *Gargoyle*)

**TOWED** 300+ HQ-2 (SA-2) *Guideline*/HQ-2A/HQ-2B(A)

**GUNS** 16,000 100mm/85mm

**MSL**

**AAM** • **IR** PL-2B†; PL-5B/C; PL-8; R-73 (AA-11 *Archer*); **IIR** PL-10 (entering service in small numbers); **IR/SARH** R-27 (AA-10 *Alamo*); **SARH** PL-11; **ARH** PL-12; R-77 (AA-12 *Adder*)

**ASM** KD-88; Kh-29 (AS-14 *Kedge*); Kh-31A/P (AS-17 *Krypton*); Kh-59 (AS-18 *Kazoo*); YJ-91 (Domestically produced Kh-31P variant)

**LACM Strategic** CJ-20; **Tactical** YJ(KD)-63

**BOMBS**

**Laser-guided**: KD-9; KD-10; LS-500J; LT-2

**TV-guided**: KAB-500KR; KAB-1500KR

**15th Airborne Corps****FORCES BY ROLE****SPECIAL FORCES**

1 SF unit

**MANOEUVRE****Reconnaissance**

1 recce regt

**Air Manoeuvre**

2 AB div (2 AB regt; 1 arty regt)

1 AB div (1 AB regt; 1 arty regt)

**Aviation**

1 hel regt

**COMBAT SUPPORT**

1 sigs gp

**COMBAT SERVICE SUPPORT**

1 log gp

**TRANSPORT**

1 regt with Y-7; Y-8

**EQUIPMENT BY TYPE**

AIFV 180 Type-03 (ZBD-03)

APC (T) 4 Type-03 (ZZZ-03)

ARTY 162+

TOWED • 122mm ε54 Type-96 (D-30)

MRL • TOWED • 107mm ε54 Type-63

MOR • 82mm some 100mm 54

AT • SP some HJ-9 *Red Arrow* 9**AD**

SAM • MANPAD QW-1

GUNS • TOWED 25mm 54 Type-87

AIRCRAFT • TPT • Light 8: 2 Y-7; 6 Y-8

**HELICOPTERS**

CSAR 8 Z-8KA

MRH 12 Z-9WZ

**Military Regions**

This represents the geographical disposition of the PLA's group armies, fleets and air divisions within China, as opposed to a joint-service command structure. Designated Rapid Reaction Units (RRU) are indicated.

**Shenyang MR (North East)****Land Forces**

(Heilongjiang, Jilin, Liaoning MD)

**16th Group Army**

(1 SF bde, 1 armd bde, 3 mech inf bde, 1 mot inf div, 1 mot inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**39th Group Army**

(1 SF gp, 1 armd bde, 1 mech inf div, 2 mech inf bde, 2 mot inf bde; 1 avn bde, 1 arty bde, 1 AD bde, 1 engr regt, 1 EW regt)

**40th Group Army**

(1 armd bde, 1 mech inf bde, 2 mot inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**North Sea Fleet Naval Aviation****5th Naval Air Division**

(1 FGA regt with JH-7A)

**Other Forces**

(1 ftr regt with J-15; 1 trg regt with CJ-6A; 1 trg regt with HY-7; 1 trg regt with Y-5)

**Shenyang MRAF****1st Fighter Division**

(1 ftr regt with J-11B; 1 FGA regt with J-10/J-10A/J-10S; 1 ftr regt with J-8F)

**11th Attack Division**

(1 atk regt with JH-7A; 1 atk regt with Q-5)

**16th Special Mission Division**

(1 EW regt with Y-8/Y-8CB/Y-8G; 1 ISR regt with JZ-8F; 1 tpt regt with Y-5/Y-7)

**21st Fighter Division**

(1 ftr regt (forming) with J-10B/S; 1 ftr regt with J-8H; 1 ftr regt with J-7H)

**Dalian Base**

(2 FGA bde with J-7E; J-11B; Q-5)

**Harbin Flying Academy**

(2 trg bde with CJ-6; JL-8; Y-5; Y-7)

**Other Forces**

(1 (mixed) SAM/ADA bde; 1 SAM bde)

**Beijing MR (North)****Land Forces**

(Beijing, Tianjin Garrison, Inner Mongolia, Hebei, Shanxi MD)

**27th Group Army**

(1 armd bde, 2 mech inf bde, 2 mot inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**38th Group Army**

(1 SF bde, 1 armd div, 2 mech inf div, 1 avn bde, 1 arty bde, 1 AD bde, 1 engr regt)

**65th Group Army**

(1 armd bde, 2 mech inf bde, 2 mot inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**Other Forces**

(1 (OPFOR) mech inf bde; 2 (Beijing) gd div; 1 avn bde)

**North Sea Fleet Naval Aviation****2nd Naval Air Division**

(1 tpt regt with Y-7/Y-8)

**Other Forces**

(1 trg regt with JL-9; 1 trg regt with HY-7; 1 trg regt with JL-8; 1 trg regt with Mi-8; Z-9)

**Beijing MRAF****7th Fighter Division**

(1 ftr regt with J-11; 2 ftr regt with J-7)

**15th Fighter/Attack Division**

(1 FGA regt with J-10A/S; 1 ftr regt with J-7G)

**24th Fighter Division**

(1 ftr regt with J-7G; 1 FGA regt with J-10/J-10A/J-10S)

**Shijiazhuang Flying Academy**

(1 trg bde with CJ-6; JL-8; Y-5; Y-7)

**Other Forces**

(1 Flight Test Centre; 3 SAM div; 1 (mixed) SAM/ADA div)

**Other Forces****34th VIP Transport Division**

(1 tpt regt with B-737; CRJ200/700; 1 tpt regt with B-737; Tu-154M; Tu-154M/D; 1 tpt regt with Y-7; 1 hel regt with AS332; H225)

**Lanzhou MR (West)****Land Forces**

(Ningxia, Shaanxi, Gansu, Qing-hai, Xinjiang, South Xinjiang MD)

**21st Group Army**

(1 SF bde, 1 armd bde, 1 mech inf bde, 1 mot inf div (RRU), 1 arty bde, 1 AD bde, 1 engr regt, 1 EW regt)



**47th Group Army**

(1 armd bde, 1 mech inf bde, 2 (high alt) mot inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**Xinjiang MD**

(1 SF bde, 1 (high alt) mech div, 3 (high alt) mot div, 1 avn bde, 1 arty bde, 1 AD bde, 1 engr regt, 1 EW regt)

**Lanzhou MRAF****6th Fighter Division**

(1 ftr regt with J-11; 1 ftr regt with J-7E; 1 ftr regt with J-7)

**36th Bomber Division**

(1 surv regt with Y-8H1; 1 bbr regt with H-6M; 1 bbr regt with H-6H/M)

**Urumqi Base**

(2 FGA bde with J-8H; J-11B; JH-7A)

**Xi'an Flying Academy**

(2 trg bde with CJ-6; JL-8; Y-7; Z-9)

**Other Forces**

(1 (mixed) SAM/ADA div; 1 SAM bde; 4 indep SAM regt)

**Jinan MR (Centre)****Land Forces**

(Shandong, Henan MD)

**20th Group Army**

(1 armd bde, 2 mech inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**26th Group Army**

(1 SF bde, 1 armd bde, 1 mech inf bde, 3 mot inf bde, 1 avn regt, 1 arty bde, 1 AD bde, 1 engr regt, 1 EW regt)

**54th Group Army**

(1 SF bde, 1 armd bde, 2 mech inf div (RRU), 1 mech bde, 1 avn regt, 1 arty bde, 1 AD bde, 1 engr regt)

**North Sea Fleet**

Coastal defence from the DPRK border (Yalu River) to south of Lianyungang (approx 35°10'N); equates to Shenyang, Beijing and Jinan MR, and to seaward; HQ at Qingdao; support bases at Lushun, Qingdao. 9 coastal-defence districts

3 SSN; 19 SSK; 1 CV; 2 DDGHM; 2 DDGM; 10 FFGHM; 2 FFGM; 1 FFGH; 3 FFG; 7 FSGM; ε18 PCFG/PCG; 9 LS; 1 ML; ε9 MCMV

**North Sea Fleet Naval Aviation****2nd Naval Air Division**

(1 EW/ISR/AEW regt with Y-8J/JB/W/X; Y-9JB; 1 MP/hel regt with SH-5; AS365; Ka-28; SA321; Z-8; Z-9)

**5th Naval Air Division**

(1 FGA regt with JH-7A; 1 ftr regt with J-8F)

**Jinan MRAF****5th Attack Division**

(2 atk regt with Q-5E; 1 atk regt with JH-7A)

**12th Fighter Division**

(1 ftr regt with J-10A/S; 1 ftr regt with J-8B; 1 ftr regt with J-7G)

**19th Fighter Division**

(1 ftr regt with Su-27SK; 1 ftr regt with J-7; 1 trg regt with J-7/JJ-7)

**32nd Fighter Division**

(1 ftr regt with J-11B; 1 tpt regt with Y-5/Y-7/Z-9; 1 trg regt with J-7/JJ-7)

**Other Forces**

(1 Flight Instructor Training Base with CJ-6; JL-8; 4 SAM bn)

**Nanjing MR (East)****Land Forces**

(Shanghai Garrison, Jiangsu, Zhejiang, Fujian, Jiangxi, Anhui MD)

**1st Group Army**

(1 armd bde, 1 amph mech div, 1 mech inf bde, 1 mot inf bde, 1 avn bde, 1 arty bde, 1 MRL bde, 1 AD bde, 1 engr regt, 1 EW regt)

**12th Group Army**

(1 SF bde, 1 armd bde, 2 mech inf bde, 1 mot inf bde, 1 arty bde, 1 AD bde, 1 engr regt)

**31st Group Army**

(1 SF bde, 1 (amph) armd bde, 2 mot inf div (incl 1 RRU), 1 mot inf bde, 1 avn regt, 1 arty bde, 1 AD bde, 1 engr regt, 1 EW regt)

**East Sea Fleet**

Coastal defence from south of Lianyungang to Dongshan (approx 35°10'N to 23°30'N); equates to Nanjing Military Region, and to seaward; HQ at Ningbo; support bases at Fujian, Zhoushan, Ningbo. 7 coastal defence districts

16 SSK; 8 DDGHM; 14 FFGHM; 4 FFG; 5 FSGM; ε34 PCFG/PCG; ε18 LS; ε18 MCMV

**East Sea Fleet Naval Aviation****4th Naval Aviation Division**

(1 FGA regt with Su-30MK2; 1 hel regt with Mi-8; Ka-28; Ka-31; 1 FGA regt with J-10A)

**6th Naval Aviation Division**

(2 FGA regt with JH-7; 1 bbr regt with H-6G)

**Nanjing MRAF****3rd Fighter Division**

(1 ftr regt with J-7G; 1 FGA regt with J-10/J-10A/J-10S; 1 FGA regt with Su-30MKK)

**10th Bomber Division**

(1 bbr regt with H-6H; 1 bbr regt with H-6K)

**14th Fighter Division**

(2 ftr regt with J-11; 1 ftr regt with J-7E)

**26th Special Mission Division**

(1 AEW&C regt with KJ-200; KJ-500; KJ-2000/Y-8T; 1 CSAR regt with M-171; Z-8)

**28th Attack Division**

(2 atk regt with JH-7A; 1 atk regt with Q-5D/E)

**Shanghai Base**

(2 FGA/ISR bde with J-7E; J-8H; JZ-8F; Su-30MKK)

**Other Forces**

(3 SAM bde; 1 ADA bde; 2 indep SAM regt)

**Guangzhou MR (South)****Land Forces**

(Hubei, Hunan, Guangdong, Guangxi, Hainan MD)

**41st Group Army**

(1 armd bde, 1 mech inf div (RRU), 1 mech inf bde, 1 mtn inf bde, 1 avn regt, 1 arty bde, 1 AD bde, 1 engr regt)

**42nd Group Army**

(1 SF bde, 1 armd bde, 1 amph mech div (RRU), 2 mot inf bde, 1 avn bde, 1 arty bde, 1 MRL bde, 1 AD bde, 1 engr regt, 1 EW regt)

**Other Forces**

(1 mot inf bde; 1 (composite) mot inf bde (composed of units drawn from across the PLA and deployed to Hong Kong on a rotational basis); 1 hel sqn (Hong Kong), 1 AD bn (Hong Kong))

**South Sea Fleet**

Coastal defence from Dongshan (approx 23°30'N) to VNM border; equates to Guangzhou MR, and to seaward (including Paracel and Spratly Islands); HQ at Zuanjiang; support bases at Yulin, Guangzhou 4 SSBN; 2 SSN; 16 SSK; 7 DDGHM; 8 FFGHM; 12 FFG; 11 FSGM; 40 PCFG/PCG; 3 LPD; 23 LS; 9 MCMV

**South Sea Fleet Naval Aviation****8th Naval Aviation Division**

(2 FGA regt with J-11B; 1 bbr regt with H-6G)

**9th Naval Aviation Division**

(1 FGA regt with J-11B, 1 FGA regt with JH-7A; 1 tpt regt with Y-7; Y-8; Z-8; Z-8JH/S; Z-9)

**Guangzhou MRAF****2nd Fighter Division**

(1 ftr regt with J-8H; 1 FGA regt with J-10B/S; 1 ftr regt with J-11)

**8th Bomber Division**

(1 tkr regt with H-6U; 2 bbr regt with H-6K)

**9th Fighter Division**

(1 FGA regt with J-10A/S; 2 ftr regt with J-7E)

**13th Transport Division**

(1 tpt regt with Y-8; 1 tpt regt with Il-76MD/TD; 1 tpt regt with Il-76MD; Il-78)

**18th Fighter Division**

(1 ftr regt with J-7; 1 FGA regt with Su-30MKK)

**Nanning Base**

(2 ftr bde with J-7G; J-10A/S)

**Other Forces**

(4 SAM Bde, 1 ADA bde, 1 indep ADA regt)

**Other Forces****Marines**

(2 mne bde)

**15th Airborne Corps**

(3 AB div)

**Chengdu MR (South-West)****Land Forces**

(Chongqing Garrison, Sichuan, Guizhou, Yunnan, Tibet MD)

**13th Group Army**

(1 SF bde, 1 armd bde, 1 (high alt) mot inf div (RRU), 1 mot inf div, 1 avn bde, 1 arty bde, 1 AD bde, 1 engr regt, 1 EW regt)

**14th Group Army**

(1 armd bde, 2 mot inf bde, 2 mtn inf bde, 1 avn regt, 1 arty bde, 1 AD bde, 1 engr regt)

**Xizang Military District**

(1 SF gp; 1 (high alt) mech inf bde; 2 mtn inf bde; 1 arty regt, 1 AD bde, 1 engr bde, 1 EW regt)

**Chengdu MRAF****4th Transport Division**

(1 tpt regt with Y-8/Y-9; 1 tpt regt with Y-7; 1 tpt regt with Mi-17V-5/Y-7)

**20th Special Mission Division**

(1 tpt regt with Y-7; 1 EW regt with Y-8CB/G/XZ)

**33rd Fighter Division**

(1 ftr regt with J-7E; 1 ftr regt with J-11)

**44th Fighter Division**

(1 ftr regt with J-7; 1 FGA regt with J-10/J-10A/J-10S)

**Other Forces**

(1 (mixed) SAM/ADA bde; 3 indep SAM regt)

**Paramilitary 660,000+ active****People's Armed Police €660,000****Internal Security Forces €400,000****FORCES BY ROLE****MANOEUVRE****Other**

14 (mobile) paramilitary div

22 (mobile) indep paramilitary regt

Some (firefighting/garrison) unit

**Border Defence Force €260,000****FORCES BY ROLE****COMMAND**

30 div HQ

**MANOEUVRE****Other**

110 (border) paramilitary regt

20 (marine) paramilitary regt

**China Coast Guard**

In March 2013, four of China's maritime law-enforcement agencies were unified under the State Oceanic Administration and renamed the China Coast Guard

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS 326+**

PSOH 18

PSO 33+

PCO 53

PB/PBF 222+

**AMPHIBIOUS • LST 7: 3 *Yukan*; 4 *Yuting* II**

**LOGISTICS AND SUPPORT 16**

AGOR 13

AGS 1

ATF 2

**Maritime Safety Administration (MSA)**

Various tasks, including aid to navigation

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS 61+**

PSOH 2  
 PSO 3  
 PCO 10+  
 PCC 22+  
 PB 24+

#### LOGISTICS AND SUPPORT 31

ABU 16  
 AG 5  
 AGF 5  
 ATF 5

### Cyber

The PLA has devoted much attention to information warfare over the past decade, in terms of both battlefield EW and wider cyber-warfare capabilities. The main doctrine is the 'Integrated Network Electronic Warfare' (INEW) document, which guides PLA computer-network operations. PLA thinking appears to have moved beyond INEW, towards a new concept of 'information confrontation' (*xinxi duikang*), which aims to integrate both electronic and non-electronic aspects of information warfare within a single command authority. PLA thinking sees warfare under informationised conditions as characterised by opposing sides using complete systems of ground, naval, air, space and electromagnetic forces. Since 2008, major PLA military exercises, including *Kuayue 2009* and *Lianhe 2011*, have all had cyber and information-operations components that have been both offensive and defensive in nature. China's cyber assets fall under the command of two main departments of the General Staff Department. Computer-network attacks and EW would, in theory, come under the 4th Department (ECM), and computer-network defence and intelligence gathering come under the 3rd Department, or 3PLA (SIGINT). 3PLA is supported by a variety of 'militia units' comprising both military cyber-warfare personnel and civilian hackers. In a February 2013 report, US security company Mandiant described a secret Chinese military unit, 'Unit 61398', subordinate to 3PLA that had, Mandiant alleged, systematically exfiltrated substantial amounts of data from 141 companies since 2007, when its facility was built in Shanghai. A December 2013 Science of Military Strategy document explicitly referenced China's network-warfare forces, reportedly dividing them into three groups: 'specialized military network warfare forces'; 'PLA-authorized forces'; and 'non-governmental forces'.

### DEPLOYMENT

#### CÔTE D'IVOIRE

UN • UNOCI 6 obs

#### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 221; 5 obs; 1 engr coy; 1 fd hospital

#### GULF OF ADEN

2 FFGHM; 1 AORH

#### LEBANON

UN • UNIFIL 418; 1 engr coy; 1 fd hospital

#### LIBERIA

UN • UNMIL 514; 2 obs; 1 engr coy; 1 tpt coy; 1 fd hospital

#### MALI

UN • MINUSMA 402; 1 sy coy; 1 engr coy; 1 fd hospital

#### MIDDLE EAST

UN • UNTSO 3 obs

#### SOUTH SUDAN

UN • UNMISS 1,052; 3 obs; 1 inf bn; 1 engr coy; 1 fd hospital

#### SUDAN

UN • UNAMID 231; 1 engr coy

#### WESTERN SAHARA

UN • MINURSO 10 obs

### Fiji FJI

Fijian Dollar F\$		2014	2015	2016
GDP	F\$	8.1bn	8.71bn	
	US\$	4.29bn	4.53bn	
<i>per capita</i>	US\$	4,844	5,086	
Growth	%	5.3	4.3	
Inflation	%	0.5	2.8	
Def exp	F\$	89m		
	US\$	47m		
Def bdt	F\$	102m	105m	103m
	US\$	54m	55m	
US\$1=F\$		1.89	1.93	

Population 909,389

Ethnic groups: Fijian 51%; Indian 44%; European/Others 5%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.3%	4.3%	4.3%	4.1%	21.0%	2.8%
Female	13.7%	4.1%	4.1%	4.0%	20.1%	3.3%

### Capabilities

The role of Fiji's armed forces is to guarantee the security of the nation, though they have been involved in several coups since the 1980s, the most recent in 2007, and civil-military relations remain a concern. Though small, the armed forces have regularly taken part in international peacekeeping tasks. Defence relations with its traditional security partners – Australia, New Zealand and the US – were re-established at the end of 2014, after they were suspended in the wake of the 2007 coup. During this period, Fiji looked more to China and Russia, and the extent to which Fiji will revert – if at all – to the previous security relationship is unclear.

**ACTIVE 3,500 (Army 3,200 Navy 300)**

**RESERVE €6,000**

(to age 45)

## ORGANISATIONS BY SERVICE

### Army 3,200 (incl 300 recalled reserves)

#### FORCES BY ROLE SPECIAL FORCES

1 spec ops coy

#### MANOEUVRE

##### Light

3 inf bn

#### COMBAT SUPPORT

1 arty bty

1 engr bn

#### COMBAT SUPPORT

1 log bn

### Reserves 6,000

#### FORCES BY ROLE

#### MANOEUVRE

##### Light

3 inf bn

#### EQUIPMENT BY TYPE

##### ARTY 16

TOWED 85mm 4 25-pdr (ceremonial)

MOR 81mm 12

### Navy 300

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 5: 3 *Kula*  
(*AUS Pacific*); 2 *Levuka*

## DEPLOYMENT

#### EGYPT

MFO 338; 1 inf bn

#### IRAQ

UN • UNAMI 160; 2 sy unit

#### LEBANON

UN • UNIFIL 144; 1 inf coy

#### MIDDLE EAST

UN • UNTSO 2 obs

#### SOUTH SUDAN

UN • UNMISS 4; 2 obs

#### SYRIA/ISRAEL

UN • UNDOF 300; 1 inf coy; elm 1 log bn

## India IND

Indian Rupee Rs		2014	2015	2016
GDP	Rs	125tr	141tr	
	US\$	2.05tr	2.18tr	
<i>per capita</i>	US\$	1,608	1,688	
Growth	%	7.3	7.3	
Inflation	%	5.9	5.4	
Def bdgt [a]	Rs	2.77tr	3.1tr	
	US\$	45.3bn	48bn	

US\$1=Rs 61.14 64.66

[a] Includes defence civil estimates, which include military pensions

Population 1,251,695,584

Religious groups: Hindu 80%; Muslim 14%; Christian 2%; Sikh 2%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.9%	4.9%	4.7%	4.3%	20.3%	2.8%
Female	13.2%	4.3%	4.1%	3.9%	19.4%	3.1%

## Capabilities

India has the third-largest armed forces in the world by personnel strength, and is continuing a substantial drive to modernise its military capabilities. The armed forces are orientated against both Pakistan and China, and they also offer significant support to police and paramilitary forces in internal-security matters. They participate in numerous bilateral and multilateral exercises, and are one of the top troop contributors to UN peacekeeping operations. Ambitious and extensive development and procurement programmes across services are aimed at replacing ageing equipment, largely of Soviet and Russian origin, but many of these projects have experienced significant delays. India continues to modernise its strategic forces, particularly its delivery systems, evidenced by the ongoing SLBM programme. Current army requirements include air-defence systems, field artillery and AIFVs, while the air force is seeking a medium transport aircraft and has committed to the acquisition of A330 tanker aircraft. Cancellation of the Medium Multi-role Combat Aircraft requirement after the decision to purchase off-the-shelf French *Rafale* combat aircraft has increased uncertainty over the future of the fighter-aircraft fleet. The Indian government's 'Make in India' policy aims to strengthen the indigenous defence-industrial base through measures that include reforming India's foreign-direct-investment cap. However, industrial-capability limitations and bureaucratic obstacles have hampered a number of promising initiatives. (See pp. 227–29.)

**ACTIVE 1,346,000** (Army 1,150,900, Navy 58,350  
Air 127,200, Coast Guard 9,550) Paramilitary  
1,403,700

**RESERVE 1,155,000** (Army 960,000 Navy 55,000 Air  
140,000) Paramilitary 987,800

Army first-line reserves (300,000) within 5 years of full-time service, further 500,000 have commitment to the age of 50.

## ORGANISATIONS BY SERVICE

### Strategic Forces Command

Strategic Forces Command (SFC) is a tri-service command established in 2003. The commander-in-chief of SFC, a senior three-star military officer, manages and administers all strategic forces through separate army and air-force chains of command.

#### FORCES BY ROLE

##### MISSILE

- 1 gp with *Agni I*
- 1 gp with *Agni II*
- 1 gp (reported forming) with *Agni III*
- 2 gp with SS-150/250 *Prithvi I/II*

#### EQUIPMENT BY TYPE

##### MSL • STRATEGIC 54

- ICBM *Agni V* (in test)
  - IRBM *Agni III* (entering service); *Agni IV* (in test)
  - MRBM  $\epsilon$ 12 *Agni II*
  - SRBM 42:  $\epsilon$ 12 *Agni I*;  $\epsilon$ 30 SS-250 *Prithvi II*; some SS-350 *Dhanush* (naval testbed)
  - LACM *Nirbhay* (likely nuclear capable; in development)
- Some Indian Air Force assets (such as *Mirage 2000H* or Su-30MKI) may be tasked with a strategic role

### Space

#### EQUIPMENT BY TYPE

##### SATELLITES 6

- COMMUNICATIONS 3 GSAT
- ISR 3: 1 *Cartosat 2A*; 2 RISAT

### Army 1,150,900

6 Regional Comd HQ (Northern, Western, Central, Southern, Eastern, Southwestern), 1 Training Comd (ARTRAC)

#### FORCES BY ROLE

##### COMMAND

- 4 (strike) corps HQ
- 10 (holding) corps HQ

##### MISSILE

- 2 msl gp with *Agni I/II*
- 2 msl gp with SS-150/250 *Prithvi I/II*

##### SPECIAL FORCES

- 8 SF bn

##### MANOEUVRE

###### Armoured

- 3 armd div (2–3 armd bde, 1 arty bde (2 arty regt))
- 8 indep armd bde

###### Mechanised

- 6 (RAPID) mech inf div (1 armd bde, 2 mech inf bde, 1 arty bde)
- 2 indep mech bde

###### Light

- 15 inf div (2–5 inf bde, 1 arty bde)
- 1 inf div (forming)
- 7 indep inf bde

###### Air Manoeuvr

- 1 para bde

###### Mountain

- 12 mtn div (3–4 mtn inf bde, 3–4 art regt)
- 2 indep mtn bde

#### Aviation

- 14 hel sqn

#### COMBAT SUPPORT

- 3 arty div (2 arty bde (3 med art regt, 1 STA/MRL regt))
- 8 AD bde
- 3 SSM regt with PJ-10 *Brahmos*
- 4 engr bde

### Reserve Organisations

**Reserves** 300,000 reservists (first-line reserve within 5 years full time service); 500,000 reservists (commitment until age of 50) (total 800,000)

**Territorial Army** 160,000 reservists (only 40,000 regular establishment)

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

- 42 inf bn

##### COMBAT SUPPORT

- 6 (Railway) engr regt
- 2 engr regt
- 1 sigs regt

##### COMBAT SERVICE SUPPORT

- 6 ecological bn

#### EQUIPMENT BY TYPE

**MBT** 2,974+: 124 *Arjun*; 1,950 T-72M1; 900+ T-90S; ( $\epsilon$ 1,100 various models in store)

**RCCE** 110 BRDM-2 with 9K111 *Fagot* (AT-4 *Spigot*)/9K113 *Konkurs* (AT-5 *Spandrel*); *Ferret* (used for internal-security duties along with some indigenously built armd cars)

**AIFV** 1,455+: 350+ BMP-1; 980 *Sarath* (BMP-2); 125 BMP-2K

**APC** 336+

**APC (W)** 157+ OT-62/OT-64

**PPV** 179: 165 *Casspir*; 14+ *Yukthirath* MPV

**ARTY** 9,682+

**TOWED** 2,970+: **105mm** 1,350+: 600+ IFG Mk1/Mk2/Mk3 (being replaced); up to 700 LFG; 50 M-56; **122mm** 520 D-30; **130mm**  $\epsilon$ 600 M-46; (500 in store) **155mm** 500:  $\epsilon$ 300 FH-77B;  $\epsilon$ 200 M-46 (mod)

**MRL** 192: **122mm**  $\epsilon$ 150 BM-21/LRAR **214mm** 14 *Pinaka* (non operational) **300mm** 28 9A52 *Smerch*

**MOR** 6,520+

**SP 120mm** E1

**TOWED** 6,520+: **81mm** 5,000+ E1 **120mm**  $\epsilon$ 1,500 AM-50/E1 **160mm** 20 M-58 *Tampella*

#### AT • MSL

**SP** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*)

**MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*) (being phased out); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); *Milan 2*

**RCL** **84mm** *Carl Gustav*; **106mm** 3,000+ M40A1 (10 per inf bn)

#### HELICOPTERS

**MRH** 275+: 80 *Dhruv*; 12 *Lancer*; 3+ *Rudra*; 120 SA315B *Lama* (*Cheetah*); 60 SA316B *Alouette III* (*Chetak*)

**UAV • ISR • Medium** 26: 14 *Nishant*; 12 *Searcher* Mk I/II



**AD****SAM**

**SP 680+**: 180 2K12 *Kub* (SA-6 *Gainful*); 50+ 9K33 *Osa* (SA-8B *Gecko*); 200 9K31 *Strela-1* (SA-9 *Gaskin*); 250 9K35 *Strela-10* (SA-13 *Gopher*); *Akash*

**MANPAD** 9K32 *Strela-2* (SA-7 *Grail* – being phased out)†; 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*)

**GUNS** 2,395+

**SP 155+**: 23mm 75 ZSU-23-4; ZU-23-2 (truck-mounted); 30mm 20-80 2S6 *Tunguska*

**TOWED** 2,240+: 20mm Oerlikon (reported); 23mm 320 ZU-23-2; 40mm 1,920 L40/70

**RADAR • LAND** 38+: 14 AN/TPQ-37 *Firefinder*; BSR Mk.2; 24 *Cymbeline*; EL/M-2140; M113 A1GE *Green Archer* (mor); MUFAR; *Stentor*

**AMPHIBIOUS 2 LCVP****MSL**

**IRBM** some *Agni-III* (entering service)

**MRBM** ε12 *Agni-II*

**SRBM** 42: ε12 *Agni-I*; ε30 250 *Prithvi II*

**LACM** 15 PJ-10 *Brahmos*

**AEV** BMP-2; FV180

**ARV** T-54/T-55; VT-72B; WZT-2; WZT-3

**VLB** AM-50; BLG-60; BLG T-72; *Kartik*; MTU-20; MT-55; *Sarvatra*

**MW** 910 MCV-2

**Navy 58,350 (incl 7,000 Naval Avn and 1,200 Marines)**

Fleet HQ New Delhi. Commands located at Mumbai, Vishakhapatnam, Kochi & Port Blair

**EQUIPMENT BY TYPE****SUBMARINES • TACTICAL 14**

**SSN** 1 *Chakra* (ex-RUS *Nerpa*) with 4 single 533mm TT with 3M54 *Klub* (SS-N-27 *Sizzler*) ASHM; 3M14E *Klub* LACM; 4 single 650mm TT with T-65 HWT (RUS lease agreement)

**SSK** 13:

4 *Shishumar* (GER T-209/1500) with 8 single 533mm TT

2 *Sindhughosh* (FSU *Kilo*) with 6 single 533mm TT

7 *Sindhughosh* (FSU *Kilo*) with 6 single 533mm TT with 3M54 *Klub* (SS-N-27 *Sizzler*) ASHM

**PRINCIPAL SURFACE COMBATANTS 28****AIRCRAFT CARRIERS 2**

**CV** 1 *Vikramaditya* (ex-FSU *Kiev* mod) (capacity: 12 MiG-29K/KUB *Fulcrum* FGA ac; 6 Ka-28 *Helix A* ASW hel/Ka-31 *Helix B* AEW hel)

**CVS** 1 *Viraat* (ex-UK *Hermes*) with 2 octuple VLS with *Barak-1* SAM, 2 twin AK230 CIWS (capacity 30 *Sea Harrier* FRS 1 (*Sea Harrier* FRS MK51) FGA ac; 7 Ka-27 *Helix* ASW hel/*Sea King* Mk42B ASW hel) (planned to decommission 2016)

**DESTROYERS 13****DDGHM** 8:

3 *Delhi* with 4 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) ASHM, 2 single Inchr with 3K90 *Uragan* (SA-N-7 *Gadfly*) SAM, 4 octuple VLS with *Barak-1* SAM, 5 single 533mm ASTT, 2 RBU 6000

A/S mor; 2 AK630 CIWS, 1 100mm gun (capacity either 2 *Dhruv* hel/*Sea King* Mk42A ASW hel)

2 *Kolkata* with 2 octuple VLS with *Brahmos* ASHM; 4 octuple VLS fitted for *Barak-8* SAM; 2 twin 533mm TT with SET-65E HWT, 2 RBU 6000 *Smerch* 2 A/S mor, 4 AK630 CIWS, 1 76mm gun (capacity 2 *Dhruv/Sea King* Mk42B hel)

3 *Shivalik* with 1 octuple VLS with 3M54 *Klub* (SS-N-27 *Sizzler*) ASHM; *Brahmos* ASHM/LACM 4 octuple VLS with *Barak-1* SAM, 1 single Inchr with 3K90 *Uragan* (SA-N-7 *Gadfly*) SAM, 2 triple 324mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 AK630 CIWS, 1 76mm gun (capacity 1 *Sea King* Mk42B ASW hel)

**DDGM** 5:

2 *Rajput* (FSU *Kashin*) with 2 twin Inchr with P-15M *Termit* (SS-N-2C *Styx*) ASHM, 2 twin Inchr with M-1 *Volna* (SA-N-1 *Goa*) SAM, 5 single 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 AK630 CIWS, 1 76mm gun (capacity Ka-28 *Helix A* hel)

1 *Rajput* (FSU *Kashin*) with 2 twin Inchr with *Brahmos* ASHM, 2 single Inchr with P-15M *Termit* (SS-N-2C *Styx*) ASHM, 2 twin Inchr with M-1 *Volna* (SA-N-1 *Goa*) SAM, 5 single 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 4 AK630 CIWS, 1 76mm gun (capacity 1 Ka-28 *Helix A* hel)

2 *Rajput* (FSU *Kashin*) with 1 octuple VLS with *Brahmos* ASHM, 2 twin Inchr with P-15M *Termit* (SS-N-2C *Styx*) ASHM, 2 octuple VLS with *Barak* SAM. 1 twin Inchr with M-1 *Volna* (SA-N-1 *Goa*) SAM, 5 single 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 4 AK630 CIWS, 1 76mm gun (capacity 1 Ka-28 *Helix A* hel)

**FRIGATES 13****FFGHM** 12:

3 *Brahmaputra* with 4 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) ASHM, 3 octuple VLS with *Barak-1* SAM, 2 triple 324mm ASTT with A244 LWT, 4 AK630 CIWS, 1 76mm gun (capacity 2 SA316B *Alouette III* (*Chetak*)/*Sea King* Mk42 ASW hel)

3 *Godavari* with 4 single Inchr with P-15M *Termit* (SS-N-2D *Styx*) ASHM, 1 octuple VLS with *Barak-1* SAM, 2 triple 324mm ASTT with A244 LWT, 4 AK630 CIWS, 1 76mm gun (capacity 2 SA316B *Alouette III* (*Chetak*)/*Sea King* Mk42 ASW hel)

3 *Talwar I* with 1 octuple VLS with 3M54 *Klub* (SS-N-27 *Sizzler*) ASHM, 1 single Inchr with 3K90 *Uragan* (SA-N-7 *Gadfly*) SAM, 2 twin 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 *Kashtan* (CADS-N-1) CIWS, 1 100mm gun (capacity 1 *Dhruv/Ka-28 Helix A* ASW hel)

3 *Talwar II* with 1 octuple VLS with *Brahmos* ASHM/LACM, 1 single Inchr with 3K90 *Uragan* (SA-N-7 *Gadfly*) SAM, 2 twin 533mm ASTT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 AK630 CIWS, 1 100mm gun (capacity 1 *Dhruv/Ka-28 Helix A* ASW hel)

**FFH** 1:

1 *Kamorta* with 2 twin 533mm TT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 AK630 CIWS, 1 76mm gun (capacity 1 *Dhruv/Ka-28 Helix A* ASW hel)

**PATROL AND COASTAL COMBATANTS 109****CORVETTES 24****FSGM 20:**

- 4 *Khukri* with 2 twin Inchr with P-15M *Termit* (SS-N-2C *Styx*) ASHM, 2 twin Inchr (manual aiming) with 9K32M *Strela-2M* (SA-N-5 *Grail*) SAM, 2 AK630 CIWS, 1 76mm gun, 1 hel landing platform (for *Dhruv*/SA316 *Alouette III* (*Chetak*))
- 4 *Kora* with 4 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) ASHM, 1 quad Inchr (manual aiming) with 9K32M *Strela-2M* (SA-N-5 *Grail*) SAM, 2 AK630 CIWS, 1 76mm gun, 1 hel landing platform (for *Dhruv*/SA316 *Alouette III* (*Chetak*))
- 10 *Veer* (FSU *Tarantul*) with 4 single Inchr with P-15M *Termit* (SS-N-2D *Styx*) ASHM, 2 quad Inchr (manual aiming) with 9K32M *Strela-2M* (SA-N-5 *Grail*), 2 AK630 CIWS, 1 76mm gun
- 2 *Prabal* (mod *Veer*) each with 4 quad Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) ASHM, 1 quad Inchr (manual aiming) with 9K32M *Strela-2M* (SA-N-5 *Grail*) SAM, 2 AK630 CIWS, 1 76mm gun

**FSM 4:**

- 4 *Abhay* (FSU *Pauk II*) with 1 quad Inchr (manual aiming) with 9K32M *Strela-2M* (SA-N-5 *Grail*) SAM, 2 twin 533mm ASTT, 2 RBU 1200 A/S mor, 1 76mm gun

**PSOH 10:** 4 *Saryu* with 2 AK630 CIWS, 1 76mm gun (capacity 1 *Dhruv*); 6 *Sukanya* with 4 RBU 2500 A/S mor (capacity 1 SA316 *Alouette III* (*Chetak*))

**PCC 16:** 10 *Car Nicobar*; 6 *Trinkat* (SDB Mk5)

**PBF 59:** 23 Immediate Support Vessel; 15 *Plascoa 1300* (SPB); 5 *Super Dvora*; 16 *Solas Marine Interceptor* (additional vessels in build)

**MINE WARFARE • MINE COUNTERMEASURES 6**

**MSO 6** *Pondicherry* (FSU *Natya*) with 2 RBU 1200 A/S mor

**AMPHIBIOUS****PRINCIPAL AMPHIBIOUS VESSELS 1**

**LPD 1** *Jalashwa* (ex-US *Austin*) with 1 *Phalanx* CIWS, (capacity up to 6 med spt hel; either 9 LCM or 4 LCM and 2 LCAC; 4 LCVP; 930 troops)

**LANDING SHIPS 9**

**LSM 4** *Kumbhir* (FSU *Polnocny C*) (capacity 5 MBT or 5 APC; 160 troops)

**LST 5:**

2 *Magar* (capacity 15 MBT or 8 APC or 10 trucks; 500 troops)

3 *Magar mod* (capacity 11 MBT or 8 APC or 10 trucks; 500 troops)

**LANDING CRAFT 32**

**LCM 4** LCM-8 (for use in *Jalashwa*)

**LCU 8:** 2 LCU Mk4; 6 *Vasco de Gama* Mk2/3 LC (capacity 2 APC; 120 troops)

**LCVP 20** (for use in *Magar*)

**LOGISTICS AND SUPPORT 57**

**AGOR 1** *Sagardhwani* with 1 hel landing platform

**AGHS 8** *Sandhayak*

**AGS 2** *Makar*

**AH 1**

**AOL 7:** 6 *Poshak*; 1 *Ambika*

**AOR 1** *Jyoti* with 1 hel landing platform

**AORH 3:** 1 *Aditya* (mod *Deepak*); 2 *Deepak* with 4 AK630

CIWS

**AP 3** *Nicobar* with 1 hel landing platform

**ASR 1**

**ATF 1**

**AWT 2**

**AX 4:** 1 *Tir*; 3 *AXS*

**YDT 3**

**YTB 2**

**YTL/YTM 15**

**YPT 1**

**Naval Aviation 7,000**

Flying 125–150 hrs/year on *Sea Harrier* hours

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with MiG-29K/KUB *Fulcrum*

1 sqn with *Sea Harrier* FRS 1 (Mk51); *Sea Harrier* T-4N (T-60)

**ANTI-SUBMARINE WARFARE**

4 sqn with Ka-28 *Helix A*; SA316B *Alouette III* (*Chetak*); *Sea King* Mk42A/B

**MARITIME PATROL**

2 sqn with BN-2 *Islander*; Do-228-101; Il-38SD *May*; Tu-142M *Bear F*

1 sqn with P-8I *Neptune*

**AIRBORNE EARLY WARNING & CONTROL**

1 sqn with Ka-31 *Helix B*

**SEARCH & RESCUE**

1 sqn with SA316B *Alouette III* (*Chetak*); *Sea King* Mk42C

1 sqn with *Dhruv*

**TRANSPORT**

1 (comms) sqn with Do-228

1 sqn with HS-748M (HAL-748M)

**TRAINING**

1 sqn with HJT-16 *Kiran* MkI/II, *Hawk* Mk132

**TRANSPORT HELICOPTER**

1 sqn with UH-3H *Sea King*

**ISR UAV**

1 sqn with *Heron*; *Searcher* MkII

**EQUIPMENT BY TYPE**

**AIRCRAFT 71** combat capable

**FTR 33** MiG-29K/KUB *Fulcrum*

**FGA 10:** 8 *Sea Harrier* FRS 1 (Mk51); 2 *Sea Harrier* T-4N (T-60)

**ASW 17:** 5 Il-38SD *May*; 4 Tu-142M *Bear F*; 8 P-8I *Neptune*

**MP 13** Do-228-101

**TPT 37:** **Light 27:** 17 BN-2 *Islander*; 10 Do-228; **PAX 10** HS-748M (HAL-748M)

**TRG 16:** 6 HJT-16 *Kiran* MkI; 6 HJT-16 *Kiran* MkII; 11 *Hawk* Mk132\*

**HELICOPTERS**

**ASW 47:** 12 Ka-28 *Helix A*; 21 *Sea King* Mk42A; 14 *Sea King* Mk42B

**MRH 58:** 10 *Dhruv*; 25 SA316B *Alouette III* (*Chetak*); 23 SA319 *Alouette III*

**AEW 9** Ka-31 *Helix B*

**TPT • Medium** 11: 5 *Sea King* Mk42C; up to 6 UH-3H *Sea King*

**UAV • ISR** 11: **Heavy** 4 *Heron*; **Medium** 7 *Searcher* Mk II **MSL**

**AShM** AGM-84 *Harpoon* (on P-8I ac); Kh-35 (AS-20 *Kayak*; on *Bear* and *May* ac); *Sea Eagle* (service status unclear); *Sea Skua*

**ASCM** PJ-10 *Brahmos*

**AAM • IR** R-550 *Magic/Magic* 2; R-73 (AA-11 *Archer*)

**IR/SARH** R-27 (AA-10 *Alamo*); **ARH** *Derby*; R-77 (AA-12 *Adder*)

### Marines €1,200 (Additional 1,000 for SPB duties)

After the Mumbai attacks, the Sagar Prahari Bal (SPB), with 80 PBF, was established to protect critical maritime infrastructure.

#### FORCES BY ROLE

##### SPECIAL FORCES

1 (marine) cdo force

##### MANOEUVRE

###### Amphibious

1 amph bde

### Air Force 127,200

5 regional air comds: Western (New Delhi), Southwestern (Gandhinagar), Eastern (Shillong), Central (Allahabad), Southern (Trivandrum). 2 support comds: Maintenance (Nagpur) and Training (Bangalore)

Flying hours 180 hrs/year

#### FORCES BY ROLE

##### FIGHTER

3 sqn with MiG-29 *Fulcrum*; MiG-29UB *Fulcrum*

##### FIGHTER/GROUND ATTACK

4 sqn with *Jaguar* IB/IS

8 sqn with MiG-21bis/*Bison*

2 sqn with MiG-21M/MF *Fishbed*

5 sqn with MiG-27ML *Flogger*

3 sqn with *Mirage* 2000E/ED/I/IT (2000H/TH – secondary ECM role)

11 sqn with Su-30MKI *Flanker*

##### ANTI SURFACE WARFARE

1 sqn with *Jaguar* IM with *Sea Eagle* AShM

##### ISR

1 unit with Gulfstream IV SRA-4

##### AIRBORNE EARLY WARNING & CONTROL

1 sqn with Il-76TD *Phalcon*

##### TANKER

1 sqn with Il-78 *Midas*

##### TRANSPORT

1 sqn with C-130J-30 *Hercules*

1 sqn with C-17A *Globemaster* III

5 sqn with An-32/An-32RE *Cline*

1 (comms) sqn with B-737; B-737BBJ; EMB-135BJ

4 sqn with Do-228; HS-748

2 sqn with Il-76MD *Candid*

1 flt with HS-748

##### TRAINING

1 sqn with *Tejas*

Some units with An-32; Do-228; *Hawk* Mk 132\*; HJT-16 *Kiran* MkI/II; *Jaguar* IS/IM; MiG-21bis; MiG-21FL; MiG-21M/MF; MiG-27ML; PC-7 *Turbo Trainer* MkII; SA316B *Alouette* III (*Chetak*)

##### ATTACK HELICOPTER

2 sqn with Mi-25 *Hind*; Mi-35 *Hind*

##### TRANSPORT HELICOPTER

5 sqn with *Dhruv*

2 sqn with Mi-8 *Hip*

7 sqn with Mi-17/Mi-17-1V *Hip* H

11 sqn with Mi-17V-5 *Hip* H

2 sqn with SA316B *Alouette* III (*Chetak*)

1 flt with Mi-8 *Hip*

1 flt with Mi-26 *Halo*

2 flt with SA315B *Lama* (*Cheetah*)

2 flt with SA316B *Alouette* III (*Chetak*)

##### ISR UAV

5 sqn with *Heron*; *Searcher* MkII

##### AIR DEFENCE

25 sqn with S-125 *Pechora* (SA-3B *Goa*)

6 sqn with 9K33 *Osa-AK* (SA-8B *Gecko*)

2 sqn with *Akash*

10 flt with 9K38 *Igla-1* (SA-18 *Grouse*)

##### EQUIPMENT BY TYPE

**AIRCRAFT** 881 combat capable

**FTR** 62: 55 MiG-29 *Fulcrum* (incl 12+ MiG-29UPG); 7

MiG-29UB *Fulcrum*

**FGA** 729: 13 *Jaguar* IB; 80 *Jaguar* IS; 10 *Jaguar* IM; 31

MiG-21bis; 115 MiG-21 *Bison*; 40 MiG-21M/MF *Fishbed*;

40 MiG-21U/UM *Mongol*; 124 MiG-27ML *Flogger* J2; 40

*Mirage* 2000E/I (2000H); 10 *Mirage* 2000ED/IT (2000TH);

ε225 Su-30MKI *Flanker*; 1 *Tejas*

**ISR** 3 Gulfstream IV SRA-4

**AEW&C** 5: 2 EMB-145AEW (in test; 1 more on order); 3

Il-76TD *Phalcon*

**TKR** 6 Il-78 *Midas*

**TPT** 245: **Heavy** 34: 10 C-17A *Globemaster* III; 24 Il-76MD

*Candid*; **Medium** 5 C-130J-30 *Hercules*; **Light** 142: 68 An-

32; 35 An-32RE *Cline*; 35 Do-228; 4 EMB-135BJ; **PAX** 64:

1 B-707; 4 B-737; 3 B-737BBJ; 56 HS-748

**TRG** 340: 90 *Hawk* Mk132\*; 120 HJT-16 *Kiran* MkI; 55

HJT-16 *Kiran* MkII; 75 PC-7 *Turbo Trainer* MkII

##### HELICOPTERS

**ATK** 19 Mi-25/Mi-35 *Hind*

**MRH** 388: 60 *Dhruv*; 80 Mi-17/Mi-17-1V *Hip* H; 149

Mi-17V-5 *Hip* H; 59 SA315B *Lama* (*Cheetah*); 40 SA316B

*Alouette* III (*Chetak*)

**TPT** 34: **Heavy** 4 Mi-26 *Halo*; **Medium** 30 Mi-8

**UAV • ISR • Heavy** some *Heron* **Medium** some *Searcher* MkII

**AD • SAM** S-125 *Pechora* (SA-3B *Goa*)

**SP** 9K33 *Osa-AK* (SA-8B *Gecko*); *Akash*

**MANPAD** 9K38 *Igla-1* (SA-18 *Grouse*)

##### MSL

**AAM • IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*)

R-550 *Magic*; **IR/SARH** R-27 (AA-10 *Alamo*); **SARH**

Super 530D **ARH** R-77 (AA-12 *Adder*)

**AShM** AM-39 *Exocet*; *Sea Eagle*

**ASM** Kh-29 (AS-14 *Kedge*); Kh-59 (AS-13 *Kingbolt*); Kh-59M (AS-18 *Kazoo*); Kh-31A (AS-17B *Krypton*); AS-30; Kh-23 (AS-7 *Kerry*)†  
**ARM** Kh-25MP (AS-12 *Kegler*); Kh-31P (AS-17A *Krypton*)  
**LACM** *Nirbhay* (likely nuclear capable; in development)

## Coast Guard 9,550

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 98

**PSOH** 9: 2 *Sankalp* (additional vessels in build); 4 *Samar* with 1 76mm gun; 3 *Vishwast*

**PSO** 3 *Samudra* with 1 hel landing platform

**PCO** 5 *Vikram*

**PCC** 42: 15 *Aadesh*; 7 *Priyadarshini*; 8 *Rajshree*; 5 *Rani Abbakka*; 7 *Sarojini Naidu*

**PBF** 25: 13 *Interceptor*; 12 (various)

**PB** 14: 4 *Tara Bai*; 10 (various)

**AMPHIBIOUS • LCAC** 18 Griffon 8000TD

**AIRCRAFT • TPT • Light** 23 Do-228

**HELICOPTERS • MRH** 17 SA316B *Alouette III* (*Chetak*)

## Paramilitary 1,403,700

### Rashtriya Rifles 65,000

Ministry of Defence. 15 sector HQ

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

65 paramilitary bn

### Assam Rifles 63,900

Ministry of Home Affairs. Security within northeastern states, mainly army-officered; better trained than BSF

#### FORCES BY ROLE

Equipped to roughly same standard as an army inf bn

#### COMMAND

7 HQ

##### MANOEUVRE

###### Other

46 paramilitary bn

#### EQUIPMENT BY TYPE

**ARTY • MOR** 81mm 252

## Border Security Force 230,000

Ministry of Home Affairs

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

175 paramilitary bn

#### EQUIPMENT BY TYPE

Small arms, lt arty, some anti-tank weapons

**ARTY • MOR** 81mm 942+

**AIRCRAFT • TPT** some (air spt)

**HELICOPTERS • MRH** 2 Mi-17V-5 *Hip*

## Central Industrial Security Force 134,100 (lightly armed security guards)

Ministry of Home Affairs. Guards public-sector locations

## Central Reserve Police Force 229,700

Ministry of Home Affairs. Internal-security duties, only lightly armed, deployable throughout the country

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

198 paramilitary bn

10 (rapid action force) paramilitary bn

10 (CoBRA) paramilitary bn

4 (Mahila) paramilitary bn (female)

## Defence Security Corps 31,000

Provides security at Defence Ministry sites

## Indo-Tibetan Border Police 36,300

Ministry of Home Affairs. Tibetan border security SF/ guerrilla-warfare and high-altitude-warfare specialists

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

49 paramilitary bn

## National Security Guards 7,350

Anti-terrorism contingency deployment force, comprising elements of the armed forces, CRPF and Border Security Force

## Railway Protection Forces 70,000

## Sashastra Seema Bal 73,350

Guards the borders with Nepal and Bhutan

## Special Frontier Force 10,000

Mainly ethnic Tibetans

## Special Protection Group 3,000

Protection of ministers and senior officials

## State Armed Police 450,000

For duty primarily in home state only, but can be moved to other states. Some bn with GPMG and army-standard infantry weapons and equipment

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

24 (India Reserve Police) paramilitary bn (cdo trained)

## Reserve Organisations

### Civil Defence 500,000 reservists

Operate in 225 categorised towns in 32 states. Some units for NBC defence

### Home Guard 487,800 reservists (515,000 authorised str)

In all states except Arunachal Pradesh and Kerala; men on reserve lists, no trg. Not armed in peacetime. Used for civil defence, rescue and firefighting provision in wartime; 6 bn (created to protect tea plantations in Assam).



## Cyber

National agencies include the Computer Emergency Response Team (CERT-In), which has authorised designated individuals to carry out penetration tests against infrastructure. The Defence Information Assurance and Research Agency (DIARA) is mandated to deal with cyber-security-related issues for the armed services. All services have their own cyber-security policies and CERT teams, and headquarters maintain information-security policies. The Indian Army raised in 2005 the Army Cyber Security Establishment and set up in April 2010 the Cyber Security Laboratory at the Military College of Telecommunication Engineering (under the Corps of Signals). In 2005 there was further reporting that India was considering setting up a Cyber Command.

## DEPLOYMENT

### AFGHANISTAN

300 (Indo-Tibetan Border Police paramilitary: facilities protection)

### CÔTE D'IVOIRE

UN • UNOCI 9 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 3,351; 30 obs; 3 mech inf bn; 1 inf bn; 1 fd hospital

### GULF OF ADEN

1 FFGHM

### LEBANON

UN • UNIFIL 897; 1 inf bn; 1 fd hospital

### SOUTH SUDAN

UN • UNMISS 2,283; 11 obs; 2 inf bn; 1 engr coy; 1 fd hospital

### SUDAN

UN • UNISFA 1; 2 obs

### SYRIA/ISRAEL

UN • UNDOF 189; 1 log bn(-)

## FOREIGN FORCES

Total numbers for UNMOGIP mission in India and Pakistan

**Chile** 2 obs

**Croatia** 10 obs

**Finland** 6 obs

**Ghana** 2 obs

**Korea, Republic of** 7 obs

**Philippines** 6 obs

**Sweden** 5 obs

**Switzerland** 3 obs

**Thailand** 3 obs

**Uruguay** 2 obs

## Indonesia IDN

Indonesian Rupiah Rp		2014	2015	2016
<b>GDP</b>	Rp	10,543tr	11,786tr	
	US\$	889bn	873bn	
<i>per capita</i>	US\$	3,524	3,416	
<b>Growth</b>	%	5.0	4.7	
<b>Inflation</b>	%	6.4	6.8	
<b>Def bdgt</b>	Rp	86.1tr	102tr	133tr
	US\$	7.26bn	7.57bn	
<b>FMA (US)</b>	US\$	14m	14m	14m
<b>US\$1=Rp</b>		11,863.75	13,506.12	

**Population** 255,993,674

**Ethnic groups:** Javanese 45%; Sundanese 14%; Madurese 8%; Malay 8%; Chinese 3%; other 22%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	13.1%	4.5%	4.2%	4.0%	21.3%	2.9%
<b>Female</b>	12.7%	4.3%	4.0%	3.8%	21.4%	3.7%

## Capabilities

Indonesia's security preoccupations are largely dictated by its position as a vastly populous and sprawling archipelago sitting astride strategic sea lines of communication. Internal security remains a major concern, but there has been a growing emphasis on regional and maritime security. The army remains the armed forces' dominant service. In West Papua, where resistance to Indonesian rule continues, the army still deploys operationally and has faced accusations of serious human-rights abuses. Current plans call for the establishment by 2024 of a Minimum Essential Force, including a substantially strengthened navy and air force. Rising defence spending has permitted improved pay and modest equipment purchases for all three services, and for the construction of new forward bases around the country's periphery, including on the Natuna Islands, in the South China Sea. Indonesia buys equipment from diverse sources, while using technology-transfer agreements with foreign suppliers to develop its national defence industry, but procurement plans remain challenging. They include main battle tanks, artillery, submarines and fixed and rotary-wing airlift. The armed forces lack the capacity for significant autonomous military deployments beyond national territory, though they participate regularly in bilateral and multi-lateral military exercises with regional and international partners, including the US.

**ACTIVE 395,500 (Army 300,400 Navy 65,000 Air 30,100) Paramilitary 281,000**

*Conscription liability* 2 years selective conscription authorised

**RESERVE 400,000**

Army cadre units; numerical str n.k., obligation to age 45 for officers



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**ORGANISATIONS BY SERVICE**


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**Army** €300,400
 

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**Mil Area Commands (KODAM)**

13 comd (I, II, III, IV, V, VI, VII, IX, XII, XVI, XVII, Jaya & Iskandar Muda)

**FORCES BY ROLE**
**MANOEUVRE**
**Mechanised**

3 armd cav bn

6 cav bn

**Light**

1 inf bde (1 cav bn, 3 inf bn)

3 inf bde (1 cdo bn, 2 inf bn)

4 inf bde (3 inf bn)

41 indep inf bn

10 cdo bn

**Aviation**

1 composite avn sqn

1 hel sqn

**COMBAT SUPPORT**

12 fd arty bn

1 AD regt (2 ADA bn, 1 SAM unit)

6 ADA bn

3 SAM unit

7 cbt engr bn

**COMBAT SERVICE SUPPORT**

4 construction bn

**Special Forces Command (KOPASSUS)**
**FORCES BY ROLE**

**SPECIAL FORCES** 3 SF gp (total: 2 cdo/para unit, 1 CT unit, 1 int unit)

**Strategic Reserve Command (KOSTRAD)**
**FORCES BY ROLE**
**COMMAND**

2 div HQ

**MANOEUVRE**
**Armoured**

2 armd bn (forming)

**Light**

3 inf bde (total: 1 mech inf bn; 6 cdo bn; 1 inf bn)

**Air Manoeuvre**

3 AB bde (3 AB bn)

**COMBAT SUPPORT**

2 fd arty regt (total: 6 arty bn)

1 arty bn

2 AD bn

2 cbt engr bn

**EQUIPMENT BY TYPE**

**MBT** 40 *Leopard* 2A4

**LT TK** 350: 275 AMX-13 (partially upgraded); 15 PT-76; 60 *Scorpion* 90

**RECCE** 142: 55 *Ferret* (13 upgraded); 69 *Saladin* (16 upgraded); 18 VBL

**AIFV** 58: 22 *Black Fox*; 36 *Marder* 1A3

**APC** 533+

**APC (T)** 93+: 75 AMX-VCI; 15 FV4333 *Stormer*; 3 M113A1-B

**APC (W)** 437: 14 APR-1; €150 *Anoa*; 40 BTR-40; 34 BTR-50PK; 22 *Commando Ranger*; 45 FV603 *Saracen* (14 upgraded); 100 LAV-150 *Commando*; 32 VAB-VTT  
**PPV** 3+: *Barracuda*; 3 *Bushmaster*; *Casspir*

**ARTY** 1,110+

**SP 155mm** 9 CAESAR

**TOWED** 133+: **105mm** 110+: some KH-178; 60 M101; 50 M-56; **155mm** 23: 5 FH-88; 18 KH-179

**MRL 127mm** 13 ASTROS II Mk6

**MOR** 955: **81mm** 800; **120mm** 155: 75 Brandt; 80 UBM 52

**AT**

**MSL** • **MANPATS** SS.11; *Milan*; 9K11 *Malyutka* (AT-3 *Sagger*)

**RCL 90mm** M67; **106mm** M40A1

**RL 89mm** LRAC

**PATROL AND COASTAL COMBATANTS** • **PBF** 1

**AIRCRAFT** • **TPT** • **Light** 9: 1 BN-2A *Islander*; 6 C-212 *Aviocar* (NC-212); 2 *Turbo Commander* 680

**HELICOPTERS**

**ATK** 6 Mi-35P *Hind*

**MRH** 36: 1 AS550 *Fennec*; 18 Bell 412 *Twin Huey* (NB-412); 17 Mi-17V-5 *Hip H*

**TPT** • **Light** 30: 8 Bell 205A; 20 Bo-105 (NBo-105); 2 H120 *Colibri*

**TRG** 12 Hughes 300C

**AD**

**SAM**

**SP** 2 *Kobra* (with 125 GROM-2 msl); TD-2000B (*Giant Bow II*)

**TOWED** 93: 51 *Rapier*; 42 RBS-70

**MANPAD** QW-3

**GUNS** • **TOWED** 411: **20mm** 121 Rh 202; **23mm** *Giant Bow*; **40mm** 90 L/70; **57mm** 200 S-60

**AEV** 3: 2 *Leopard* 2; 1 M113A1-B-GN

**ARV** 11+: 2 AMX-13; 6 AMX-VCI; 3 BREM-2; 2 *Leopard* 2; *Stormer*; T-54/T-55

**VLB** 13+: 10 AMX-13; *Leguan*; 1 *Leopard* 2; 2 *Stormer*

**Navy** €65,000 (including Marines and Aviation)

Two fleets: East (Surabaya), West (Jakarta). It is currently planned to change to three commands: Riau (West); Papua (East); Makassar (Central). Two Forward Operating Bases at Kupang (West Timor) and Tahuna (North Sulawesi)

**EQUIPMENT BY TYPE**

**SUBMARINES** • **TACTICAL** • **SSK** 2 *Cakra*† (Type-209/1300) with 8 single 533mm TT with SUT HWT

**PRINCIPAL SURFACE COMBATANTS** 11

**FRIGATES** 11

**FFGHM** 7:

3 *Ahmad Yani* (ex-NLD *Van Speijk*) with 2 quad Mk 141 Inchr with RGM-84A *Harpoon* AShM, 2 SIMBAD twin Inchr (manual) with *Mistral* SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun (capacity 1 Bo-105 (NBo-105) hel)

1 *Ahmad Yani* (ex-NLD *Van Speijk*) with 2 twin-cell VLS with 3M55 *Yakhont* (SS-N-26 *Strobile*) AShM; 2 SIMBAD twin Inchr (manual) with *Mistral* SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun (capacity 1 Bo-105 (NBo-105) hel)

2 *Ahmad Yani* (ex-NLD *Van Speijk*) with 4 single Inchr with C-802 ASHM, 2 SIMBAD twin Inchr (manual) with *Mistral* SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun (capacity 1 Bo-105 (NBo-105) hel)

1 *Hajar Dewantara* (trg role) with 2 twin Inchr with MM-38 *Exocet* ASHM, 2 single 533mm ASTT with SUT HWT, 1 57mm gun (capacity 1 Bo-105 (NBo-105) hel)

#### FFGM 4:

4 *Diponegoro* (NLD SIGMA 9113) with 2 twin Inchr with MM-40 *Exocet* Block II ASHM, 2 quad *Tetral* Inchr with *Mistral* SAM, 2 triple 324mm ASTT with MU90 LWT, 1 76mm gun, 1 hel landing platform

### PATROL AND COASTAL COMBATANTS 88

#### CORVETTES 21

**FSGHM** 3 *Bung Tomo* with 2 quad Inchr with MM-40 *Exocet* ASHM, 1 18-cell VLS with *Sea Wolf* SAM, 2 triple 324mm ASTT, 1 76mm gun (capacity: 1 Bo-105 hel)

**FSGH** 1 *Nala* with 2 twin Inchr with MM-38 *Exocet* ASHM, 1 twin 375mm A/S mor, 1 120mm gun (capacity 1 lt hel)

**FSG** 2 *Fatahillah* with 2 twin Inchr with MM-38 *Exocet* ASHM, 2 triple B515 *ILAS-3/Mk32* 324mm ASTT with A244/Mk46 LWT, 1 twin 375mm A/S mor, 1 120mm gun

**FMS** 15 *Kapitan Patimura* (GDR *Parchim I*) with 2 quad Inchr with 9K32M *Strela-2* (SA-N-5 *Grail*) SAM, 4 single 400mm ASTT, 2 RBU 6000 *Smerch 2* A/S mor, 1 twin 57mm gun

**PCFG** 4 *Mandau* with 4 single Inchr with MM-38 *Exocet* ASHM, 1 57mm gun

**PCT** 4 *Singa* with 2 single 533mm TT, 1 57mm gun

**PCC** 16: 4 *Kakap*; 2 *Pandrong*; 3 *Pari*; 3 *Sampari* (KCR-60M) with 2 twin Inchr for C-705 ASHM, 1 57mm gun; 4 *Todak* with 1 57mm gun

#### PBG 10:

2 *Clurit* with 2 twin Inchr with C-705 ASHM, 1 AK630 CIWS

6 *Clurit* with 2 twin Inchr with C-705 ASHM

2 *Badau* (ex-BRN *Waspada*) with 2 twin Inchr for MM-38 *Exocet* ASHM

**PB** 33: 1 *Cucut* (ex-SGP *Jupiter*); 13 *Kobra*; 1 *Krait*; 8 *Sibarau*; 10 *Viper*

### MINE WARFARE • MINE COUNTERMEASURES 11

**MCO** 2 *Pulau Rengat*

**MSC** 9 *Pulau Rotet* (ex-GDR *Wolgast*)

### AMPHIBIOUS

#### PRINCIPAL AMPHIBIOUS VESSELS • LPD 5:

1 *Dr Soeharso* (Ex-*Tanjung Dalpele*; capacity 2 LCU/LCVP; 13 tanks; 500 troops; 2 AS332L *Super Puma*)

4 *Makassar* (capacity 2 LCU/LCVP; 13 tanks; 500 troops; 2 AS332L *Super Puma*)

#### LANDING SHIPS • LST 21

1 *Teluk Amboina* (capacity 16 tanks; 200 troops)

1 *Teluk Bintuni* (capacity 10 MBT)

11 *Teluk Gilimanuk* (ex-GDR *Frosch*)

2 *Teluk Langsa* (capacity 16 tanks; 200 troops)

6 *Teluk Semangka* (capacity 17 tanks; 200 troops)

#### LANDING CRAFT 55

LCM 20

LCU 5

LCVP 30

### LOGISTICS AND SUPPORT 32

**AGF** 1 *Multatuli* with 1 hel landing platform

**AGOR** 6: 5 *Baruna Jaya*; 1 *Burujulasad* with 1 hel landing platform

**AGSH** 1

**AGS** 2 *Rigel*

**AKSL** 4

**AOL** 1

**AORLH** 1 *Arun* (ex-UK *Rover*)

**AOT** 3: 2 *Khobi*; 1 *Sorong*

**ATF** 2

**AXS** 2

**AP** 6: 1 *Tanjung Kambani* (troop transport) with 1 hel landing platform; 2 *Tanjung Nusanive* (troop transport); 3 *Karang Pilang* (troop transport)

**YTM** 3

### Naval Aviation €1,000

#### EQUIPMENT BY TYPE

##### AIRCRAFT

**MP** 23: 3 CN-235 MPA; 14 N-22B *Searchmaster B*; 6 N-22SL *Searchmaster L*

**TPT** • **Light** 36: 8 Beech G36 *Bonaza*; 21 C-212-200 *Aviocar*; 2 DHC-5D *Buffalo*; 3 TB-9 *Tampico*; 2 TB-10 *Tobago*

##### HELICOPTERS

**MRH** 4 Bell 412 (NB-412) *Twin Huey*

**TPT** 15: **Medium** 3 AS332L *Super Puma* (NAS322L);

**Light** 12: 3 H120 *Colibri*; 9 Bo-105 (NBo-105)

### Marines €20,000

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bn

##### MANOEUVRE

##### Amphibious

2 mne gp (1 cav regt, 3 mne bn, 1 arty regt, 1 cbt spt regt, 1 CSS regt)

1 mne bde (3 mne bn)

#### EQUIPMENT BY TYPE

**LT** TK 55 PT-76+

**RECCE** 21 BRDM

**AIFV** 122: 24 AMX-10P; 10 AMX-10 PAC 90; 22 BMP-2; 54 BMP-3F; 12 BTR-80A

**AAV** 10 LVTP-7A1

**APC (W)** 100 BTR-50P

**ARTY** 59+

**TOWED** 50: **105mm** 22 LG1 MK II; **122mm** 28 M-38

**MRL** **122mm** 9 RM-70

**MOR** **81mm**

**AD** • **GUNS** 150: **40mm** 5 L/60/L/70; **57mm** S-60

### Air Force 30,100

2 operational comd (East and West) plus trg comd.

#### FORCES BY ROLE

##### FIGHTER

1 sqn with F-5E/F *Tiger* II

1 sqn with F-16A/B/C/D *Fighting Falcon*

**FIGHTER/GROUND ATTACK**

- 1 sqn with F-16C/D *Fighting Falcon*
- 1 sqn with Su-27SK/SKM *Flanker*; Su-30MK/MK2 *Flanker*
- 2 sqn with *Hawk* Mk109\*/Mk209\*
- 1 sqn with T-50i *Golden Eagle*\*

**GROUND ATTACK**

- 1 sqn with EMB-314 (A-29) *Super Tucano*\*

**MARITIME PATROL**

- 1 sqn with B-737-200; CN-235M-220 MPA

**TANKER/TRANSPORT**

- 1 sqn with C-130B/KC-130B *Hercules*

**TRANSPORT**

- 1 VIP sqn with B-737-200; C-130H/H-30 *Hercules*; L-100-30; F-27-400M *Troopship*; F-28-1000/3000; AS332L *Super Puma* (NAS332L); SA330SM *Puma* (NAS300SM)
- 1 sqn with C-130H/H-30 *Hercules*; L-100-30
- 1 sqn with C-212 *Aviocar* (NC-212)
- 1 sqn with CN-235M-110; C-295M

**TRAINING**

- 1 sqn with Grob 120TP
- 1 sqn with KT-1B
- 1 sqn with SF-260M; SF-260W *Warrior*

**TRANSPORT HELICOPTER**

- 2 sqn with AS332L *Super Puma* (NAS332L); SA330J/L *Puma* (NAS330J/L); H120 *Colibri*

**EQUIPMENT BY TYPE**

Only 45% of ac op

**AIRCRAFT** 104 combat capable

**FTR** 22: 8 F-5E *Tiger II*; 4 F-5F *Tiger II*; 7 F-16A *Fighting Falcon*; 3 F-16B *Fighting Falcon*

**FGA** 24: 6 F-16C *Fighting Falcon*; 2 F-16D *Fighting Falcon*; 2 Su-27SK *Flanker*; 3 Su-27SKM *Flanker*; 2 Su-30MK *Flanker*; 9 Su-30MK2 *Flanker*

**MP** 6: 3 B-737-200; 3 CN-235M-220 MPA

**TKR** 1 KC-130B *Hercules*

**TPT** 42: **Medium** 15: 4 C-130B *Hercules*; 4 C-130H *Hercules*; 6 C-130H-30 *Hercules*; 2 L-100-30; **Light** 19: 7 C-295 (2 more on order); 6 C-212 *Aviocar* (NC-212); 5 CN-235-110; 1 F-27-400M *Troopship*; **PAX** 5: 1 B-737-200; 1 B-737-800BBJ; 1 F-28-1000; 2 F-28-3000

**TRG** 117: 12 EMB-314 (A-29) *Super Tucano*\* (4 more on order); 18 Grob 120TP; 7 *Hawk* Mk109\*; 23 *Hawk* Mk209\*; 14 KT-1B; 10 SF-260M; 7 SF-260W *Warrior*; 16 T-50i *Golden Eagle*\*

**HELICOPTERS**

**TPT** 30: **Medium** 18: 9 AS332 *Super Puma* (NAS332L) (VIP/CSAR); 1 SA330SM *Puma* (NAS330SM) (VIP); 4 SA330J *Puma* (NAS330J); 4 SA330L *Puma* (NAS330L); **Light** 12 H120 *Colibri*

**MSL**

ASM AGM-65G *Maverick*  
**AAM** • **IR** AIM-9P *Sidewinder*; R-73 (AA-11 *Archer*); **IR/SARH** R-27 (AA-10 *Alamo*)  
**ARM** Kh-31P (AS-17A *Krypton*)

**Special Forces (Paskhasau)****FORCES BY ROLE****SPECIAL FORCES**

- 3 (PASKHASAU) SF wg (total: 6 spec ops sqn)
- 4 indep SF coy

**EQUIPMENT BY TYPE****AD**

**SAM** • **MANPAD** QW-3

**GUNS** • **TOWED** 35mm 6 Oerlikon *Skyshield*

**Paramilitary** €281,000 active**Customs****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 65

**PBF** 15

**PB** 50

**Marine Police****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 37

**PSO** 2 *Bisma*

**PCC** 5

**PBF** 3 *Gagak*

**PB** 27: 14 *Bango*; 13 (various)

**LOGISTICS AND SUPPORT** • **AP** 1

**Police** €280,000 (including 14,000 police 'mobile bde' (BRIMOB) org in 56 coy, incl CT unit (Gegana))

**EQUIPMENT BY TYPE**

**APC (W)** 34 *Tactica*

**AIRCRAFT** • **TPT** • **Light** 5: 2 Beech 18; 2 C-212 *Aviocar* (NC-212); 1 *Turbo Commander* 680

**HELICOPTERS** • **TPT** • **Light** 22: 3 Bell 206 *Jet Ranger*; 19 Bo-105 (NBo-105)

**KPLP (Coast and Seaward Defence Command)**

Responsible to Military Sea Communications Agency

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 34

**PCO** 4: 2 *Arda Dedali*; 2 *Trisula*

**PB** 30: 3 *Bintung Laut*; 4 *Golok* (SAR); 5 *Kujang*; 3 *Rantos*; 15 (various)

**LOGISTICS AND SUPPORT** • **ABU** 1 *Jadayat***Reserve Organisations**

**Kamra People's Security** €40,000 (report for 3 weeks' basic training each year; part-time police auxiliary)

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 210; 6 obs; 1 engr coy

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 176; 15 obs; 1 engr coy

**LEBANON**

UN • UNIFIL 1,289; 1 inf bn; 1 log bn(-); 1 FFGM

**LIBERIA**

UN • UNMIL 1 obs

**MALI**

UN • MINUSMA 133; 1 hel sqn

**PHILIPPINES**

IMT 6

**SOUTH SUDAN**

UN • UNMISS 1; 3 obs

**SUDAN**

UN • UNAMID 810; 7 obs; 1 inf bn

UN • UNISFA 1; 1 obs

**WESTERN SAHARA**

UN • MINURSO 3 obs

Japan JPN				
Japanese Yen ¥		2014	2015	2016
GDP	¥	488tr	500tr	
	US\$	4.6tr	4.12tr	
<i>per capita</i>	US\$	36,222	32,481	
Growth	%	-0.1	0.6	
Inflation	%	2.7	0.7	
Def bdtg	¥	4.88tr	4.98tr	
	US\$	46.1bn	41bn	
US\$1=¥		105.94	121.43	

Population 126,919,659

Ethnic groups: Korean &lt;1%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	6.8%	2.6%	2.5%	2.5%	22.6%	11.6%
Female	6.3%	2.3%	2.3%	2.6%	22.9%	15.0%

**Capabilities**

Japan's alliance with the United States remains the cornerstone of its defence policy, reflected by continued US basing on Honshu, Kyushu and Okinawa; widespread use of US equipment across all three services; and regular training with US forces. While the Self-Defense Forces offensive capacity remains weak, the navy has strengths in ASW and air defence. Tokyo's concerns over its deteriorating regional security environment, in which it perceives an emerging threat from China, as well as its established concern over North Korea, have escalated, stimulating defence policy and legislative reforms to enable it to play a more active international security role, as well as to strengthen the US–Japan alliance. A new military procurement drive has, for the first time, focused on power projection, mobility and ISR. Japan is also trying to forge closer defence and intelligence ties with other regional powers, including Australia and India. (See pp. 229–30.)

**ACTIVE 247,150** (Ground Self-Defense Force 151,000; Maritime Self-Defense Force 45,500; Air Self-Defense Force 47,100; Central Staff 3,550) Paramilitary 12,650

**RESERVE 56,100** (General Reserve Army (GSDF) 46,000; Ready Reserve Army (GSDF) 8,200; Navy 1,100; Air 800)

**ORGANISATIONS BY SERVICE****Space****EQUIPMENT BY TYPE**

SATELLITES • ISR 6 IGS

**Ground Self-Defense Force 151,000****FORCES BY ROLE****COMMAND**

5 army HQ (regional comd)

**SPECIAL FORCES**

1 spec ops unit (bn)

**MANOEUVRE****Armoured**

1 (7th) armd div (1 armd recce sqn, 3 tk regt, 1 armd inf regt, 1 avn sqn, 1 SP arty regt, 1 AD regt, 1 cbt engr bn, 1 sigs bn, 1 NBC bn, 1 log regt)

**Mechanised**

1 (2nd) inf div (1 armd recce sqn, 1 tk regt, 1 mech inf regt, 2 inf regt, 1 avn sqn, 1 SP arty regt, 1 AT coy, 1 AD bn, 1 cbt engr bn, 1 sigs bn, 1 NBC bn, 1 log regt)

1 (4th) inf div (1 armd recce sqn, 1 tk bn, 1 mech inf regt, 2 inf regt, 1 inf coy, 1 avn sqn, 1 arty regt, 1 AT coy, 1 AD bn, 1 cbt engr bn, 1 sigs bn, 1 NBC bn, 1 log regt)

1 (9th) inf div (1 armd recce sqn, 1 tk bn, 3 mech inf regt, 1 avn sqn, 1 arty regt, 1 AD bn, 1 cbt engr bn, 1 sigs bn, 1 NBC bn, 1 log regt)

2 (5th &amp; 11th) inf bde (1 armd recce sqn, 1 tk bn, 3 mech inf regt, 1 avn sqn, 1 SP arty bn, 1 AD coy, 1 cbt engr coy, 1 sigs coy, 1 NBC coy, 1 log bn)

**Light**

1 (8th) inf div (1 recce sqn, 1 tk bn, 4 inf regt, 1 avn sqn, 1 arty regt, 1 AD bn, 1 cbt engr bn, 1 sigs bn, 1 NBC bn, 1 log regt)

4 (1st, 3rd, 6th &amp; 10th) inf div (1 recce sqn, 1 tk bn, 3 inf regt, 1 avn sqn, 1 arty regt, 1 AD bn, 1 cbt engr bn, 1 sigs bn, 1 NBC bn, 1 log regt)

1 (13th) inf bde (1 recce sqn, 1 tk coy, 3 inf regt, 1 avn sqn, 1 arty bn, 1 AD coy, 1 cbt engr coy, 1 NBC coy, 1 sigs coy, 1 log bn)

1 (14th) inf bde (1 recce sqn, 1 tk coy, 2 inf regt, 1 avn sqn, 1 arty bn, 1 AD coy, 1 cbt engr coy, 1 NBC coy, 1 sigs coy, 1 log bn)

1 (15th) inf bde (1 recce sqn, 1 inf regt, 1 avn sqn, 1 AD regt, 1 cbt engr coy, 1 NBC coy, 1 sigs coy, 1 log bn)

**Air Manoeuvre**

1 (1st) AB bde (3 AB bn, 1 arty bn, 1 cbt engr coy, 1 sigs coy, 1 log bn)

1 (12th) air mob inf bde (1 recce sqn, 3 inf regt, 1 avn sqn, 1 SP arty bn, 1 AD coy, 1 cbt engr coy, 1 NBC coy, 1 sigs coy, 1 log bn)

**Aviation**

1 hel bde

5 avn gp (1 atk hel bn, 1 hel bn)

**COMBAT SUPPORT**

1 arty bde

2 arty unit (bde)

2 AD bde

4 AD gp

4 engr bde

1 engr unit  
 1 EW bn  
 5 int bn  
 1 MP bde  
 1 sigs bde

**COMBAT SERVICE SUPPORT**

5 log unit (bde)  
 5 trg bde

**EQUIPMENT BY TYPE**

**MBT** 688: 53 Type-10; 293 Type-74; 341 Type-90

**RECCE** 162: 110 Type-87; 52 Chemical Reconnaissance Vehicle

**AIFV** 68 Type-89

**APC** 792

**APC (T)** 226 Type-73

**APC (W)** 562: 205 Type-82; 357 Type-96

**PPV** 4 *Bushmaster*

**ARTY** 1,790

**SP** 166: **155mm** 99 Type-99; **203mm** 67 M110A2

**TOWED** **155mm** 422 FH-70

**MRL** **227mm** 99 M270 MLRS

**MOR** 1,103

**SP** **120mm** 24 Type-96

**TOWED** 1,079: **81mm** 651 L16 **120mm** 428

**AT**

**MSL**

**SP** 37 Type-96 MPMS

**MANPATS** Type-79 *Jyu-MAT*; Type-87 *Chu-MAT*;  
 Type-01 LMAT

**RCL** • **84mm** *Carl Gustav*

**RL** **89mm**

**AIRCRAFT**

**TPT** • **Light** 8: 1 MU-2 (LR-1); 7 Beech 350 *King Air* (LR-2)

**HELICOPTERS**

**ATK** 108: 60 AH-1S *Cobra*; 11 AH-64D *Apache*; 37 OH-1

**ISR** 48 OH-6D

**TPT** 256: **Heavy** 57: 27 CH-47D *Chinook* (CH-47J); 30 CH-47JA *Chinook*; **Medium** 39: 3 H225 *Super Puma* MkII+ (VIP); 36 UH-60L *Black Hawk* (UH-60JA); **Light** 160: 130 Bell-205 (UH-1J); 30 Enstrom 480B (TH-480B)

**AD**

**SAM**

**SP** 204: 40 Type-03 *Chu-SAM*; 4 Type-11 *Tan-SAM*; 47

Type-81 *Tan-SAM*; 113 Type-93 *Kin-SAM*

**TOWED** 126 MTM-23B I-HAWK

**MANPAD** Type-91 *Kei-SAM*

**GUNS** • **SP** **35mm** 52 Type-87

**MSL** • **AShM** 88: 2 Type-12; 86 Type-88

**ARV** 69: 3 Type-11; 36 Type-78; 30 Type-90

**VLB** 22 Type-91

**Maritime Self-Defense Force 45,500**

Surface units organised into 4 Escort Flotillas with a mix of 8 warships each. Bases at Yokosuka, Kure, Sasebo, Maizuru, Ominato. SSK organised into two flotillas with bases at Kure and Yokosuka.

**EQUIPMENT BY TYPE**

**SUBMARINES** • **TACTICAL** • **SSK** 18:

1 *Harushio* (trg role) with 6 single 533mm TT with T-89 HWT/UGM-84C *Harpoon* AShM

1 *Oyashio* (trg role) with 6 single 533mm TT with T-89 HWT/UGM-84C *Harpoon* AShM

10 *Oyashio* with 6 single 533mm TT with T-89 HWT/UGM-84C *Harpoon* AShM

6 *Soryu* (AIP fitted) with 6 single 533mm TT with T-89 HWT/UGM-84C *Harpoon* AShM (additional vessels in build)

**PRINCIPAL SURFACE COMBATANTS 47****AIRCRAFT CARRIERS** • CVH 3:

2 *Hyuga* with 1 16-cell Mk41 VLS with ASROC/RIM-162 ESSM SAM, 2 triple 324mm ASTT with Mk46/Type-97 LWT, 2 *Phalanx* Block 1B CIWS (normal ac capacity 3 SH-60 *Seahawk* ASW hel; plus additional ac embarkation up to 7 SH-60 *Seahawk* or 7 MCH-101)

1 *Izumo* with 2 11-cell SeaRAM Inchr with RIM-116 SAM, 2 *Phalanx* Block 1B CIWS (normal ac capacity 7 SH-60 *Seahawk* ASW hel; plus additional ac embarkation up to 5 SH-60 *Seahawk*/MCH-101 hel)

**CRUISERS** • CGHM 2 *Atago* (*Aegis* Baseline 7) with 2 quad Inchr with SSM-1B AShM, 1 64-cell Mk41 VLS with SM-2 MR SAM/ASROC, 1 32-cell Mk41 VLS with SM-2 MR SAM, 2 triple 324mm ASTT with Mk46 LWT, 2 *Phalanx* Block 1B CIWS, 1 127mm gun (capacity 1 SH-60 *Seahawk* ASW hel)

**DESTROYERS** 33**DDGHM** 26:

8 *Asagiri* with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 octuple Mk29 Inchr with *Sea Sparrow* SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 octuple Mk112 Inchr with ASROC, 2 *Phalanx* CIWS, 1 76mm gun (capacity 1 SH-60 *Seahawk* ASW hel)

4 *Akizuki* with 2 quad Inchr with SSM-1B AShM, 1 32-cell Mk41 VLS with ASROC/ESSM *Sea Sparrow* SAM, 2 triple 324mm ASTT with Type-97 LWT, 2 *Phalanx* CIWS, 1 127mm gun (capacity 1 SH-60 *Seahawk* ASW hel)

9 *Murasame* with 2 quad Inchr with SSM-1B AShM, 1 16-cell Mk48 VLS with ESSM *Sea Sparrow* SAM, 2 triple 324mm TT with Mk46 LWT, 1 16-cell Mk41 VLS with ASROC, 2 *Phalanx* CIWS, 2 76mm gun (capacity 1 SH-60 *Seahawk* ASW hel)

5 *Takanami* (improved *Murasame*) with 2 quad Inchr with SSM-1B AShM, 1 32-cell Mk41 VLS with ASROC/RIM-7M/ESSM *Sea Sparrow* SAM, 2 triple 324mm TT with Mk46 LWT, 2 *Phalanx* CIWS, 1 127mm gun (capacity 1 SH-60 *Seahawk* ASW hel)

**DDGM** 6:

2 *Hatakaze* with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 Mk13 GMLS with SM-1 MR SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 octuple Mk112 Inchr with ASROC, 2 *Phalanx* CIWS, 2 127mm gun, 1 hel landing platform

4 *Kongou* (*Aegis* Baseline 4/5) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 29-cell Mk41 VLS with SM-2/3 SAM/ASROC, 1 61-cell Mk41 VLS with SM-2/3 SAM/ASROC, 2 triple 324mm ASTT, 2 *Phalanx* Block 1B CIWS, 1 127mm gun

**DDHM** 1 *Shirane* with 1 octuple Mk112 Inchr with ASROC, 1 octuple Mk29 Inchr with RIM-7M *Sea*



*Sparrow* SAM, 2 triple ASTT with Mk46 LWT, 2 *Phalanx* CIWS, 2 127mm gun (capacity 3 SH-60 *Seahawk* ASW hel)

**FRIGATES 9**

**FFGHM 3** *Hatsuyuki* with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 1 octuple Mk29 Inchr with RIM-7F/M *Sea Sparrow* SAM, 2 triple ASTT with Mk46 LWT, 1 octuple Mk112 Inchr with ASROC, 2 *Phalanx* CIWS, 1 76mm gun (capacity 1 SH-60 *Seahawk* ASW hel)

**FFGM 6** *Abukuma* with 2 quad Mk141 Inchr with RGM-84C *Harpoon* ASHm, 2 triple ASTT with Mk 46 LWT, 1 octuple Mk112 Inchr with ASROC, 1 *Phalanx* CIWS, 1 76mm gun

**PATROL AND COASTAL COMBATANTS 6**

**PBFG 6** *Hayabusa* with 4 SSM-1B ASHm, 1 76mm gun

**MINE WARFARE • MINE COUNTERMEASURES 27****MCM SPT 4:**

2 *Ishima*

1 *Uraga* with 176mm gun, 1 hel landing platform (for MH-53E)

1 *Uraga* with 1 hel landing platform (for MH-53E)

**MSO 23:** 3 *Hirashima*; 12 *Sugashima*; 2 *Uwajima*; 3 *Yaeyama*; 3 *Enoshima*

**AMPHIBIOUS**

**LANDING SHIPS • LST 3** *Osumi* with 2 *Phalanx* CIWS, 1 hel landing platform (for 2 CH-47 hel) (capacity 10 Type-90 MBT; 2 LCAC(L) ACV; 330 troops)

**LANDING CRAFT 8**

**LCU 2** *Yusotei*

**LCAC 6** LCAC(L) (capacity either 1 MBT or 60 troops)

**LOGISTICS AND SUPPORT 28**

**AGH 1** *Asuka* with 1 8-cell VLS (wpn trials) (capacity 1 SH-60 *Seahawk* hel)

**AGBH 1** *Shirase* (capacity 2 AW101 *Merlin* hel)

**AGOS 2** *Hibiki* with 1 hel landing platform

**AGS 4:** 1 *Futami*; 1 *Nichinan*; 1 *Shonan*; 1 *Suma*

**AOE 5:** 2 *Mashu* (capacity 1 MH-53 hel); 3 *Towada* with 1 hel landing platform

**ARC 1** *Muroto*

**ASR 2:** 1 *Chihaya* with 1 hel landing platform; 1 *Chiyoda* with 1 hel landing platform

**AX 6:**

1 *Kashima* with 2 triple 324mm ASTT, 1 76mm gun, 1 hel landing platform

1 *Kurobe* with 1 76mm gun (trg spt ship)

3 *Shimayuki* with 2 quad Inchr with RGM-84 *Harpoon* AShM, 1 octuple Mk29 Inchr with RIM-7M *Sea Sparrow* SAM, 1 octuple Mk112 Inchr with ASROC, 2 triple 324mm ASTT with Mk46 LWT, 2 *Phalanx* CIWS, 1 76mm gun

1 *Tenryu* (trg spt ship); with 1 76mm gun (capacity: 1 med hel)

**YAC 1** *Hashidate*

**YG 5** *Hiuchi*

**Naval Aviation €9,800**

7 Air Groups

**FORCES BY ROLE****ANTI SUBMARINE/SURFACE WARFARE**

5 sqn with SH-60B (SH-60J)/SH-60K *Seahawk*

**MARITIME PATROL**

4 sqn with P-3C *Orion*

**ELECTRONIC WARFARE**

1 sqn with EP-3 *Orion*

**MINE COUNTERMEASURES**

1 sqn with MH-53E *Sea Dragon*; MCH-101

**SEARCH & RESCUE**

1 sqn with *Shin Meiya* US-1A/US-2

2 sqn with UH-60J *Black Hawk*

**TRANSPORT**

1 sqn with AW101 *Merlin* (CH-101); Beech 90 *King Air* (LC-90); KC-130R *Hercules*

**TRAINING**

1 sqn with Beech 90 *King Air* (TC-90)

1 sqn with P-3C *Orion*

1 sqn with T-5J

1 hel sqn with H135 (TH-135); OH-6DA; SH-60B (SH-60J) *Seahawk*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 80 combat capable

**ASW 80:** 7 P-1; 73 P-3C *Orion*

**ELINT 5** EP-3C *Orion*

**SAR 6:** 2 *Shin Meiya* US-1A; 4 *Shin Meiya* US-2

**TPT 28:** **Medium** 4 C-130R *Hercules*; **Light** 24: 5 Beech 90 *King Air* (LC-90); 19 Beech 90 *King Air* (TC-90)

**TRG 30** T-5J

**HELICOPTERS**

**ASW 85:** 43 SH-60B *Seahawk* (SH-60J); 42 SH-60K *Seahawk*

**MCM 11:** 5 MH-53E *Sea Dragon*; 6 MCH-101

**ISR 2** OH-6DA (trg role)

**SAR 18** UH-60J *Black Hawk*

**TPT 15:** **Medium** 2 AW101 *Merlin* (CH-101) (additional ac being delivered); **Light** 13 H135 (TH-135)

**Air Self-Defense Force 47,100**

Flying hours 150 hrs/year

7 cbt wg

**FORCES BY ROLE****FIGHTER**

7 sqn with F-15J *Eagle*

2 sqn with F-4EJ (F-4E) *Phantom II*

3 sqn with Mitsubishi F-2

**ELECTRONIC WARFARE**

2 sqn with Kawasaki EC-1; YS-11E

**ISR**

1 sqn with RF-4EJ (RF-4E) *Phantom II*\*

**AIRBORNE EARLY WARNING & CONTROL**

2 sqn with E-2C *Hawkeye*

1 sqn with E-767

**SEARCH & RESCUE**

1 wg with U-125A *Peace Krypton*; UH-60J *Black Hawk*

**TANKER**

1 sqn with KC-767J

**TRANSPORT**

1 (VIP) sqn with B-747-400

3 sqn with C-1; C-130H *Hercules*; YS-11

Some (liaison) sqn with Gulfstream IV (U-4); T-4\*

**TRAINING**

1 (aggressor) sqn with F-15J *Eagle*

**TEST**

1 wg with F-15J *Eagle*; T-4\*

**TRANSPORT HELICOPTER**

4 flt with CH-47 *Chinook*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 557 combat capable

FTR 201 F-15J *Eagle*

FGA 147: 92 F-2A/B; 55 F-4E *Phantom II* (F-4EJ)

EW 3: 1 Kawasaki EC-1; 2 YS-11EA

ISR 17: 13 RF-4E *Phantom II*\* (RF-4J); 4 YS-11EB

AEW&C 17: 13 E-2C *Hawkeye*; 4 E-767

SAR 26 U-125A *Peace Krypton*

TKR 4 KC-767J

TPT 62: **Medium** 15 C-130H *Hercules*; **PAX** 47: 2 B-747-

400; 13 Beech T-400; 23 C-1; 5 Gulfstream IV (U-4); 4 YS-11

TRG 245: 196 T-4\*; 49 T-7

**HELICOPTERS**

SAR 31 UH-60J *Black Hawk*

TPT • **Heavy** 15 CH-47 *Chinook*

**MSL**

ASM ASM-1 (Type-80); ASM-2 (Type-93)

AAM • **IR** AAM-3 (Type-90); AIM-9 *Sidewinder*; **IRR**

AAM-5 (Type-04); **SARH** AIM-7 *Sparrow*; **ARH** AAM-4 (Type-99)

**Air Defence**

Ac control and warning. 4 wg; 28 radar sites

**FORCES BY ROLE****AIR DEFENCE**

6 SAM gp (total: 24 SAM bty with MIM-104D/F *Patriot* PAC-2/3)

1 AD gp with Type-81 *Tan-SAM*; M167 *Vulcan*

**EQUIPMENT BY TYPE****AD****SAM**

SP Type-81 *Tan-SAM*

**TOWED** 120 MIM-104D/F *Patriot* PAC-2/3

**GUNS** • **TOWED 20mm** M167 *Vulcan*

**Paramilitary 12,650****Coast Guard**

Ministry of Land, Transport, Infrastructure and Tourism (no cbt role)

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** 395+

PSOH 14: 2 *Mizuho* (capacity 1 Bell 212); 2 *Shikishima* (capacity 2 Bell 212); 10 *Soya* (capacity 1 Bell 212)

PSO 28:

3 *Hida* with 1 hel landing platform

1 *Izu* with 1 hel landing platform

1 *Kojima* (trg) with 1 hel landing platform

4 *Kunigami* with 1 hel landing platform

1 *Miura* with 1 hel landing platform

1 *Nojima* with 1 hel landing platform

7 *Ojika* with 1 hel landing platform

10 *Shiretoko*

PCO 28: 3 *Aso*; 9 *Hateruma*; 3 *Iwami*; 2 *Takatori*; 11 *Teshio*

PCC 26: 4 *Amami*; 22 *Tokara*

PBF 47: 20 *Hayaqumo*; 5 *Mihashi*; 14 *Raizan*; 2 *Takatsuki*;

6 *Tsuruugi*

**PB** 252+: 8 *Akizuki*; 4 *Asogiri*; 200+ CL-Type; 15

*Hayanami*; 1 *Matsumami*; 7 *Murakumo*; 2 *Natsugiri*; 3

*Shimazugiri*; 10 *Yodo*; 2 *Katonami*

**LOGISTICS AND SUPPORT 37**

**ABU** 1 *Teshio*

**AGS** 12

**AKSL** 7

**YAG** 5

**YPC** 3

**YTR** 9

**AIRCRAFT**

**MP** 2 *Falcon* 900 MPA

**ISR** 2 Beech 200T

**TPT** 21: **Light** 12: 10 Beech 350 *King Air* (LR-2); 1

Cessna 206 *Stationair* (U-206G); 1 YS-11A; **PAX** 9: 3 CL-300; 2 Gulfstream V (MP); 4 Saab 340B

**HELICOPTERS**

**MRH** 7 Bell 412 *Twin Huey*

**SAR** 1 S-76D

**TPT** 41: **Medium** 7: 4 AS332 *Super Puma*; 3 H225 *Super*

*Puma*; **Light** 34: 5 AW139; 4 Bell 206B *Jet Ranger II*; 20 Bell 212; 4 S-76C

**Cyber**

In 2012 a 'Cyber Planning Office' was established in the C4 Systems Planning Division, Joint Staff Office (JSO) of the Ministry of Defense to consolidate the cyber-planning functions of the JSO and to create a more systematic structure for responding to cyber attacks. The National Defense Program Guidelines for FY2014 and beyond stated that 'Japan will build up persistent ISR [intelligence, surveillance and reconnaissance] capabilities to prevent any acts that could impede efficient action by the SDF'. The 2014 Mid-Term Defense Program (FY2014–18) said that the Self-Defense Forces would develop specialist training for cyber personnel. The document also said that 'through its efforts to secure response capabilities in cyberspace where attackers have an overwhelming advantage, the SDF may consider the acquisition of capabilities to prevent them from using cyberspace'. A Cyber Defense Group was launched in March 2014 to respond to cyber threats. The group monitors defence-ministry and SDF networks, and provides responses to cyber attacks. A revised Cybersecurity Strategy was reportedly under development in mid-2015.

**DEPLOYMENT****DJIBOUTI**

170; 2 P-3C *Orion*

**GULF OF ADEN & INDIAN OCEAN**

2 DDGHM

**SOUTH SUDAN**

**UN** • UNMISS 272; 1 engr coy

**FOREIGN FORCES****United States**

US Pacific Command: 50,000

**Army** 2,300; 1 SF gp; 1 avn bn; 1 SAM regt

**Navy** 19,600; 1 CVN; 3 CGHM; 3 DDGHM; 5 DDGM; 1 LCC; 4 MCO; 1 LHD; 1 LPD; 2 LSD; 1 base at Sasebo; 1 base at Yokosuka

**USAF:** 12,400; 1 HQ (5th Air Force) at Okinawa–Kadena AB; 1 ftr wg at Misawa AB (2 ftr sqn with 22 F-16C/D *Fighting Falcon*); 1 ftr wg at Okinawa–Kadena AB (2 ftr sqn with total of 54 F-15C/D *Eagle*; 1 tkr sqn with 15 KC-135R *Stratotanker*; 1 AEW sqn with 2 E-3B *Sentry*; 1 CSAR sqn with 10 HH-60G *Pave Hawk*); 1 tpt wg at Yokota AB with 10 C-130H *Hercules*; 2 C-12J; 1 spec ops gp at Okinawa–Kadena AB with (1 sqn with 5 MC-130H *Combat Talon*; 1 sqn with 5 MC-130J *Commando II*); 1 ISR sqn with RC-135 *Rivet Joint*

**USMC** 15,700; 1 Marine div (3rd); 1 ftr sqn at Iwakuni with 12 F/A-18D *Hornet*; 1 tkr sqn at Iwakuni with 15 KC-130J *Hercules*; 2 tpt sqn at Futenma with 12 MV-22B *Osprey*

US Strategic Command: 1 AN/TPY-2 X-band radar at Shariki; 1 AN/TPY-2 X-Band radar at Kyogamisaki

## Korea, Democratic People's Republic of DPRK

North Korean Won	2014	2015	2016
GDP	US\$		
<i>per capita</i>	US\$		
Def exp	won		
	US\$		

US\$1=won

\*definitive economic data not available

**Population** 24,983,205

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	10.8%	3.9%	4.2%	3.9%	22.3%	3.4%
Female	10.4%	3.9%	4.1%	3.7%	22.9%	6.5%

## Capabilities

North Korea's armed forces remain dependent on increasingly obsolete equipment of Russian and Chinese origin, including indigenous derivatives. The recent appearance of freshly painted combat aircraft only disguises the underlying lack of new airframes over the past two decades, and there is only limited evidence of modernisation across the services. North Korea's capability is arguably more reliant on its substantial personnel strength and its potential for asymmetric warfare. Whilst exercises are regularly conducted, they often appear staged and as such are not necessarily representative of wider operational capability. Though North Korean progress on nuclear-warhead miniaturisation continues to be debated, its pursuit of missile-delivery capability remains a priority. US officials now view the so-far-untested *Hwasong-13* (KN-08) road-mobile ICBM as operational, a position perhaps reinforced by the subsequent parade appearance of a redesigned model, in contrast to previous mock-ups. The 2015 acknowledgement of an active developmental SLBM system also indicates long-term ambitions to diversify delivery methods.

The lack of a full flight test of the SLBM prototype, or a confirmed submarine-ejection test launch, suggests that even an embryonic operational capability may be some years away.

**ACTIVE 1,190,000 (Army €1,020,000 Navy 60,000 Air 110,000) Paramilitary 189,000**

*Conscript liability* Army 5–12 years, Navy 5–10 years, Air Force 3–4 years, followed by compulsory part-time service to age 40. Thereafter service in the Worker/Peasant Red Guard to age 60.

**RESERVE €600,000 (Armed Forces €600,000), Paramilitary 5,700,000**

Reservists are assigned to units (see also Paramilitary)

## ORGANISATIONS BY SERVICE

### Strategic Forces

North Korea's ballistic missiles and obsolete H-5 (Il-28) bombers could in future be used to deliver nuclear warheads or bombs. At present, however, there is no conclusive evidence to suggest that North Korea has successfully produced a warhead or bomb capable of being delivered by these systems.

**Army €1,020,000**

### FORCES BY ROLE

#### COMMAND

- 2 mech corps HQ
- 9 inf corps HQ
- 1 (Capital Defence) corps HQ

#### MANOEUVRE

##### Armoured

- 1 armd div
- 15 armd bde

##### Mechanised

- 4 mech div

##### Light

- 27 inf div
- 14 inf bde

#### COMBAT SUPPORT

- 1 arty div
- 21 arty bde
- 9 MRL bde
- 1 SSM bde with *Scud*
- 1 SSM bde with FROG-7
- 5–8 engr river crossing/amphibious regt
- 1 engr river crossing bde

**Special Purpose Forces Command 88,000**

### FORCES BY ROLE

#### SPECIAL FORCES

- 8 (Reconnaissance General Bureau) SF bn

#### MANOEUVRE

##### Reconnaissance

- 17 recce bn

##### Light

- 9 lt inf bde
- 6 sniper bde

**Air Manoeuvre**

3 AB bde  
1 AB bn  
2 sniper bde  
**Amphibious**  
2 sniper bde

**Reserves 600,000****FORCES BY ROLE****MANOEUVRE**

**Light**  
40 inf div  
18 inf bde

**EQUIPMENT BY TYPE (€)**

**MBT** 3,500+ T-34/T-54/T-55/T-62/Type-59/Chonma/Pokpoong  
**LT TK** 560+: 560 PT-76; M-1985

**AIFV** 32 BTR-80A

**APC** 2,500+

**APC (T)** BTR-50; Type-531 (Type-63); VTT-323  
**APC (W)** 2,500 BTR-40/BTR-60/M-1992/1/BTR-152/M-2010 (6×6)/M-2010 (8×8)

**ARTY** 21,100+

**SP/TOWED** 8,500: **SP 122mm** M-1977/M-1981/M-1985/M-1991; **130mm** M-1975/M-1981/M-1991; **152mm** M-1974/M-1977; **170mm** M-1978/M-1989

**TOWED 122mm** D-30/D-74/M-1931/37; **130mm** M-46; **152mm** M-1937/M-1938/M-1943

**GUN/MOR 120mm** (reported)

**MRL** 5,100: **107mm** Type-63; **122mm** BM-11/M-1977 (BM-21)/M-1985/M-1992/M-1993; **200mm** BMD-20; **240mm** BM-24/M-1985/M-1989/M-1991; **300mm** some  
**MOR** 7,500: **82mm** M-37; **120mm** M-43; **160mm** M-43

**AT • MSL**

**SP** 9K11 *Malyutka* (AT-3 *Sagger*)  
**MANPATS** 2K15 *Shmel* (AT-1 *Snapper*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*)  
**RCL** 82mm 1,700 B-10

**AD****SAM**

**SP** 9K35 *Strela-10* (SA-13 *Gopher*)  
**MANPAD** 9K310 *Igla-1* (SA-16 *Gimlet*); 9K32 *Strela-2* (SA-7 *Grail*)†

**GUNS** 11,000

**SP** 14.5mm M-1984; 23mm M-1992; 37mm M-1992; 57mm M-1985

**TOWED** 11,000: 14.5mm ZPU-1/ZPU-2/ZPU-4; 23mm ZU-23; 37mm M-1939; 57mm S-60; 85mm M-1939 KS-12; 100mm KS-19

**MSL**

**ICBM** 6+ *Hwasong-13* (KN-08) (reported operational)  
**MRBM** €10 *Nodong* (€90+ msl); some *Musudan*  
**SBRM** some KN-02; 30+ *Scud-B/Scud-C* (€200+ msl)  
**SSM** 24 *FROG-3/5/7*

**Navy €60,000****EQUIPMENT BY TYPE****SUBMARINES • TACTICAL 73**

**SSB** 1 *Sinpo* with 1 *Bukkeukseong-1* (KN-11) SLBM (under development)

**SSK** 20 PRC Type-033/FSU *Romeot* with 8 single 533mm TT with 14 SAET-60 HWT

**SSC 32+:**

30 *Sang-O* with 2 single 533mm TT with Type-53-65 HWT  
2+ *Sang-O II* with 4 single 533mm TT with Type-53-65 HWT

**SSW** 20+ (some *Yugo* with 2 single 406mm TT; some *Yeono* with 2 single 533mm TT)

**PRINCIPAL SURFACE COMBATANTS 3****FRIGATES • FFG 3:**

1 *Najin* with 2 single Inchr with P-15 *Termit* (SS-N-2) ASHM, 2 RBU 1200 A/S mor, 2 100mm gun, 2 twin 57mm gun

1 *Najin* with 2 twin Inchr with KN-01 ASHM (reported), 2 RBU 1200 A/S mor, 2 100mm gun, 2 twin 57mm gun (operational status unclear)

1 *Soho* with 4 single Inchr with P-15 *Termit* (SS-N-2) ASHM, 2 RBU 1200 A/S mor, 1 100mm gun, 1 hel landing platform (for med hel)

**PATROL AND COASTAL COMBATANTS 383+****PCG 18:**

8 *Osa I* with 4 single Inchr with P-15 *Termit* (SS-N-2) ASHM, 2 twin AK230 CIWS

10 *Soju* with 4 single Inchr with P-15 *Termit* (SS-N-2) ASHM

**PCO 5:**

4 *Sariwon* with 2 twin 57mm gun  
1 *Tral* with 1 85mm gun

**PCC 18:**

6 *Hainan* with 4 RBU 1200 A/S mor, 2 twin 57mm gun  
7 *Taechong I* with 2 RBU 1200 A/S mor, 1 85mm gun, 1 twin 57mm gun

5 *Taechong II* with 2 RBU 1200 A/S mor, 1 100mm gun, 1 twin 57mm gun

**PBFG 17+:**

4 *Huangfen* with 4 single Inchr with P-15 *Termit* (SS-N-2) ASHM, 2 twin AK230 CIWS

6 *Komar* with 2 single Inchr with P-15 *Termit* (SS-N-2) ASHM

6 *Sohung* with 2 single Inchr with P-15 *Termit* (SS-N-2) ASHM

1+ *Nongo* with 2 twin Inchr with KN-01 ASHM, 2 30mm CIWS (operational status unknown)

**PBF 229:**

54 *Chong-Jin* with 1 85mm gun  
142 *Ku Song/Sin Hung/Sin Hung* (mod)  
33 *Sinpo*

**PB 96:**

59 *Chaho*  
6 *Chong-Ju* with 2 RBU 1200 A/S mor, 1 85mm gun  
13 *Shanghai II*  
18 *SO-1* with 4 RBU 1200 A/S mor, 2 twin 57mm gun

**MINE WARFARE • MINE COUNTERMEASURES 24**

**MSC** 24: 19 *Yukto I*; 5 *Yukto II*

**AMPHIBIOUS**

**LANDING SHIPS • LSM** 10 *Hantaeh* (capacity 3 tanks; 350 troops)

**LANDING CRAFT 257**

**LCPL** 96 *Nampo* (capacity 35 troops)

**LCM 25**LCAC 136 *Kongbang* (capacity 50 troops)**LOGISTICS AND SUPPORT 23:**

AGI 14 (converted fishing vessels)

AS 8 (converted cargo ships)

ASR 1 *Kowan***Coastal Defence****FORCES BY ROLE****COMBAT SUPPORT**

2 AshM regt with HY-1/KN-01 (6 sites, and probably some mobile launchers)

**EQUIPMENT BY TYPE****ARTY**

TOWED 122mm M-1931/37; 152mm M-1937

COASTAL 130mm M-1992; SM-4-1

MSL • AshM HY-1; KN-01

**Air Force 110,000**

4 air divs. 1st, 2nd and 3rd Air Divs (cvt) responsible for N, E and S air defence sectors respectively; 8th Air Div (trg) responsible for NE sector. The AF controls the national airline.

Flying hours 20 hrs/year on ac

**FORCES BY ROLE****BOMBER**3 lt regt with H-5; Il-28 *Beagle***FIGHTER**1 regt with MiG-15 *Fagot*6 regt with J-5; MiG-17 *Fresco*4 regt with J-6; MiG-19 *Farmer*5 regt with J-7; MiG-21F-13/PFM *Fishbed*1 regt with MiG-21bis *Fishbed*1 regt with MiG-23ML/P *Flogger*1 regt with MiG-29A/S/UB *Fulcrum***GROUND ATTACK**1 regt with Su-25/Su-25UBK *Frogfoot***TRANSPORT**

Some regt with An-2 *Colt/Y-5* (to infiltrate 2 air-force sniper brigades deep into ROK rear areas); An-24 *Coke*; Il-18 *Coot*; Il-62M *Classic*; Tu-134 *Crusty*; Tu-154 *Careless*

**TRAINING**

Some regt with CJ-6; FT-2; MiG-21U/UM

**TRANSPORT HELICOPTER**

Some regt with Hughes 500D/E; Mi-8 *Hip*; Mi-17 *Hip H*; Mil-26 *Halo*; PZL Mi-2 *Hoplite*; Z-5

**AIR DEFENCE**

19 bde with S-125 *Pechora* (SA-3 *Goa*); S-75 *Dvina* (SA-2 *Guideline*); S-200 *Angara* (SA-5 *Gammon*); 9K36 *Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1* (SA-16 *Gimlet*); 9K32 *Strela-2* (SA-7 *Grail*)‡; KN-06

**EQUIPMENT BY TYPE****AIRCRAFT 545 combat capable**BBR 80 Il-28 *Beagle/H-5†*

FTR 401+: MiG-15 *Fagot*; 107 MiG-17 *Fresco/J-5*; 100 MiG-19 *Farmer/J-6*; 120 MiG-21F-13 *Fishbed/J-7*; MiG-21PFM *Fishbed*; 46 MiG-23ML *Flogger*; 10 MiG-23P *Flogger*; 18+ MiG-29A/S/UB *Fulcrum*

FGA 30 MiG-21bis *Fishbed*; (18 Su-7 *Fitter* in store)ATK 34 Su-25/Su-25UBK *Frogfoot*

TPT 217+: **Heavy** some Il-76 (operated by state airline); **Light** 208: 6 An-24 *Coke*; 2 Tu-134 *Crusty*; ε200 An-2 *Colt/Y-5*; PAX 9: 2 Il-18 *Coot*; 2 Il-62M *Classic*; 4 Tu-154 *Careless*; 1 Tu-204-300

TRG 215+: 180 CJ-6; 35 FT-2; some MiG-21U/UM

**HELICOPTERS**

MRH 80 Hughes 500D/E†

TPT 206: **Heavy** 4 Mi-26 *Halo*; **Medium** 63: 15 Mi-8 *Hip*/Mi-17 *Hip H*; 48 Mi-4 *Hound/Z-5*; **Light** 139 PZL Mi-2 *Hoplite*

UAV • **ISR** • **Medium** some (unidentified indigenous type); **Light** *Pchela-1* (*Shmel*) (reported)

**AD • SAM**

SP some KN-06 (status unknown)

TOWED 312+: 179+ S-75 *Dvina* (SA-2 *Guideline*); 133 S-125 *Pechora* (SA-3 *Goa*)

STATIC/SHELTER 38 S-200 (SA-5 *Gammon*)

MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K36 *Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1* (SA-16 *Gimlet*)

**MSL**ASM Kh-23 (AS-7 *Kerry*); Kh-25 (AS-10 *Karen*)

AAM • **IR** R-3 (AA-2 *Atoll*)‡; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); PL-5; PL-7; SARH R-23/24 (AA-7 *Apex*); R-27R/ER (AA-10 A/C *Alamo*)

**Paramilitary 189,000 active****Security Troops 189,000 (incl border guards, public safety personnel)**

Ministry of Public Security

**Worker/Peasant Red Guard ε5,700,000 reservists**

Org on a province/town/village basis; comd structure is bde–bn–coy–pl; small arms with some mor and AD guns (but many units unarmed)

**Cyber**

Since the 1970s, the North Korean military (the Korean People's Army – KPA) has maintained a modest electronic-warfare (EW) capability. As a result of strategic reviews following *Operation Desert Storm*, the KPA established an information-warfare (IW) capability under the concept of 'electronic intelligence warfare' (EIW). In 1998, Unit 121 was reportedly established within the Reconnaissance Bureau of the General Staff Department to undertake offensive cyber operations. Experts assess North Korea as conceiving of cyber capabilities as useful tools for 'coercive diplomacy' and 'disruptive actions' in the South in the case of war. North Korea has launched distributed-denial-of-service attacks on South Korean institutions and pursues cyber infiltration against military and other government agencies. The attack on Sony Pictures in 2014 was attributed to North Korea. In response, US President Obama said that the US 'will respond. We will respond proportionally, and we'll respond in a place and time and manner that we choose.' North Korea's internet service was shut down, for a time, four days later. However, the incident illustrated that while attribution of North Korean activity may have been possible in this case, the country has also invested significant capacity in cyber operations.



## Korea, Republic of ROK

South Korean Won		2014	2015	2016
GDP	won	1485tr	1,561tr	
	US\$	1.41tr	1.39tr	
per capita	US\$	27,970	27,513	
Growth	%	3.3	2.7	
Inflation	%	1.3	0.7	
Def bdgt	won	35.7tr	37.5tr	
	US\$	33.9bn	33.5bn	
US\$1=won		1,052.96	1,120.74	

Population 49,115,196

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	7.1%	3.4%	3.7%	3.3%	27.0%	5.4%
Female	6.6%	3.1%	3.3%	3.0%	26.5%	7.6%

### Capabilities

South Korea's primary military concern remains its troubled relationship with North Korea. This has led to a defence policy that seeks to recapitalise conventional military capabilities in order to maintain Seoul's qualitative edge, whilst simultaneously pursuing the niche capabilities required to deter North Korea's artillery, ballistic-missile and littoral-submarine threats. Military procurement is therefore currently both extensive and widely spread, and includes new armoured vehicles and artillery, tactical and tanker aircraft, UAVs, precision munitions, ballistic and cruise missiles, satellites, and cyber- and missile-defence equipment. Whilst most of these acquisitions are from indigenous defence industry, the lengthy timelines of key programmes such as Korean Air and Missile Defence (KAMD) and 'Kill Chain' (intended to give Seoul the ability to detect and destroy North Korean ballistic missiles prior to their launch) have led to imports of key items, such as *Spike* NLOS and *Patriot* PAC-3 missiles. The US alliance remains a key element of defence strategy, and the transfer of wartime operational control of forces to Seoul, planned for the end of 2015, has been delayed again, and will now be 'conditions based' with no firm date set. Meanwhile, although a possible deployment of the US THAAD missile-defence system has been suggested, no decision on this had been taken by late 2015.

**ACTIVE 628,000 (Army 495,000 Navy 70,000 Air 65,000) Paramilitary 4,500**

*Conscript liability* Army, Navy and Air Force 26 months

**RESERVE 4,500,000**

Reserve obligation of three days per year. First Combat Forces (Mobilisation Reserve Forces) or Regional Combat Forces (Homeland Defence Forces) to age 33.

**Reserve Paramilitary 3,000,000**

Being reorganised

### ORGANISATIONS BY SERVICE

**Army 495,000**

### FORCES BY ROLE

#### COMMAND

2 army HQ  
8 corps HQ  
1 (Capital Defence) comd HQ

#### SPECIAL FORCES

1 (Special Warfare) SF comd  
7 SF bde

#### MANOEUVRE

##### Armoured

5 armd bde

##### Mechanised

6 mech inf div (1 recce bn, 1 armd bde, 2 mech inf bde, 1 fd arty bde, 1 engr bn)

##### Light

16 inf div (1 recce bn, 1 tk bn, 3 inf regt, 1 arty regt (4 arty bn), 1 engr bn)

2 indep inf bde

##### Air Manoeuvre

1 air aslt bde

##### Other

3 (Counter Infiltration) bde

##### Aviation

1 (army avn) comd

#### COMBAT SUPPORT

3 SSM bn  
1 ADA bde  
5 ADA bn  
6 engr bde  
5 engr gp  
1 CBRN defence bde  
8 sigs bde

#### COMBAT SERVICE SUPPORT

4 log cpt cmd  
5 sy regt

### Reserves

#### FORCES BY ROLE

##### COMMAND

1 army HQ

##### MANOEUVRE

###### Light

24 inf div

#### EQUIPMENT BY TYPE

**MBT** 2,418+: 1,000 K1; 484 K1A1; 4+ K2; 253 M48; 597 M48A5; 80 T-80U; (400 M47 in store)

**AIFV** 370: 40 BMP-3; ε330 K21

**APC** 2,790

**APC (T)** 2,560: 300 Bv 206; 1,700 KIFV; 420 M113; 140 M577

**APC (W)** 220; 20 BTR-80; 200 KM-900/-901 (Fiat 6614)

**PPV** 10 *MaxxPro*

**ARTY** 11,038+

**SP** 1,353+: **155mm** 1,340: ε300 K9 *Thunder*; 1,040 M109A2 (K55/K55A1); **175mm** some M107; **203mm** 13 M110

**TOWED** 3,500+: **105mm** 1,700 M101/KH-178; **155mm** 1,800+ KH-179/M114/M115

**MRL** 185+: **130mm** 156 K136 *Kooryong*; **227mm** 29 M270

**MLRS** (all ATACMS capable); **239mm** some *Chunmoo*

**MOR** 6,000: **81mm** KM29 (M29); **107mm** M30

**AT**

**MSL • MANPATS** 9K115 *Metis* (AT-7 *Saxhorn*); TOW-2A RCL 57mm; 75mm; 90mm M67; 106mm M40A2  
**GUNS** 58  
 SP 90mm 50 M36  
 TOWED 76mm 8 M18 *Hellcat* (AT gun)

**HELICOPTERS**

ATK 60 AH-1F/J *Cobra*  
 MRH 175: 130 Hughes 500D; 45 MD-500  
 TPT 276: **Heavy** 37: 31 CH-47D *Chinook*; 6 MH-47E *Chinook*; **Medium** 127: 40 KUH-1 *Surion*; 87 UH-60P *Black Hawk*; **Light** 112: ε100 Bell-205 (UH-1H *Iroquois*); 12 Bo-105

**AD****SAM**

SP *Chun Ma* (*Pegasus*)  
**MANPAD** FIM-92A *Stinger*; *Javelin*; *Mistral*; 9K31 *Igla-1* (SA-16 *Gimlet*)

**GUNS** 330+

SP 170: 20mm ε150 KIFV *Vulcan* SPAAG; 30mm 20 BIHO *Flying Tiger*  
 TOWED 160: 20mm 60 M167 *Vulcan*; 35mm 20 GDF-003; 40mm 80 L/60/L/70; M1

**RADAR • LAND** AN/TPQ-36 *Firefinder* (arty, mor); AN/TPQ-37 *Firefinder* (arty); RASIT (veh, arty)

**MSL**

SRBM 30 *Hyonmu I/IIA/IIIB*  
 LACM *Hyonmu III*

**AEV** 207 M9

ARV 238: 200 K1; K288A1; M47; 38 M88A1

**VLB** 56 K1**Navy 70,000 (incl marines)**

Three separate fleet elements; 1st Fleet Donghae (East Sea/Sea of Japan); 2nd Fleet Pyeongtaek (West Sea/Yellow Sea); 3rd Fleet Busan (South Sea/Korea Strait); independent submarine command; three additional flotillas (incl SF, mine warfare, amphibious and spt elements) and 1 Naval Air Wing (3 gp plus spt gp).

**EQUIPMENT BY TYPE****SUBMARINES • TACTICAL 23****SSK** 12:

6 *Chang Bogo* (GER Type-209/1200; KSS-1) with 8 single 533mm TT with SUT HWT  
 3 *Chang Bogo* with 8 single 533mm TT with SUT HWT/UGM-84B *Harpoon* AShM  
 3 *Son Won-il* (GER Type 214; KSS-2; AIP fitted) with 8 single 533mm TT with SUT HWT/*Hae Sung* AShM (additional vessels in build)

**SSC** 11:

9 *Cosmos*  
 2 *Dolgorae* (KSS-1) with 2 single 406mm TT

**PRINCIPAL SURFACE COMBATANTS 23****CRUISERS • CGHM 3:**

3 *Sejong* (KDX-3) (*Aegis* Baseline 7) with 2 quad Mk141 Inchr with RGM-84 *Harpoon* AShM, 1 48-cell Mk41 VLS with SM-2MR SAM, 1 32-cell Mk41 VLS with SM-2MR SAM, 1 Mk49 GMLS with RIM-116 SAM, 2 triple Mk32 324mm ASTT with K745 LWT, 1 32-cell VLS with ASROC, 1 *Goalkeeper* CIWS, 1 127mm gun (capacity 2 *Lynx* Mk99 hel)

**DESTROYERS • DDGHM 6:**

6 *Chungmugong Yi Sun-Jhin* (KDX-2) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM (some may be fitted with *Hae Sung* AShM), 1 32-cell Mk41 VLS with SM-2MR SAM/ASROC, 1 Mk49 GMLS with RIM-116 SAM, 2 triple Mk32 324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS, 1 127mm gun (capacity 1 *Lynx* Mk99 hel)

**FRIGATES 14****FFGHM 6:**

3 *Gwanggaeto Daewang* (KDX-1) with 2 quad Mk141 Inchr with RGM-84 *Harpoon* AShM, 1 16 cell Mk48 VLS with *Sea Sparrow* SAM, 2 triple Mk32 324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS, 1 127mm gun (capacity 1 *Lynx* Mk99 hel)  
 3 *Incheon* with 2 quad Inchr with *Hae Sung* AShM, 1 21-cell Mk49 Inchr with RIM-116 SAM, 2 triple 324mm ASTT with K745 *Blue Shark* LWT, 1 Mk15 1B *Phalanx* CIWS, 1 127 mm gun

FFGM 8 *Ulsan* with 2 quad Mk141 Inchr with RGM-84C *Harpoon* AShM, 2 triple Mk32 324mm ASTT with Mk46 LWT, 2 76mm gun

**PATROL AND COASTAL COMBATANTS 116****CORVETTES • FSG 36:**

17 *Gumdoksuri* with 2 twin Inchr with *Hae Sung* AShM, 1 76mm gun  
 19 *Po Hang* with 2 twin Inchr with RGM-84 *Harpoon* AShM, 2 triple 324mm ASTT with Mk46 LWT, 2 76mm gun

**PBF** 80 *Sea Dolphin***MINE WARFARE 10****MINE COUNTERMEASURES 9**

MHO 6 *Kan Kyeong*

MSO 3 *Yang Yang*

**MINELAYERS • ML** 1 *Won San* with 2 triple Mk32 324mm ASTT, 1 76mm gun, 1 hel landing platform

**AMPHIBIOUS****PRINCIPAL AMPHIBIOUS SHIPS 2****LPD 2:**

1 *Cheonwangbong* (LST-II) (capacity 2 LCM; 300 troops; 2 UH-60 hel)  
 1 *Dokdo* with 1 Mk49 GMLS with RIM-116 SAM, 2 *Goalkeeper* CIWS (capacity 2 LCAC; 10 tanks; 700 troops; 10 UH-60 hel)

**LANDING SHIPS • LST 4** *Alligator* with 1 hel landing platform (capacity 20 tanks; 300 troops)

**LANDING CRAFT 41**

LCAC 5: 3 *Tsaplya* (capacity 1 MBT; 130 troops); 2 LSF-II

LCM 10 LCM-8

LCT 6

LCVP 20

**LOGISTICS AND SUPPORT 24**

AG 1 *Sunjin* (trials spt)

AGOR 17 (civil manned, funded by the Ministry of Transport)

AORH 3 *Chun Jee*

ARS 1

ATS 2

## Naval Aviation

### EQUIPMENT BY TYPE

**AIRCRAFT** 16 combat capable

ASW 16: 8 P-3C *Orion*; 8 P-3CK *Orion*

TPT • **Light** 5 Cessna F406 *Caravan II*

### HELICOPTERS

ASW 24: 11 *Lynx* Mk99; 13 *Lynx* Mk99-A

MRH 3 SA319B *Alouette III*

TPT 15: **Medium** 8 UH-60P *Black Hawk* **Light** 7 Bell 205 (UH-1H *Iroquois*)

## Marines 29,000

### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

2 mne div (1 recce bn, 1 tk bn, 3 mne regt, 1 amph bn,

1 arty regt, 1 engr bn)

1 mne bde

#### COMBAT SUPPORT

Some cbt spt unit

### EQUIPMENT BY TYPE

MBT 100: 50 K1A1; 50 M48

AAV 166 AAV-7A1

ARTY • **TOWED 105mm; 155mm**

AT • **MSL** • SP *Spike* NLOS

MSL • **ASHm** RGM-84A *Harpoon* (truck mounted)

## Naval Special Warfare Flotilla

## Air Force 65,000

4 Comd (Ops, Southern Combat, Logs, Trg)

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

3 sqn with F-4E *Phantom II*

6 sqn with F-5E/F *Tiger II*

3 sqn with F-15K *Eagle*

10 sqn with F-16C/D *Fighting Falcon* (KF-16C/D)

1 sqn with FA-50 *Fighting Eagle*

1 sqn with FA-50 *Fighting Eagle* (forming)

#### ISR

1 wg with KO-1

#### SIGINT

1 sqn with Hawker 800RA/XP

#### SEARCH & RESCUE

2 sqn with AS332L *Super Puma*; Bell 412EP; HH-47D *Chinook*; HH-60P *Black Hawk*; Ka-32 *Helix* C

#### TRANSPORT

1 VIP sqn with B-737-300; B-747; CN-235-220; S-92A *Superhawk*; VH-60P *Black Hawk* (VIP)

3 sqn (incl 1 Spec Ops) with C-130H/H-30/J-30 *Hercules*

2 sqn with CN-235M-100/220

#### TRAINING

2 sqn with F-5E/F *Tiger II*

1 sqn with F-16C/D *Fighting Falcon*

4 sqn with KT-1

1 sqn with Il-103

3 sqn with T-50/TA-50 *Golden Eagle*\*

#### TRANSPORT HELICOPTER

1 sqn with UH-60P *Black Hawk* (Spec Ops)

## AIR DEFENCE

3 AD bde (total: 3 SAM bn with MIM-23B I-HAWK; 2

SAM bn with MIM-104E *Patriot* PAC-2 GEM-T)

### EQUIPMENT BY TYPE

**AIRCRAFT** 556 combat capable

FTR 174: 142 F-5E *Tiger II*; 32 F-5F *Tiger II*

FGA 314: 70 F-4E *Phantom II*; 60 F-15K *Eagle*; 118 F-16C *Fighting Falcon* (KF-16C); 46 F-16D *Fighting Falcon* (KF-16D); 20 FA-50 *Fighting Eagle*; (some F-4D *Phantom II* in store)

AEW&C 4 B-737 AEW

ISR 24: 4 Hawker 800RA; 20 KO-1

SIGINT 4 Hawker 800SIG

TPT 38: **Medium** 16: 8 C-130H *Hercules*; 4 C-130H-30

*Hercules*; 4 C-130J-30 *Hercules*; **Light** 20: 12 CN-

235M-100; 8 CN-235M-220 (incl 2 VIP); **PAX** 2: 1 B-737-300; 1 B-747

TRG 186: 23 Il-103; 83 KT-1; 49 T-50 *Golden Eagle*\*; 9 T-50B *Black Eagle*\* (aerobatics); 22 TA-50 *Golden Eagle*\*

### HELICOPTERS

SAR 16: 5 HH-47D *Chinook*; 11 HH-60P *Black Hawk*

MRH 3 Bell 412EP

TPT • **Medium** 30: 2 AS332L *Super Puma*; 8 Ka-32 *Helix* C; 3 S-92A *Superhawk*; 7 UH-60P *Black Hawk*; 10 VH-60P *Black Hawk* (VIP)

UAV • **ISR** 103+ **Medium** 3+: some *Night Intruder*; 3

*Searcher* **Light** 100 *Harpy*

AD • **SAM** 206

SP 48 MIM-104E *Patriot* PAC-2 GEM-T

TOWED 158 MIM-23B I-HAWK

### MSL

AAM • **IR** AIM-9 *Sidewinder*; **IIR** AIM-9X *Sidewinder*;

SARH AIM-7 *Sparrow*; **ARH** AIM-120B/C5 AMRAAM

ASM AGM-65A *Maverick*; AGM-84H SLAM-ER

ASHm AGM-84 *Harpoon*; AGM-130; AGM-142 *Popeye*

ARM AGM-88 HARM

## Paramilitary €4,500 active

**Civilian Defence Corps** 3,000,000 reservists (to age 50)

## Coast Guard €4,500

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 54

PSOH 1 *Sambongho*

PSO 4: 1 *Sumjinkang*; 3 *Mazinger*

PCO 16: 1 *Han Kang* with 1 76mm gun; 15 *Tae Geuk*

PCC 24: 4 *Bukhansan*; 6 (430 tonne); 14 *Hae Uri*

PB 9: 5 *Hyundai Type*; €4 (various)

### AMPHIBIOUS

**LANDING CRAFT** • **LCAC** 8: 1 BHT-150; 4 *Griffon* 470TD; 3 *Griffon* 8000TD

**LOGISTICS AND SUPPORT** • **ARS** 30+

### AIRCRAFT

MP 5: 1 C-212-400 MP; 4 CN-235-110 MPA

TPT • **PAX** 1 CL-604

### HELICOPTERS

MRH 7: 5 AS565MB *Panther*; 1 AW139; 1 Bell 412SP

TPT • **Medium** 8 Ka-32 *Helix* C

## Cyber

South Korea established a Cyber Warfare Command Centre with over 200 personnel in early 2010, in the wake of a substantial distributed-denial-of-service attack in 2009. The new centre responds to the attention given to cyber and information security by the National Intelligence Service and the Defense Security Command. In early 2014, there was the first meeting of a new Korea-US National Defense Cyber Cooperation Working Group, designed to share information and enhance cooperation in relation to policy, strategy, doctrine and training.

## DEPLOYMENT

### AFGHANISTAN

NATO • ISAF 50

### ARABIAN SEA

Combined Maritime Forces • CTF-151: 1 DDGHM

### CÔTE D'IVOIRE

UN • UNOCI 2 obs

### INDIA/PAKISTAN

UN • UNMOGIP 7 obs

### LEBANON

UN • UNIFIL 320; 1 mech inf bn

### LIBERIA

UN • UNMIL 1; 1 obs

### SOUTH SUDAN

UN • UNMISS 273; 2 obs; 1 engr coy

### SUDAN

UN • UNAMID 2

### UAE

128 (trg activities at UAE Spec Ops School)

### WESTERN SAHARA

UN • MINURSO 4 obs

## FOREIGN FORCES

Sweden NNSC: 5 obs

Switzerland NNSC: 5 obs

United States US Pacific Command: 28,500

**Army** 19,200; 1 HQ (8th Army) at Seoul; 1 div HQ (2nd Inf) at Tongduchon; 1 armd bde with M1 *Abrams*; M2/ M3 *Bradley*; M109; 1 (FS cbt avn) hel bde with AH-64 *Apache*; CH-47 *Chinook*; UH-60 *Black Hawk*; 1 ISR hel bn with OH-58D *Kiowa Warrior*; 1 arty (fires) bde with M270 MLRS; 1 AD bde with MIM 104 *Patriot/FIM-92A Avenger*; 1 (APS) armd bde eqpt set

**Navy** 250

**USAF** 8,800; 1 HQ (7th Air Force) at Osan AB; 1 fr wg at Kunsan AB (2 fr sqn with 20 F-16C/D *Fighting Falcon*); 1 fr wg at Osan AB (1 fr sqn with 20 F-16C/D *Fighting Falcon*, 1 atk sqn with 24 A-10C *Thunderbolt II*); 1 ISR sqn at Osan AB with U-2S

**USMC** 250

## Laos LAO

New Lao Kip		2014	2015	2016
<b>GDP</b>	kip	94tr	102tr	
	US\$	11.7bn	12.5bn	
<i>per capita</i>	US\$	1,693	1,785	
<b>Growth</b>	%	7.4	7.5	
<b>Inflation</b>	%	5.5	5.3	
<b>Def exp</b>	kip	€197bn		
	US\$	€24m		
<b>FMA</b>	US\$	0.3m	0.2m	0.2m
<b>US\$1=kip</b>		8,050.27	8,163.60	

**Population** 6,911,544

**Ethnic groups:** Lao 55%; Khmou 11%; Hmong 8%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	17.2%	5.5%	5.1%	4.4%	15.7%	1.7%
<b>Female</b>	16.9%	5.6%	5.1%	4.5%	16.2%	2.1%

## Capabilities

The Lao People's Armed Forces (LPAF) have considerable military experience from the Second Indo-China War and the 1988 border war with Thailand. However, Laos is one of the world's poorest countries, and the defence budget and military procurement have been limited for more than 20 years. The armed forces remain closely linked to the ruling Communist Party, and their primary role is internal security. Contacts with the Chinese and Vietnamese armed forces continue, but the LPAF have made no international deployments and have little capacity for sustained high-intensity operations. Laos participates in ADMM-Plus military exercises, and since 2014 has been co-chair of the ADMM-Plus expert working group on HA/DR, with Japan.

**ACTIVE 29,100 (Army 25,600 Air 3,500) Paramilitary 100,000**

*Conscript liability* 18 months minimum

## ORGANISATIONS BY SERVICE

### Army 25,600

#### FORCES BY ROLE

4 mil regions

#### MANOEUVRE

**Armoured**

1 armd bn

**Light**

5 inf div

7 indep inf regt

65 indep inf coy

**Aviation**

1 (liaison) flt

#### COMBAT SUPPORT

5 arty bn

9 ADA bn

- 1 engr regt  
2 (construction) engr regt

**EQUIPMENT BY TYPE**

**MBT** 25: 15 T-54/T-55; 10 T-34/85

**LT TK** 10 PT-76

**APC (W)** 50: 30 BTR-40/BTR-60; 20 BTR-152

**ARTY** 62+

**TOWED** 62: **105mm** 20 M101; **122mm** 20 D-30/M-30 M-1938; **130mm** 10 M-46; **155mm** 12 M114

**MOR** **81mm**; **82mm**; **107mm** M-1938/M2A1; **120mm** M-43

**AT** • **RCL** **57mm** M18/A1; **75mm** M20; **106mm** M40; **107mm** B-11

**AD** • **SAM** • **MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡; 25 9K310 *Igla-1* (SA-16 *Gimlet*)

**GUNS**

**SP** **23mm** ZSU-23-4

**TOWED** **14.5mm** ZPU-1/ZPU-4; **23mm** ZU-23; **37mm** M-1939; **57mm** S-60

**ARV** T-54/T-55

**VLB** MTU

**Army Marine Section €600****EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** • **PBR** 52+  
**AMPHIBIOUS LCM** 4+

**Air Force 3,500****FORCES BY ROLE****TRANSPORT**

1 sqn with An-2 *Colt*; An-26 *Curl*; An-74 *Coaler*; Y-7; Y-12; Yak-40 *Codling* (VIP)

**TRAINING**

1 sqn with Yak-18 *Max*

**TRANSPORT HELICOPTER**

1 sqn with Ka-32T *Helix* C; Mi-6 *Hook*; Mi-8 *Hip*; Mi-17 *Hip* H; Mi-26 *Halo*; SA360 *Dauphin*

**EQUIPMENT BY TYPE****AIRCRAFT**

**TPT** • **Light** 15: 4 An-2 *Colt*; 3 An-26 *Curl*; 1 An-74 *Coaler*; 5 Y-7; 1 Y-12; 1 Yak-40 *Codling* (VIP)

**TRG** 8 Yak-18 *Max*

**HELICOPTERS**

**MRH** 15: 11 Mi-17 *Hip* H; 4 Z-9A

**TPT** 15: **Heavy** 2: 1 Mi-6 *Hook*; 1 Mi-26 *Halo*

**Medium** 10: 1 Ka-32T *Helix* C; 9 Mi-8 *Hip*

**Light** 3 SA360 *Dauphin*

**MSL** • **AAM** • **IR** R-3 (AA-2 *Atoll*)†

**Paramilitary**

**Militia Self-Defence Forces** 100,000+

Village 'home guard' or local defence

**Malaysia MYS**

Malaysian Ringgit RM		2014	2015	2016
<b>GDP</b>	RM	1.11tr	1.18tr	
	US\$	338bn	313bn	
<i>per capita</i>	US\$	11,049	10,073	
<b>Growth</b>	%	6.0	4.7	
<b>Inflation</b>	%	3.1	2.4	
<b>Def bdgt</b>	RM	16.1bn	17.8bn	17.3bn
	US\$	4.92bn	4.74bn	
<b>US\$1=RM</b>		3.27	3.75	

**Population** 30,513,848

**Ethnic groups:** Malay and other indigenous (Bunipatre) 64%; Chinese 27%; Indian 9%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	14.7%	4.4%	4.2%	3.9%	20.9%	2.7%
<b>Female</b>	13.8%	4.2%	4.1%	3.9%	20.2%	3.0%

**Capabilities**

Malaysia's armed forces have considerable experience of counter-insurgency. Substantial modernisation programmes over the last 30 years have helped develop their capacity for external defence, but budget constraints are delaying some significant new equipment programmes. Army units have deployed on UN peacekeeping operations, and the navy has achieved well-publicised successes with its anti-piracy patrols in the Gulf of Aden. There is also considerable emphasis on joint-service operations. Malaysian forces regularly participate in Five Power Defence Arrangements and other exercises with regional and international partners. However, the 2013 armed intrusion at Lahad Datu in Sabah State and the aftermath of the March 2014 disappearance of Malaysia Airlines flight MH370 both revealed serious shortcomings in military capabilities, the latter particularly highlighting gaps in air and maritime surveillance and security. Addressing these shortcomings is clearly a high priority, as is bolstering capabilities to defend James Shoal, off Sarawak, in the light of growing tensions in the South China Sea. New combat aircraft, maritime-patrol aircraft and patrol vessels are planned, and airlift will also be boosted. Malaysia's first A400M was delivered in March.

**ACTIVE 109,000** (Army 80,000 Navy 14,000 Air 15,000) Paramilitary 24,600

**RESERVE 51,600** (Army 50,000, Navy 1,000 Air Force 600) Paramilitary 244,700

**ORGANISATIONS BY SERVICE**

**Army** 80,000 (to be 60–70,000)

2 mil region, 4 area comd (div)

**FORCES BY ROLE****SPECIAL FORCES**

1 SF bde (3 SF bn)



**MANOEUVRE****Armoured**

1 tk regt (5 armd bn)

**Mechanised**

5 armd regt

1 mech inf bde (3 mech bn, 1 cbt engr sqn)

**Light**

1 inf bde (4 inf bn, 1 arty regt)

5 inf bde (3 inf bn, 1 arty regt)

2 inf bde (2 inf bn)

1 inf bde (2 inf bn)

**Air Manoeuvre**

1 (Rapid Deployment Force) AB bde (1 lt tk sqn, 3 AB bn, 1 lt arty regt, 1 engr sqn)

**Aviation**

1 hel sqn

**COMBAT SUPPORT**

9 arty regt

1 arty locator regt

1 MRL regt

3 ADA regt

1 cbt engr sqn

3 fd engr regt (total: 7 cbt engr sqn, 3 engr spt sqn)

1 int unit

4 MP regt

1 sigs regt

**COMBAT SERVICE SUPPORT**

1 const regt

**EQUIPMENT BY TYPE****MBT** 48 PT-91M *Twardy***LT TK** 21 *Scorpion*-90**RECCE** 296+: 130 AML-60/90; 92 *Ferret* (60 mod); K216A1 (as CBRN recce); 74 SIBMAS (some †)**AIFV** 90: 31 ACV300 *Adnan* (25mm *Bushmaster*); 13 ACV300 *Adnan* AGL; 46 AV8 *Gempita* IFV25 being delivered**APC** 787**APC (T)** 265: 149 ACV300 *Adnan* (incl 69 variants); 13 FV4333 *Stormer* (upgraded); 63 K-200A; 40 K-200A1**APC (W)** 522: 32 *Anoa*; 300 *Condor* (incl variants); 150 LAV-150 *Commando*; 30 M3 *Panhard*; 10 VBL**ARTY** 424**TOWED** 134: **105mm** 100 Model 56 pack howitzer;**155mm** 34: 12 FH-70; 22 G-5**MRL** 36 **ASTROS II** (equipped with 127mm SS-30)**MOR** 254: **81mm SP** 14: 4 K281A1; 10 ACV300-S; **120mm SP** 8 ACV-S **81mm**: 232**AT • MSL****SP** 8 ACV300 *Baktar Shikan*; K263**MANPATS** 9K115 *Metis* (AT-7 *Saxhorn*); 9K115-2 *Metis-M* (AT-13 *Saxhorn* 2); *Eryx*; *Baktar Shihan* (HJ-8); C90-CRRB; SS.11**RCL** 260: **84mm** 236 *Carl Gustav*; **106mm** 24 M40**AMPHIBIOUS • LCA** 165 *Damen Assault Craft* 540 (capacity 10 troops)**HELICOPTERS • TPT • Light** 10 AW109**AD****SAM** 15 *Jernas* (*Rapier* 2000)**MANPAD** *Anza*; HY-6 (FN-6); 9K38 *Igla* (SA-18 *Grouse*); QW-1 *Vanguard*; *Starburst***GUNS • TOWED** 52: **35mm** 16 GDF-005; **40mm** 36 L40/70

AEV 9: 3 MID-M; 6 WZT-4

ARV 41+: *Condor*; 15 ACV300; 4 K-288A1; 22 SIBMASVLB 5+: *Leguan*; 5 PMCz-90**Reserves****Territorial Army**

Some paramilitary forces to be incorporated into a re-organised territorial organisation.

**FORCES BY ROLE****MANOEUVRE****Mechanised**

4 armd sqn

**Light**

16 inf regt (3 inf bn)

**Other**

1 (border) sy bde (5 bn)

5 (highway) sy bn

**COMBAT SUPPORT**

5 arty bty

2 fd engr regt

1 int unit

3 sigs sqn

**COMBAT SUPPORT**

4 med coy

5 tpt coy

**Navy 14,000**

3 Regional Commands; Kuantan (East Coast); Kinabalu (Borneo) &amp; Langkawi (West Coast)

**EQUIPMENT BY TYPE****SUBMARINES • TACTICAL • SSK** 2 *Tunku Abdul Rahman* (FRA *Scorpene*) with 6 single 533mm TT with WASS *Black Shark* HWT/SM-39 *Exocet* ASHM**PRINCIPAL SURFACE COMBATANTS 10****FRIGATES 10****FFGHM 2:**2 *Lekiu* with 2 quad Inchr with MM-40 *Exocet* Block II ASHM, 1 16-cell VLS with *Sea Wolf* SAM, 2 B515 ILAS-3 triple 324mm ASTT with *Sting Ray* LWT, 1 57mm gun (capacity 1 *Super Lynx* hel)**FFG 2:**2 *Kasturi* with 2 quad Inchr with MM-40 *Exocet* Block II ASHM, 1 twin 375mm A/S mor, 1 100mm gun, 1 57m gun, 1 hel landing platform**FF 6:**6 *Kedah* (GER MEKO) with 1 76mm gun, 1 hel landing platform, (fitted for MM-40 *Exocet* ASHM & RAM CIWS)**PATROL AND COASTAL COMBATANTS 37****CORVETTES • FSGM** 4 *Laksamana* with 3 twin Inchr with Mk 2 *Otomat* ASHM, 1 *Albatros* quad Inchr with *Aspide* SAM, 1 76mm gun**PCFG** 4 *Perdana* (FRA *Combattante II*) with 2 single Inchr with MM-38 *Exocet* ASHM, 1 57mm gun**PBG** 4 *Handalan* (SWE *Spica-M*) with 2 twin Inchr with MM-38 *Exocet* ASHM, 1 57mm gun**PBF** 17 *Tempur* (SWE CB90)**PB** 8: 6 *Jerong* (Lurssen 45) with 1 57mm gun; 2 *Sri Perlis***MINE WARFARE • MINE COUNTERMEASURES 4****MCO** 4 *Mahamiru* (ITA *Lerici*)

**AMPHIBIOUS**

LANDING CRAFT • LCM/LCU 115

**LOGISTICS AND SUPPORT 14**AGH 2 *Bunga Mas Lima* (capacity 1 AS555 *Fennec*)AGS 2: 1 *Mutiara* with 1 hel landing platform; 1 *Perantau*AP 2 *Sri Gaya*AOR 2: 1 *Mahawangsa* with 2 57mm guns; 1 *Sri Indera Sakti* with 1 57mm gunASR 1 *Mega Bakti*

ATF 2

AX 1 *Hang Tuah* with 1 57mm gun, 1 hel landing platform

AXS 1

YTM 1

**Naval Aviation 160****EQUIPMENT BY TYPE****HELICOPTERS**ASW 6 *Super Lynx* 300MRH 6 AS555 *Fennec*MSL • ASHm *Sea Skua***Special Forces****FORCES BY ROLE****SPECIAL FORCES**

1 (mne cdo) SF unit

**Air Force 15,000**

1 air op HQ, 2 air div, 1 trg and log comd, 1 Intergrated Area Def Systems HQ

Flying hours 60 hrs/year

**FORCES BY ROLE****FIGHTER**2 sqn with MiG-29/MiG-29UB *Fulcrum***FIGHTER/GROUND ATTACK**1 sqn with F/A-18D *Hornet*1 sqn with Su-30MKM *Flanker*2 sqn with *Hawk* Mk108\*/Mk208\***FIGHTER/GROUND ATTACK/ISR**1 sqn with F-5E/F *Tiger II*; RF-5E *Tigereye\****MARITIME PATROL**

1 sqn with Beech 200T

**TANKER/TRANSPORT**2 sqn with KC-130H *Hercules*; C-130H *Hercules*; C-130H-30 *Hercules*; Cessna 402B**TRANSPORT**1 (VIP) sqn with A319CT; AW109; B-737-700 BBJ; BD700 *Global Express*; F-28 *Fellowship*; *Falcon* 900

1 sqn with CN-235

**TRAINING**1 unit with PC-7; SA316 *Alouette III***TRANSPORT HELICOPTER**4 (tpt/SAR) sqn with H225M *Super Cougar*; S-61A-4 *Nuri*; S-61N; S-70A *Black Hawk***AIR DEFENCE**1 sqn with *Starburst***SPECIAL FORCES**

1 (Air Force Commando) unit (airfield defence/SAR)

**EQUIPMENT BY TYPE****AIRCRAFT 67 combat capable**FTR 21: 8 F-5E *Tiger II*; 3 F-5F *Tiger II*; 8 MiG-29 *Fulcrum* (MiG-29N); 2 MiG-29UB *Fulcrum* (MIG-29NUB)FGA 26: 8 F/A-18D *Hornet*; 18 Su-30MKMISR 6: 4 Beech 200T; 2 RF-5E *Tigereye\**TKR 4 KC-130H *Hercules*TPT 33: **Heavy** 1 A400M *Atlas*; **Medium** 10: 2 C-130H *Hercules*; 8 C-130H-30 *Hercules*; **Light** 17: 8 CN-235M-220 (incl 2 VIP); 9 Cessna 402B (2 modified for aerial survey);PAX 5: 1 A319CT; 1 B-737-700 BBJ; 1 BD700 *Global Express*; 1 F-28 *Fellowship*; 1 *Falcon* 900TRG 80: 6 *Hawk* Mk108\*; 12 *Hawk* Mk208\*; 8 MB-339C; 7 MD3-160 *Aero Tiga*; 30 PC-7; 17 PC-7 Mk II *Turbo Trainer***HELICOPTERS**MRH 17 SA316 *Alouette III*TPT 45: **Heavy** 12 H225M *Super Cougar*; **Medium** 32: 28 S-61A-4 *Nuri*; 2 S-61N; 2 S-70A *Black Hawk*; **Light** 1 AW109UAV • ISR • **Medium** *Aludra*AD • SAM • **MANPAD** *Starburst***MSL**AAM • IR AIM-9 *Sidewinder*; R-73 (AA-11 *Archer*); IIR AIM-9X *Sidewinder*; IR/SARH R-27 (AA-10 *Alamo*); SARH AIM-7 *Sparrow*; ARH AIM-120C AMRAAM; R-77 (AA-12 *Adder*)ASM AGM-65 *Maverick*ASHM AGM-84D *Harpoon***Paramilitary €24,600****Police–General Ops Force 18,000****FORCES BY ROLE****COMMAND**

5 bde HQ

**SPECIAL FORCES**

1 spec ops bn

**MANOEUVRE****Other**

19 paramilitary bn

2 (Aboriginal) paramilitary bn

4 indep paramilitary coy

**EQUIPMENT BY TYPE**RECCE €100 S52 *Shorland*APC (W) 170: 140 AT105 *Saxon*; €30 SB-301**Malaysian Maritime Enforcement Agency (MMEA) €4,500**

Controls 5 Maritime Regions (Northern Peninsula; Southern Peninsula; Eastern Peninsula; Sarawak; Sabah), subdivided into a further 18 Maritime Districts. Supported by one provisional MMEA Air Unit.

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 191**PSO 2 *Langkawi* with 1 57mm gun, 1 hel landing platformPBF 57: 18 *Penggalang 17* (TUR MRTP 16); 2 *Penggalang 18*; 6 *Penyelamat 20*; 16 *Penggalang 16*; 15 *Tugau*PB 132: 15 *Gagah*; 4 *Malawali*; 2 *Nusa*; 3 *Nusa 28*; 1 *Peninjau*; 7 *Ramunia*; 2 *Rhu*; 4 *Semilang*; 15 *Sipadan* (ex-

*Kris/Sabah*); 8 *Icarus 1650*; 10 *Pengawal*; 10 *Pengawal 13*; 27 *Pengawal 23*; 4 *Penyelamat*; 2 *Perwira*; 9 *Sipadan Steel*; 9 *Sipadan Kayu*

**LOGISTICS AND SUPPORT • AX 1 *Marlin*****AIRCRAFT • MP 2** *Bombardier 415MP***HELICOPTERS**MRH 3 *AS365 Dauphin***Marine Police 2,100****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 132**PBF 12: 6 *Sangitan*; 6 *Stan Patrol 1500*

PB/PBR 120

**Police Air Unit****EQUIPMENT BY TYPE****AIRCRAFT**TPT • **Light** 17: 4 *Cessna 206 Stationair*; 6 *Cessna 208 Caravan*; 7 *PC-6 Turbo-Porter***HELICOPTERS**TPT • **Light** 2: 1 *Bell 206L Long Ranger*; 1 *AS355F Ecureuil II***Area Security Units (R) 3,500**

(Auxiliary General Ops Force)

**FORCES BY ROLE****MANOEUVRE****Other**

89 paramilitary unit

**Border Scouts (R) 1,200**

in Sabah, Sarawak

**People's Volunteer Corps 240,000 reservists (some 17,500 armed)**

RELA

**Customs Service****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 23**

PBF 10

PB 13

**DEPLOYMENT****DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 7; 8 obs

**LEBANON**

UN • UNIFIL 830; 1 mech inf bn

**LIBERIA**

UN • UNMIL 1; 3 obs

**PHILIPPINES**

IMT 11

**SUDAN**

UN • UNAMID 11

UN • UNISFA 1 obs

**WESTERN SAHARA**

UN • MINURSO 7 obs

**FOREIGN FORCES****Australia** 130; 1 inf coy (on 3-month rotational tours); 1 AP-3C *Orion* on occasion**Mongolia MNG**

Mongolian Tugrik t		2014	2015	2016
<b>GDP</b>	t	21.9tr	24.3tr	
	US\$	12bn	12.4bn	
<b>per capita</b>	US\$	4,115	4,179	
<b>Growth</b>	%	7.8	3.5	
<b>Inflation</b>	%	12.9	7.6	
<b>Def bdgt</b>	t	190bn	178bn	199bn
	US\$	104m	91m	
<b>FMA (US)</b>	US\$	2.4m	2m	1.6m
<b>US\$1=t</b>		1,822.48	1,955.45	

**Population** 2,992,908**Ethnic groups:** Khalka 80%; Kazakh 6%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	13.7%	4.3%	4.7%	5.2%	19.5%	1.7%
<b>Female</b>	13.2%	4.1%	4.6%	5.3%	21.3%	2.4%

**Capabilities**

Mongolia's small armed forces remain reliant on Soviet-era equipment, although this has been supplemented by recent deliveries of second-hand Russian armaments. Positioned between much stronger neighbours, territorial integrity would be difficult to maintain in the event of an inter-state conflict. This has encouraged Mongolia to pursue strong defence ties and bilateral training with multiple regional powers, as well as the US. The army has focused its development on peacekeeping operations, and the country hosts an annual multilateral peacekeeping exercise.

**ACTIVE 10,000 (Army 8,900 Air 800 Construction Troops 300) Paramilitary 7,500***Conscript liability* One year for males aged 18–25**RESERVE 137,000 (Army 137,000)****ORGANISATIONS BY SERVICE****Army 5,600; 3,300 conscript (total 8,900)****FORCES BY ROLE****MANOEUVRE****Mechanised**

1 MR bde

**Light**

1 (rapid deployment) lt inf bn (2nd bn to form)

**Air Manoeuvr**

1 AB bn

**COMBAT SUPPORT**

1 arty regt

**EQUIPMENT BY TYPE**

MBT 420: 370 T-54/T-55; 50 T-72A

RECCE 120 BRDM-2  
 AIFV 310 BMP-1  
 APC (W) 210: 150 BTR-60; 40 BTR-70M; 20 BTR-80  
 ARTY 570  
 TOWED €300: 122mm D-30/M-30 (M-1938); 130mm M-46; 152mm ML-20 (M-1937)  
 MRL 122mm 130 BM-21  
 MOR 140: 120mm; 160mm; 82mm  
 AT • GUNS 200: 85mm D-44/D-48; 100mm M-1944/MT-12  
 AD • SAM 2+ S-125 *Pechora* 2M (SA-3B *Goa*)  
 ARV T-54/T-55

## Air Force 800

### FORCES BY ROLE

#### TRANSPORT

1 sqn with An-24 *Coke*; An-26 *Curl*

#### ATTACK/TRANSPORT HELICOPTER

1 sqn with Mi-8 *Hip*; Mi-171

#### AIR DEFENCE

2 regt with S-60/ZPU-4/ZU-23

### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 3: 2 An-24 *Coke*; 1 An-26 *Curl*

#### HELICOPTERS

TPT • Medium 13: 11 Mi-8 *Hip*; 2 Mi-171

AD • GUNS • TOWED 150: 14.5mm ZPU-4; 23mm ZU-23; 57mm S-60

## Paramilitary 7,500 active

**Border Guard** 1,300; 4,700 conscript (total 6,000)

**Internal Security Troops** 400; 800 conscript (total 1,200)

### FORCES BY ROLE

#### MANOEUVRE

##### Other

4 gd unit

**Construction Troops** 300

## DEPLOYMENT

### AFGHANISTAN

NATO • *Operation Resolute Support* 120

UN • UNAMA 1 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 2 obs

### SOUTH SUDAN

UN • UNMISS 863; 7 obs; 1 inf bn

### SUDAN

UN • UNAMID 70; 1 fd hospital

### UKRAINE

OSCE • Ukraine 1

### WESTERN SAHARA

UN • MINURSO 4 obs

## Myanmar MMR

Myanmar Kyat K		2014	2015	2016
GDP	K	62.8tr	76.5tr	
	US\$	63.1bn	65.8bn	
per capita	US\$	1,228	1,269	
Growth	%	8.5	8.5	
Inflation	%	5.9	12.2	
Def bdgt	K	2.36tr	2.61tr	
	US\$	2.37bn	2.24bn	
US\$1=K		995.23	1,162.62	

Population 56,320,206

**Ethnic groups:** Burman 68%; Shan 9%; Karen 7%; Rakhine 4%; Chinese 3+%; Other Chin, Kachin, Kayan, Lahu, Mon, Palaung, Pao, Wa, 9%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.3%	4.5%	4.6%	4.5%	20.5%	2.3%
Female	12.8%	4.4%	4.5%	4.5%	21.1%	3.0%

## Capabilities

Myanmar's large, army-dominated armed forces have, since the country's independence struggle in the 1940s, been intimately involved in domestic politics. Even though the military-backed government lost the November 2015 election, the armed forces remain a key political force in the country: 25% of seats in parliament are reserved for the army. The focus of the armed forces has always been on holding together this ethnically diverse state, particularly in the face of one of the world's longest-running insurgencies, conducted by the Karen, Kachin, Mon, Shan and other minority groups around the country's perimeter – a legacy that has also included widespread charges of extensive human-rights abuse. Tentative ceasefires with most of the rebel groups have for the last two decades contributed to a decline in the army's operational experience. Morale among ordinary soldiers (mainly conscripts) is reportedly low. While the army grew substantially after the military seized power in 1988, its counter-insurgency focus means that it has remained essentially a light-infantry force. Nevertheless, since the 1990s, large-scale procurement has resulted in the entry into service of new armoured vehicles, air-defence weapons, artillery, combat aircraft and ships from China, Russia and other diverse sources, and the 2015 defence budget included another nominal increase in spending.

**ACTIVE 406,000 (Army 375,000 Navy 16,000 Air 15,000) Paramilitary 107,250**

## ORGANISATIONS BY SERVICE

### Army €375,000

14 military regions, 7 regional op comd

### FORCES BY ROLE

#### COMMAND

20 div HQ (military op comd)

10 inf div HQ

34+ bde HQ (tactical op comd)

**MANOEUVRE****Armoured**

10 armd bn

**Light**

100 inf bn (coy)

337 inf bn (coy) (regional comd)

**COMBAT SUPPORT**

7 arty bn

37 indep arty coy

7 AD bn

6 cbt engr bn

54 fd engr bn

40 int coy

45 sigs bn

**EQUIPMENT BY TYPE****MBT** 185+: 10 T-55; 50 T-72S; 25+ Type-59D; 100 Type-69-II**LT TK** 105 Type-63 (€60 serviceable)**RECCE** 127+: 12+ EE-9 *Cascavel*; 45 *Ferret*; 40 *Humber Pig*;30 *Mazda***AIFV** 10+ BTR-3U**APC** 391+**APC (T)** 331: 26 MT-LB; 250 Type-85; 55 Type-90**APC (W)** 50+: 20 Hino; 30+ Type-92**PPV** 10 MPV**ARTY** 419+**SP 155mm** 42: 30 NORA B-52; 12 SH-1**TOWED** 264+: **105mm** 132: 36 M-56; 96 M101; **122mm** 100D-30; **130mm** 16 M-46; **140mm**; **155mm** 16 Soltam M-845P**MRL** 33+: **107mm** 30 Type-63; **122mm** BM-21 (reported);Type-81; **240mm** 3+ M-1985 mod**MOR** 80+: **82mm** Type-53 (M-37); **120mm** 80+: 80 Soltam;

Type-53 (M-1943)

**AT****RCL** 1,000+: **106mm** M40A1; **84mm** €1,000 *Carl Gustav***GUNS** 84**SP 105mm** 24 PTL-02 mod**TOWED** 60: **57mm** 6-pdr; **76.2mm** 17-pdr**AD****SAM****SP** 4+: 4 KS-1A (HQ-12); Some 2K22 *Tunguska* (SA-19 *Grison*)**TOWED** S-125 *Pechora-2M* (SA-26)**MANPAD** HN-5 *Hong Nul/Red Cherry* (reported); 9K310 *Igla-1* (SA-16 *Gimlet*)**GUNS** 46**SP 57mm** 12 Type-80**TOWED** 34: **37mm** 24 Type-74; **40mm** 10 M1**MSL** • **SRBM** some *Hwasong-6* (reported)**ARV** Type-72**Navy** €16,000**EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS** • **FRIGATES** 4**FFGH** 1 *Kyansithar* with 2 twin Inchr with DPRK ASHM (possibly KN-01), 4 AK630 CIWS, 1 76mm gun (capacity 1 med hel)**FFG** 3:1 *Aung Zeya* with 2 twin Inchr with DPRK ASHM (possibly KN-01), 4 AK630 CIWS, 1 76mm gun, 1 hel landing platform2 *Mahar Bandoola* (PRC Type-053H1) with 2 quad Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 2 RBU 1200 A/S mor, 2 twin 100mm gun**PATROL AND COASTAL COMBATANTS** 113**CORVETTES** • **FSG** 2 *Anawrahta* with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) ASHM; 1 76mm gun, 1 hel landing platform**PCG** 7: 6 *Houxin* with 2 twin Inchr with C-801 (CSS-N-4 *Sardine*) ASHM; 1 Type-491 with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) ASHM**PCO** 2 *Indaw***PCG** 9 *Hainan* with 4 RBU 1200 A/S mor, 2 twin 57mm gun**PBG** 4 *Myanmar* with 2 twin Inchr with C-801 (CSS-N-4 *Sardine*) ASHM**PBF** 1 Type-201**PB** 31: 3 PB-90; 6 PGM 401; 6 PGM 412; 13 *Myanmar*; 3 *Swift***PBR** 57: 4 *Sagu*; 9 Y-301+; 1 Y-301 (Imp); 43 (various)**AMPHIBIOUS** • **CRAFT** 18: 8 LCU 10 LCM**LOGISTICS AND SUPPORT** 18**ABU** 1; **AGS** 1; **AK** 1; **AKSL** 5; **AP** 9; **YAC** 1**Naval Infantry** 800**FORCES BY ROLE****MANOEUVRE****Light**

1 inf bn

**Air Force** €15,000**FORCES BY ROLE****FIGHTER**4 sqn with F-7 *Airguard*; FT-7; MiG-29B *Fulcrum*; MiG-29UB *Fulcrum***GROUND ATTACK**2 sqn with A-5M *Fantan***TRANSPORT**1 sqn with An-12 *Cub*; F-27 *Friendship*; FH-227; PC-6A/B *Turbo Porter***TRAINING**2 sqn with G-4 *Super Galeb*\*; PC-7 Turbo Trainer\*; PC-9\*1 (trg/liaison) sqn with Cessna 550 *Citation II*; Cessna180 *Skywagon*; K-8 *Karakorum*\***TRANSPORT HELICOPTER**4 sqn with Bell 205; Bell 206 *Jet Ranger*; Mi-17 *Hip H*; Mi-35P *Hind*; PZL Mi-2 *Hoplite*; PZL W-3 *Sokol*; SA316 *Alouette III***EQUIPMENT BY TYPE****AIRCRAFT** 167 combat capable**FTR** 88: 49 F-7 *Airguard*; 10 FT-7; 18 MiG-29 *Fulcrum*; 6 MiG-29SE *Fulcrum*; 5 MiG-29UB *Fulcrum***ATK** 22 A-5M *Fantan***TPT** 22: **Medium** 2 An-12 *Cub*; **Light** 16: 3 Beech 1900D; 4 Cessna 180 *Skywagon*; 1 Cessna 550 *Citation II*; 3 F-27 *Friendship*; 5 PC-6A/B *Turbo Porter*; **PAX** 4 FH-227**TRG** 67+: 12 G-4 *Super Galeb*\*; 10+ Grob G120; 24+ K-8 *Karakorum*\*; 12 PC-7 *Turbo Trainer*\*; 9 PC-9\***HELICOPTERS****ATK** 12 Mi-35P *Hind***MRH** 23: 3 AS365; 11 Mi-17 *Hip H*; 9 SA316 *Alouette III***TPT** 46: **Medium** 10 PZL W-3 *Sokol*; **Light** 36: 12 Bell 205; 6 Bell 206 *Jet Ranger*; 18 PZL Mi-2 *Hoplite***MSL** • **AAM** • **IR** PL-5; R-73 (AA-11 *Archer*) **IR/SARH** R-27 (AA-10 *Alamo*)



**Paramilitary 107,250****People's Police Force 72,000****People's Militia 35,000****People's Pearl and Fishery Ministry €250****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS • PBR 6 Carpentaria****DEPLOYMENT****LIBERIA**

UN • UNMIL 2 obs

**SOUTH SUDAN**

UN • UNMISS 2

**Nepal NPL**

Nepalese Rupee NR		2014	2015	2016
GDP	NR	1.94tr	2.12tr	
	US\$	19.8bn	21.4bn	
<i>per capita</i>	US\$	703	751	
Growth	%	5.4	3.4	
Inflation	%	9.0	7.2	
Def bdgt	NR	32.4bn	32.1bn	37.5bn
	US\$	329m	322m	
FMA (US)	US\$	1.75m	1.3m	5m
US\$1=NR		98.26	99.49	

Population 31,551,305

Religious groups: Hindu 90%; Buddhist 5%; Muslim 3%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	15.6%	5.9%	5.5%	4.4%	15.9%	2.1%
Female	15.1%	5.7%	5.4%	4.6%	17.2%	2.5%

**Capabilities**

Nepal's armed forces have traditionally focused on internal security, while maintaining territorial integrity appears to be their main role. The army's dominance reflects the country's history of counter-insurgency in the 1990s and 2000s, as well as continuous explosive-ordnance-disposal and anti-riot activities in its territory. Following a 2006 peace accord with the Maoist People's Liberation Army, and the subsequent transition from monarchy to republic, Maoist personnel went through a process of demobilisation or integration into the regular forces. Mobility remains a challenge, due to limited transport assets and the country's topography. This shortfall was highlighted by the considerable dependence on foreign military assistance following the April 2015 earthquake. Nepal's forces have no power-projection capability – though a small air wing provides transport and support – but are extensively involved in UN peace-support operations, particularly in Africa and the Middle

East. Training support is provided by several countries, including the US, India and China.

**ACTIVE 95,750 (Army 95,750) Paramilitary 62,000****ORGANISATIONS BY SERVICE****Army 95,750****FORCES BY ROLE****COMMAND**6 inf div HQ  
1 (valley) comd**SPECIAL FORCES**

1 bde (1 SF bn, 1 AB bn, 1 cdo bn, 1 ranger bn, 1 mech inf bn)

**MANOEUVRE****Light**16 inf bde (total: 63 inf bn)  
32 indep inf coy**COMBAT SUPPORT**4 arty regt  
2 AD regt  
4 indep AD coy  
5 engr bn**EQUIPMENT BY TYPE****RECCE 40 Ferret****APC 253****APC (W)** 13: 8 OT-64C; 5 WZ-551**PPV** 240: 90 *Casspir*; 150 MPV**ARTY 92+****TOWED 105mm** 22: 8 L118 Light Gun; 14 Pack Howitzer (6 non-operational)**MOR** 70+: **81mm**; **120mm** 70 M-43 (est 12 op)**AD • GUNS • TOWED** 32+: **14.5mm** 30 Type-56 (ZPU-4); **37mm** (PRC); **40mm** 2 L/60**Air Wing 320****EQUIPMENT BY TYPE†****AIRCRAFT • TPT** 4: **Light** 3: 1 BN-2T *Islander*; 2 M-28 *Skytruck*; **PAX** 1 BAe-748**HELICOPTERS****MRH** 12: 2 *Dhruv*; 2 *Lancer*; 3 Mi-17-1V *Hip H*; 2 Mi-17V-5 *Hip*; 1 SA315B *Lama* (*Cheetah*); 2 SA316B *Alouette* III**TPT** 3: **Medium** 1 SA330J *Puma*; **Light** 2 AS350B2 *Ecureuil***Paramilitary 62,000****Armed Police Force 15,000**

Ministry of Home Affairs

**Police Force 47,000****DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 61; 3 obs; 1 MP pl

**CÔTE D'IVOIRE**

UN • UNOCI 1; 3 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 1,028; 18 obs; 1 inf bn; 1 engr coy

**HAITI**

UN • MINUSTAH 2

**IRAQ**

UN • UNAMI 77; 1 sy unit

**LEBANON**

UN • UNIFIL 870; 1 inf bn

**LIBERIA**

UN • UNMIL 18; 2 obs

**MALI**

UN • MINUSMA 145; 3 obs; 1 EOD coy

**SOUTH SUDAN**

UN • UNMISS 1,576; 12 obs; 2 inf bn

**SUDAN**

UN • UNAMID 365; 9 obs; 1 SF coy; 1 inf coy

**SYRIA/ISRAEL**

UN • UNDOF 162; 1 inf coy

**WESTERN SAHARA**

UN • MINURSO 5 obs

**FOREIGN FORCES**

United Kingdom 280 (Gurkha trg org)

**New Zealand NZL**

New Zealand Dollar NZ\$		2014	2015	2016
GDP	NZ\$	238bn	244bn	
	US\$	198bn	171bn	
<i>per capita</i>	US\$	43,363	36,963	
Growth	%	3.3	2.2	
Inflation	%	1.2	0.2	
Def exp	NZ\$	3.4bn		
	US\$	2.82bn		
Def bdgt	NZ\$	3.44bn	3.45bn	3.11bn
	US\$	2.86bn	2.42bn	
US\$1=NZ\$		1.20	1.43	

Population 4,438,393

Ethnic groups: NZ European 58%; Maori 15%; Other European 13%; Other Polynesian 5%; Chinese 2%; Indian 1%; Other 6%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	10.2%	3.5%	3.6%	3.3%	22.5%	6.8%
Female	9.7%	3.3%	3.4%	3.3%	22.7%	7.9%

**Capabilities**

New Zealand's armed forces, though small, are well trained and motivated, and are armed with comparatively modern equipment. Their key role is to protect territorial integrity and the country's maritime region. The armed forces regularly participate in multinational operations and the country is a member of the Five Power Defence Arrangements.

A successor to the 2010 defence white paper was due to be concluded by the end of 2015, considering military requirements out to 2040. In July 2015, the country for the first time took part in *Talisman Sabre*, a large Australia–US joint exercise. The amphibious-assault vessel HMNZS *Canterbury* and the fleet-replenishment vessel HMNZS *Endeavour* took part in the exercise. *Endeavour* is due to retire in 2018 and, as of the third quarter of 2015, the defence ministry was considering the replacement. Army and air units also participated in *Talisman Sabre*. Air force capabilities have been reinforced with new training aircraft, and transport and naval support helicopters. However, future procurement programmes – including new naval vessels and heavy transport aircraft – could severely stretch the budget. Deliveries of ten SH-2G helicopters previously intended for the Royal Australian Navy continued during 2015, while the last of 11 T-6C *Texan II* aircraft on order for the RNZAF were delivered. The first pilot-training course using the aircraft will be held in 2016.

**ACTIVE 8,950** (Army 4,500 Navy 2,050 Air 2,400)**RESERVE 2,200** (Army 1,550 Navy 450 Air Force 200)**ORGANISATIONS BY SERVICE****Army 4,500****FORCES BY ROLE****SPECIAL FORCES**

1 SF gp

**MANOEUVRE****Light**

1 inf bde (1 armd recce regt, 2 lt inf bn, 1 arty regt (2 arty bty, 1 AD tp), 1 engr regt(-), 1 MI coy, 1 MP coy, 1 sigs regt, 2 log bn, 1 med bn)

**COMBAT SUPPORT**

1 EOD sqn

**EQUIPMENT BY TYPE**

AIFV 95 NZLAV-25

ARTY 74

TOWED 105mm 24 L118 Light Gun

MOR 81mm 50

AT • MSL • MANPATS 24 *Javelin*RCL 84mm 42 *Carl Gustav*

AEV 7 NZLAV

ARV 3 LAV-R

**Reserves****Territorial Force 1,550 reservists**

Responsible for providing trained individuals for augmenting deployed forces

**FORCES BY ROLE****COMBAT SERVICE SUPPORT**

3 (Territorial Force Regional) trg regt

**Navy 2,050**

Fleet HQ at Auckland

**EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS • FRIGATES • FFHM 2:**

2 *Anzac* (GER MEKO 200) with 1 octuple Mk41 VLS with RIM-7M *Sea Sparrow* SAM, 2 triple Mk32 324mm TT, 1 Mk15 *Phalanx* Block 1B CIWS, 1 127mm gun (capacity 1 SH-2G(I) *Super Seasprite* ASW hel)

**PATROL AND COASTAL COMBATANTS 6**

PSOH 2 *Otago* (capacity 1 SH-2G(I) *Super Seasprite* ASW hel)  
PCC 4 *Rotoiti*

**AMPHIBIOUS • LANDING CRAFT • LCM 2****LOGISTICS AND SUPPORT 3**

AKRH 1 *Canterbury* (capacity 4 NH90 tpt hel; 1 SH-2G(I) *Super Seasprite* ASW hel; 2 LCM; 16 NZLAV; 14 NZLAV; 20 trucks; 250 troops)

AOR 1 *Endeavour* with 1 hel landing platform

YDT 1 *Manawanui*

**Air Force 2,400**

Flying hours 190

**FORCES BY ROLE****MARITIME PATROL**

1 sqn with P-3K2 *Orion*

**TRANSPORT**

1 sqn with B-757-200 (upgraded); C-130H *Hercules* (upgraded)

**ANTI-SUBMARINE/SURFACE WARFARE**

1 (RNZAF/RNZN) sqn with SH-2G(I) *Super Seasprite*

**TRAINING**

1 sqn with T-6C *Texan II*

1 sqn with Beech 200 *King Air* (leased)

**TRANSPORT HELICOPTER**

1 sqn with AW109; NH90

**EQUIPMENT BY TYPE****AIRCRAFT 6 combat capable**

ASW 6 P-3K2 *Orion*

TPT 11: **Medium** 5 C-130H *Hercules* (upgraded); **Light** 4 Beech 200 *King Air* (leased); **PAX** 2 B-757-200 (upgraded)

TRG 11 T-6C *Texan II*

**HELICOPTERS**

ASW 8 SH-2G(I) *Super Seasprite*

TPT 13: **Medium** 8 NH90; **Light** 18: 5 AW109

**MSL • AShM AGM Penguin Mk2 mod7****DEPLOYMENT****AFGHANISTAN**

NATO • *Operation Resolute Support* 7

**DJIBOUTI**

Combined Maritime Forces • CTF-151: 1 P-3K2 *Orion*

**EGYPT**

MFO 28; 1 trg unit; 1 tpt unit

**IRAQ**

*Operation Inherent Resolve* 103

**MIDDLE EAST**

UN • UNTSO 8 obs

**SOUTH SUDAN**

UN • UNMISS 1; 2 obs

**Pakistan PAK**

Pakistani Rupee Rs		2014	2015	2016
<b>GDP</b>	Rs	25.1tr	27.4tr	
	US\$	247bn	271bn	
<b>per capita</b>	US\$	1,326	1,427	
<b>Growth</b>	%	4.0	4.2	
<b>Inflation</b>	%	8.6	4.5	
<b>Def bdgt [a]</b>	Rs	632bn	725bn	785bn
	US\$	6.22bn	7.18bn	
<b>FMA (US)</b>	US\$	237m	280m	
<b>US\$1=Rs</b>		101.55	101.06	

[a] Includes budget for Ministry of Defence Production

**Population** 199,085,847

**Religious groups:** Hindu less than 3%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	16.8%	5.7%	5.4%	4.8%	16.7%	2.0%
<b>Female</b>	15.9%	5.4%	5.0%	4.5%	15.6%	2.3%

**Capabilities**

Pakistan's nuclear and conventional forces have traditionally been oriented and structured against a prospective threat from India, but for the army, counter-insurgency and counter-terrorism have been of increasing importance since 2008, and are currently their main focus. Following the summer 2014 launch of *Operation Zarb-e-Azb* to clear North Waziristan of militant groups, the Pakistani Taliban attack on a military school in Peshawar provided political and popular support for a more ambitious army-led operation to counter terrorism across the whole country. The resulting 20-point National Action Plan was backed by all the major political parties, with the Chief of Army Staff stating that the security forces would apprehend all terrorists, along with their facilitators and financiers. The operation has considerably reduced the level of terrorist and insurgent violence. A spike in cross-border incidents with Indian forces since the summer of 2015 has renewed focus on the eastern border. The army continues to contribute to UN peacekeeping operations. Saudi Arabia requested that a Pakistani contingent join the Saudi-led coalition fighting in Yemen. This was rejected by Islamabad, not least because of the level of army commitment to internal security. However, Pakistan successfully deployed two *Sword*-class frigates for evacuation operations in Yemen. The air force is modernising its inventory while improving its precision-strike and ISR capabilities. Pakistan is also producing the Chinese JF-17 combat aircraft. The navy is currently too small to sustain a long campaign against a significant competitor, such as India, but recent and likely future investment in Chinese-supplied frigates, missile craft and submarines could improve sea-denial capabilities.

**ACTIVE 643,800** (Army 550,000 Navy 23,800 Air 70,000) Paramilitary 282,000

## ORGANISATIONS BY SERVICE

### Strategic Forces

Operational control rests with the National Command Authority. The Strategic Plans Directorate (SPD) manages and commands all of Pakistan's military nuclear capability. The SPD also commands a reportedly 25,000-strong military security force responsible for guarding military nuclear infrastructure.

#### Army Strategic Forces Command 12,000-15,000

Commands all land-based strategic nuclear forces.

#### EQUIPMENT BY TYPE

##### MSL • STRATEGIC 60+

**MRBM** ε30 *Ghauri/Ghauri II (Hatf-5)/Shaheen-2 (Hatf-6 – in test); Shaheen-3 (in test)*

**SRBM** 30+: ε30 *Ghaznavi (Hatf-3 – PRC M-11)/Shaheen-1 (Hatf-4); some Abdali (Hatf-2); some Nasr (Hatf-9)*

**LACM** *Babur (Hatf-7); Ra'ad (Hatf-8 – in test)*

#### Air Force

1-2 sqn of F-16A/B or *Mirage 5* may be assigned a nuclear-strike role

### Army 550,000

#### FORCES BY ROLE

##### COMMAND

9 corps HQ

1 (area) comd

##### SPECIAL FORCES

2 SF gp (total: 4 SF bn)

##### MANOEUVRE

###### Armoured

2 armd div

7 indep armd bde

###### Mechanised

2 mech inf div

1 indep mech bde

###### Light

18 inf div

5 indep inf bde

###### Aviation

1 VIP avn sqn

4 avn sqn

3 atk hel sqn

2 ISR hel sqn

2 SAR hel sqn

2 tpt hel sqn

1 spec ops hel sqn

##### COMBAT SUPPORT

9 (corps) arty bde

5 indep arty bde

1 AD comd (3 AD gp (total: 8 AD bn))

7 engr bde

#### EQUIPMENT BY TYPE

**MBT** 2,561+: 415 *Al-Khalid* (MBT 2000); 320 T-80UD; 51 T-54/T-55; 1,100 Type-59/*Al-Zarrar*; 400 Type-69; 275+ Type-85; (270 M48A5 in store)

**APC** 1,390

**APC (T)** 1,260: 1,160 M113/*Talha*; ε100 Type-63

**APC (W)** 120 BTR-70/BTR-80

**PPV** 10 *Dingo II*

**ARTY** 4,472+

**SP** 375: **155mm** 315: 200 M109A2; ε115 M109A5 **203mm** 60 M110/M110A2

**TOWED** 1,659: **105mm** 329: 216 M101; 113 M-56; **122mm** 570: 80 D-30 (PRC); 490 Type-54 (M-1938); **130mm** 410 Type-59-I; **155mm** 322: 144 M114; 148 M198; ε30 *Panther*; **203mm** 28 M115

**MRL** 88+: **107mm** Type-81; **122mm** 52+: 52 *Azar* (Type-83); some KRL-122; **300mm** 36 A100

**MOR** 2,350+: **81mm**; **120mm** AM-50

#### AT

##### MSL

**SP** M901 TOW

**MANPATS** HJ-8; TOW

**RCL** **75mm** Type-52; **106mm** M40A1

**RL** **89mm** M20

**GUNS** **85mm** 200 Type-56 (D-44)

#### AIRCRAFT

**TPT • Light** 14: 1 Beech 200 *King Air*; 1 Beech 350 *King Air*; 3 Cessna 208B; 1 Cessna 421; 1 Cessna 550 *Citation*; 1 Cessna 560 *Citation*; 2 *Turbo Commander* 690; 4 Y-12(II)

**TRG** 88 MFI-17B *Mushshak*

#### HELICOPTERS

**ATK** 38 AH-1F/S *Cobra* with TOW (1 Mi-24 *Hind* in store)

**MRH** 114+: 10 H125M *Fennec*; 6 AW139; 26 Bell 412EP *Twin Huey*; 39+ Mi-17 *Hip H*; 12 SA315B *Lama*; 20 SA319 *Alouette III*

**TPT** 76: **Medium** 36: 31 SA330 *Puma*; 4 Mi-171; 1 Mi-172; **Light** 40: 17 H125 *Ecureuil* (SAR); 5 Bell 205 (UH-1H *Iroquois*); 5 Bell 205A-1 (AB-205A-1); 13 Bell 206B *Jet Ranger II*

**TRG** 10 Hughes 300C

**UAV • ISR • Light** *Bravo*; *Jasoos*; *Vector*

#### AD

##### SAM

**SP** some M113 with RBS-70

**MANPAD** Mk1/Mk2; FIM-92A *Stinger*; HN-5A; *Mistral*; RBS-70

**GUNS • TOWED** 1,933: **14.5mm** 981; **35mm** 248 GDF-002/GDF-005 (with 134 *Skyguard* radar units); **37mm** 310 Type-55 (M-1939)/Type-65; **40mm** 50 L/60; **57mm** 144 Type-59 (S-60); **85mm** 200 Type-72 (M-1939) KS-12

**RADAR • LAND** AN/TPQ-36 *Firefinder* (arty, mor); RASIT (veh, arty); SLC-2

#### MSL

##### STRATEGIC

**MRBM** ε30 *Ghauri/Ghauri II (Hatf-5)*; some *Shaheen-2 (Hatf-6 – in test); Shaheen-3 (in test)*

**SRBM** ε30 *Ghaznavi (Hatf-3 – PRC M-11)/Shaheen-1 (Hatf-4)*; some *Abdali (Hatf-2)*; some *Nasr (Hatf-9)*

**LACM** some *Babur (Hatf-7)*

**TACTICAL • SRBM** 105 *Hatf-1*

**ARV** 117+: 65 Type-653; *Al-Hadeed*; 52 M88A1; T-54/T-55

**VLB** M47M; M48/60

**MW** *Aardvark* Mk II

**Navy** 23,800 (incl €3,200 Marines and €2,000 Maritime Security Agency (see Paramilitary))

#### EQUIPMENT BY TYPE

##### SUBMARINES • TACTICAL 8

###### SSK 5:

- 2 *Hashmat* (FRA *Agosta 70*) with 4 single 533mm ASST with F17P HWT/UGM-84 *Harpoon* AShM
- 3 *Khalid* (FRA *Agosta 90B* – 1 with AIP) with 4 single 533mm ASST with F17 Mod 2 HWT/SM-39 *Exocet* AShM

SSI 3 MG110 (SF delivery) each with 2 single 533mm TT

##### PRINCIPAL SURFACE COMBATANTS • FRIGATES 10

**FFGHM** 4 *Sword* (F-22P) with 2 quad Inchr with C-802A AShM, 1 octuple Inchr with HQ-7 SAM, 2 triple 324mm ASST with Mk 46 LWT, 2 sextuple Type 87 A/S mor, 1 Type 730B CIWS, 1 76mm gun (capacity 1 Z-9C *Haitun* hel)

###### FFGH 2:

- 1 *Tariq* (UK *Amazon*) with 2 twin Mk141 Inchr with RGM-84D *Harpoon* AShM, 2 triple 324mm ASST with Mk 46 LWT, 1 *Phalanx* Block 1B CIWS, 1 114mm gun (capacity 1 hel)
- 1 *Tariq* (UK *Amazon*) with 2 quad Mk141 Inchr with RGM-84D *Harpoon* AShM, 2 single 400mm TT with TP 45 LWT, 1 *Phalanx* Block 1B CIWS, 1 114mm gun (capacity 1 hel)

**FFHM** 3 *Tariq* (UK *Amazon*) with 1 sextuple Inchr with LY-60 (*Aspide*) SAM, 2 single 400mm TT with TP 45 LWT, 1 *Phalanx* Block 1B CIWS, 1 114mm gun (capacity 1 hel)

**FFH** 1 *Alamgir* (US *Oliver Hazard Perry*) with 2 triple 324mm ASST with Mk46 LWT, 1 *Phalanx* CIWS, 1 76mm gun

##### PATROL AND COASTAL COMBATANTS 16

**PCG** 2 *Azmat* (PRC *Houjian* mod) with 2 quad Inchr with C-802A AShM, 1 AK630 CIWS

**PBFG** 2 *Zarrar* (33) with 4 single Inchr each with RGM-84 *Harpoon* AShM

###### PBG 4:

- 2 *Jalalat* with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) AShM
- 2 *Jurrat* with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) AShM

**PBF** 2 *Kaan 15*

**PB** 6: 1 *Larkana*; 1 *Rajshahi*; 4 LCP

##### MINE WARFARE • MINE COUNTERMEASURES

**MHC** 3 *Munsif* (FRA *Eridan*)

##### AMPHIBIOUS

**LANDING CRAFT • UCAC** 4 *Griffon 2000*

##### LOGISTICS AND SUPPORT 17

**AGS** 1 *Behr Paima*

**AOL** 2 *Madagar*

###### AORH 2:

- 1 *Fuqing* with 1 *Phalanx* CIWS (capacity 1 SA319 *Alouette III* hel)
- 1 *Moawin* with 1 *Phalanx* CIWS (capacity 1 *Sea King* Mk45 ASW hel)

**AOT** 3: 1 *Attock*; 2 *Gwadar*

**AXS** 1

**YAG** 1 *Behr Kusha*

**YTM** 7

**Marines** €3,200

#### FORCES BY ROLE

##### SPECIAL FORCES

1 cdo gp

##### MANOEUVRE

**Amphibious**

3 mne bn

##### COMBAT SUPPORT

1 AD bn

#### Naval Aviation

#### EQUIPMENT BY TYPE

**AIRCRAFT** 10 combat capable

**ASW** 10: 3 *Atlantic*; 7 P-3B/C *Orion*

**MP** 6 F-27-200 MPA

**TPT** 4: **Light** 3 ATR-72-500 (MP); **PAX** 1 Hawker 850XP

##### HELICOPTERS

**ASW** 12: 5 *Sea King* Mk45; 7 Z-9C *Haitun*

**MRH** 6 SA319B *Alouette III*

**MSL** • AShM AM-39 *Exocet*

#### Air Force 70,000

3 regional comds: Northern (Peshawar), Central (Sargodha), Southern (Masroor). The Composite Air Tpt Wg, Combat Cadres School and PAF Academy are Direct Reporting Units.

#### FORCES BY ROLE

##### FIGHTER

2 sqn with F-7P/FT-7P *Skybolt*

3 sqn with F-7PG/FT-7PG *Airguard*

1 sqn with F-16A/B MLU *Fighting Falcon*

1 sqn with F-16A/B ADF *Fighting Falcon*

1 sqn with *Mirage IIIID/E* (IIIOD/EP)

##### FIGHTER/GROUND ATTACK

2 sqn with JF-17 *Thunder* (FC-1)

1 sqn with F-16C/D Block 52 *Fighting Falcon*

3 sqn with *Mirage 5* (5PA)

##### ANTI-SURFACE WARFARE

1 sqn with *Mirage 5PA2/5PA3* with AM-39 *Exocet* AShM

##### ELECTRONIC WARFARE/ELINT

1 sqn with *Falcon 20F*

##### AIRBORNE EARLY WARNING & CONTROL

1 sqn with Saab 2000; Saab 2000 *Erieye*

1 sqn with ZDK-03

##### SEARCH & RESCUE

1 sqn with Mi-171Sh (SAR/liaison)

6 sqn with SA316 *Alouette III*

##### TANKER

1 sqn with Il-78 *Midas*

##### TRANSPORT

1 sqn with C-130B/E *Hercules*; CN-235M-220; L-100-20

1 VIP sqn with B-707; Cessna 560XL *Citation Excel*; CN-235M-220; F-27-200 *Friendship*; *Falcon 20E*; Gulfstream IVSP

1 (comms) sqn with EMB-500 *Phenom 100*; Y-12 (II)

##### TRAINING

1 OCU sqn with F-7P/FT-7P *Skybolt*

1 OCU sqn with *Mirage III/Mirage 5*

1 OCU sqn with F-16A/B MLU *Fighting Falcon*



2 sqn with K-8 *Karakorum\**  
 2 sqn with MFI-17  
 2 sqn with T-37C *Tweet*

**AIR DEFENCE**

1 bty with CSA-1 (SA-2 *Guideline*); 9K310 *Igla-1* (SA-16 *Gimlet*)  
 6 bty with *Crotale*  
 10 bty with SPADA 2000

**EQUIPMENT BY TYPE****AIRCRAFT** 450 combat capable

FTR 210: 49 F-7PG *Airguard*; 74 F-7P *Skybolt*; 24 F-16A MLU *Fighting Falcon*; 21 F-16B MLU *Fighting Falcon*; 9 F-16A ADF *Fighting Falcon*; 4 F-16B ADF *Fighting Falcon*; 21 FT-7; 6 FT-7PG; 2 *Mirage IIIB*

FGA 192: 12 F-16C Block 52 *Fighting Falcon*; 6 F-16D Block 52 *Fighting Falcon*; 49 JF-17 *Thunder* (FC-1 Block 1); 4 JF-17 *Thunder* (FC-1 Block 2); 7 *Mirage IIID* (*Mirage IIIOD*); 63 *Mirage IIIE* (*IIIEP*); 39 *Mirage 5* (5PA)/5PA2; 2 *Mirage 5D* (5DPA)/5DPA2; 10 *Mirage 5PA3* (ASuW)

ISR 10 *Mirage IIIR\** (*Mirage IIIRP*)

ELINT 2 *Falcon 20F*

AEW&C 5: 1 Saab 2000 *Erieye* (2 more non-op); 4 ZDK-03 *TKR 4 II-78 Midas*

TPT 33: **Medium** 16: 5 C-130B *Hercules*; 10 C-130E *Hercules*; 1 L-100-20; **Light** 12: 1 Cessna 560XL *Citation Excel*; 4 CN-235M-220; 4 EMB-500 *Phenom 100*; 1 F-27-200 *Friendship*; 2 Y-12 (II); **PAX** 5: 1 B-707; 1 *Falcon 20E*; 2 *Gulfstream IVSP*; 1 Saab 2000

TRG 142: 38 K-8 *Karakorum\**; 80 MFI-17B *Mushshak*; 24 T-37C *Tweet*

**HELICOPTERS**

MRH 15 SA316 *Alouette III*

TPT • **Medium** 4 Mi-171Sh

**AD • SAM** 190+

TOWED 190: 6 CSA-1 (SA-2 *Guideline*); 144 *Crotale*; ε40 SPADA 2000

MANPAD 9K310 *Igla-1* (SA-16 *Gimlet*)

**RADAR • LAND** 6+: 6 AR-1 (AD radar low level); some *Condor* (AD radar high level); some FPS-89/100 (AD radar high level); MPDR 45/MPDR 60/MPDR 90 (AD radar low level); Type-514 (AD radar high level)

**MSL**

**AAM • IR** AIM-9L/P *Sidewinder*; *U-Darter*; PL-5; **SARH** Super 530; **ARH** PL-12 (SD-10 – likely on order for the JF-17); AIM-120C AMRAAM

**ASM**: AGM-65 *Maverick*; *Raptor II*

**AshM** AM-39 *Exocet*

**LACM** *Ra'ad* (in test)

**ARM** MAR-1

**Paramilitary** 282,000 active**Coast Guard****EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** 5

**PBF** 4

**PB** 1

**Frontier Corps** 70,000

Ministry of Interior

**FORCES BY ROLE****MANOEUVRE****Reconnaissance**

1 armd recce sqn

**Other**

11 paramilitary regt (total: 40 paramilitary bn)

**EQUIPMENT BY TYPE**

**APC (W)** 45 UR-416

**Maritime Security Agency** €2,000**EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS** 1

**DESTROYERS • DD** 1 *Nazim* (ex-US *Gearing*) with 2 triple 324mm ASST, 1 twin 127mm gun

**PATROL AND COASTAL COMBATANTS** 15

**PCC** 4 *Barkat*

**PBF** 5

**PB** 6: 2 *Subqat* (PRC *Shanghai II*); 1 *Sadaqat* (ex-PRC *Huangfen*); 3 *Guns*

**National Guard** 185,000

Incl Janbaz Force; Mujahid Force; National Cadet Corps; Women Guards

**Pakistan Rangers** 25,000

Ministry of Interior

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 1,124; 10 obs; 1 inf bn; 1 hel sqn; 1 engr coy

**CÔTE D'IVOIRE**

UN • UNOCI 290; 12 obs; 2 inf coy; 2 tpt coy

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 3,443; 44 obs; 3 mech inf bn; 1 inf bn; 1 hel sqn

**LIBERIA**

UN • UNMIL 131; 9 obs; 1 fd hospital

**SUDAN**

UN • UNAMID 2,121; 9 obs; 2 inf bn, 2 engr coy; 1 med pl

**WESTERN SAHARA**

UN • MINURSO 13 obs

**FOREIGN FORCES**

Figures represent total numbers for UNMOGIP mission in India and Pakistan

**Chile** 2 obs

**Croatia** 10 obs

**Finland** 6 obs

**Ghana** 2 obs

**Korea, Republic of** 7 obs

**Philippines** 6 obs

**Sweden** 5 obs

**Switzerland** 3 obs

**Thailand** 3 obs

**Uruguay** 2 obs

## Papua New Guinea PNG

Papua New Guinea Kina K		2014	2015	2016
GDP	K	41.7bn	47bn	
	US\$	16.8bn	18bn	
<i>per capita</i>	US\$	2,232	2,332	
Growth	%	8.5	12.3	
Inflation	%	5.3	6.0	
def exp	K	277m		
	US\$	112m		
Def bdgt [a]	K	246m	261m	256m
	US\$	99m	100m	

US\$1=K 2.24 2.48

[a] Includes defence allocations to the Public Sector Development Programme (PSDP), including funding to the Defence Division and the Defence Production Division.

Population 6,672,429

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	17.5%	5.3%	4.7%	4.0%	17.4%	2.1%
Female	16.9%	5.2%	4.6%	3.9%	16.3%	2.0%

### Capabilities

Papua New Guinea has small, lightly equipped armed forces that in effect constitute an internal-security force only. Core tasks noted in the country's 2013 defence white paper include defending the state; civil-emergency assistance; nation building; and meeting international obligations. However, the document also said that 'our defence capabilities have deteriorated to the extent that we have alarming gaps in our land, air and maritime borders'. There is some concern over the possibility of fighting by separatists in the neighbouring Indonesian territory of Irian Jaya spilling across the western border. The white paper called for defence assets and capability to be rebuilt, and for the overall force size to increase to 5,000 (including 1,000 reservists) by 2017. The extent to which this ambitious plan has begun to be implemented is unclear. Papua New Guinea's main security partner is Australia, with which its armed forces also exercise.

**ACTIVE 1,900** (Army 1,600 Maritime Element 200 Air 100)

### ORGANISATIONS BY SERVICE

**Army** €1,600

**FORCES BY ROLE**  
MANOEUVRE

Light  
2 inf bn

**COMBAT SUPPORT**

1 engr bn  
1 EOD unit  
1 sigs sqn

### EQUIPMENT BY TYPE

ARTY • MOR 3+: 81mm; 120mm 3

### Maritime Element €200

1 HQ located at Port Moresby

### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 4 *Rabaul* (*Pacific*)

AMPHIBIOUS • LANDING SHIPS • LCH 3 *Salamaua* (ex-AUS *Balikpapan*) (of which 1 in trg role)

### Air Force €100

#### FORCES BY ROLE

##### TRANSPORT

1 sqn with CN-235M-100; IAI-201 *Arava*

##### TRANSPORT HELICOPTER

1 sqn with Bell 205 (UH-1H *Iroquois*)†

### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 5: 2 CN-235M-100; 3 IAI-201 *Arava*

HELICOPTERS • TPT • Light 7: 4 Bell 205 (UH-1H *Iroquois*)†; 2 Bell 412 (leased); 1 Bell 212 (leased)

### DEPLOYMENT

#### SOUTH SUDAN

UN • UNMISS 2 obs

#### SUDAN

UN • UNAMID 1; 1 obs

### FOREIGN FORCES

Australia 38; 1 trg unit

## Philippines PHL

Philippine Peso P		2014	2015	2016
GDP	P	12.6tr	13.5tr	
	US\$	285bn	299bn	
<i>per capita</i>	US\$	2,862	2,951	
Growth	%	6.1	6.0	
Inflation	%	4.2	1.9	
Def bdgt [a]	P	87.7bn	98.7bn	114bn
	US\$	1.97bn	2.18bn	
FMA (US)	US\$	50m	40m	40m
US\$1=P		44.42	45.20	

[a] Excludes military pensions

Population 100,998,376

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	17.4%	5.1%	4.7%	4.3%	17.0%	1.8%
Female	16.7%	4.9%	4.5%	4.1%	17.2%	2.5%

## Capabilities

Despite modest increases in defence funding, the capabilities and procurement plans of the Philippine armed forces remain limited in regional terms. Attention remains divided between long-running internal-security threats, disaster relief and growing external-security concerns, focused particularly on the South China Sea. The army and marines are deployed extensively in an internal-security role with air force support in the face of continuing challenges from the Abu Sayyaf Group and other Muslim insurgents in the south, and across the country in a continuing, if low-key, counter-insurgency campaign against the communist New People's Army. Until the withdrawal of the US military presence in 1992, the Philippines had largely relied on Washington to provide external defence, and since then perennially low defence budgets have thwarted efforts to develop any significant capacity for conventional war fighting or deterrence. Military-modernisation budgets have consistently failed to provide the resources needed to fulfil procurement plans. Though the armed forces have benefited from minor purchases of new equipment such as advanced jet trainers, as well as the transfer of surplus US helicopters and coast-guard cutters, it remains unlikely that the Philippines will be able to provide more than a token national capability to defend its maritime claims. For this reason, the country is relying heavily on revived alliance relations with the US for its external defence.

**ACTIVE 125,000** (Army 86,000 Navy 24,000 Air 15,000) Paramilitary 40,500

**RESERVE 131,000** (Army 100,000 Navy 15,000 Air 16,000) Paramilitary 50,000 (to age 49)

## ORGANISATIONS BY SERVICE

### Army 86,000

5 Area Unified Comd (joint service), 1 National Capital Region Comd

### FORCES BY ROLE

#### SPECIAL FORCES

1 spec ops comd (1 Scout Ranger regt, 1 SF regt, 1 lt reaction bn)

#### MANOEUVRE

##### Mechanised

1 lt armd div with (2 mech bde (total: 3 lt armd sqn; 7 armd cav tp; 4 mech inf bn; 1 cbt engr coy; 1 avn bn; 1 cbt engr coy, 1 sigs coy))

##### Light

10 div (each: 3 inf bde; 1 arty bn, 1 int bn, 1 sigs bn)

##### Other

1 (Presidential) gd gp

### COMBAT SUPPORT

1 arty regt HQ  
5 engr bde

### EQUIPMENT BY TYPE

LT TK 7 *Scorpion*

AIFV 36: 2 YPR-765; 34 M113A1 FSV

APC 299

APC (T) 76: 6 ACV300; 70 M113

APC (W) 223: 77 LAV-150 *Commando*; 146 *Simba*

ARTY 254+

TOWED 214: 105mm 204 M101/M102/M-26/M-56  
155mm 10 M114/M-68

MOR 40+: 81mm M29; 107mm 40 M30

AT • RCL 75mm M20; 90mm M67; 106mm M40A1

### AIRCRAFT

TPT • Light 4: 1 Beech 80 *Queen Air*; 1 Cessna 170; 1 Cessna 172; 1 Cessna P206A

UAV • ISR • Medium *Blue Horizon*

ARV ACV-300; *Samson*; M578

## Navy 24,000

### EQUIPMENT BY TYPE

#### PRINCIPAL SURFACE COMBATANTS • FRIGATES

FF 1 *Rajah Humabon* (ex-US *Cannon*) with 3 76mm gun

#### PATROL AND COASTAL COMBATANTS 68

PSOH 2 *Gregorio del Pilar* (ex-US *Hamilton*) with 1 76mm gun, (capacity 1 Bo 105)

PCF 1 *General Mariano Alvaes* (ex-US *Cyclone*)

PCO 11:

3 *Emilio Jacinto* (ex-UK *Peacock*) with 1 76mm gun

6 *Miguel Malvar* (ex-US) with 1 76mm gun

2 *Rizal* (ex-US *Auk*) with 2 76mm gun

PBF 16: 3 *Conrado Yap* (ex-ROK *Sea Hawk*); 7 *Tomas Batilo* (ex-ROK *Chamsuri*); 6 MPAC

PB 32: 2 *Aguinaldo*; 22 *Jose Andrada*; 2 *Kagitingan*; 2 *Point* (ex-US); 4 *Swift Mk3* (ex-US)

PBR 6 Silver Ships

### AMPHIBIOUS

#### LANDING SHIPS • LST 5:

2 *Bacolod City* (US *Besson*) with 1 hel landing platform (capacity 32 tanks; 150 troops)

3 *Zamboanga del Sur* (capacity 16 tanks; 200 troops)

#### LANDING CRAFT 32

LCH 2 (ex-AUS *Balikpapan*)

LCU 12

LCVP 2

LCM 16

### LOGISTICS AND SUPPORT 18

AFD 4

AK 1

AOL 2

AOT 3

AO 1 *Lake Caliraya*

AP 1

AR 1

AWT 2

YTL 3

YTM 1

## Naval Aviation

### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 6: 4 BN-2A *Defender*; 2 Cessna 177 *Cardinal*

HELICOPTERS • TPT 13: Medium 4 Mi-171Sh; Light 9: 3 AW109; 2 AW109E; 4 Bo-105

## Marines 8,300

### FORCES BY ROLE

#### MANOEUVRE

**Amphibious**

4 mne bde (total: 12 mne bn)

**COMBAT SUPPORT**

1 CSS bde (6 CSS bn)

**EQUIPMENT BY TYPE****APC (W)** 42: 19 LAV-150 *Commando*; 23 LAV-300**AAV** 59: 4 LVTH-6+; 55 LVTP-7**ARTY** 31+**TOWED 105mm** 31: 23 M101; 8 M-26**MOR 107mm** M30**Naval Special Operations Group****FORCES BY ROLE****SPECIAL FORCES**

1 SEAL unit

1 diving unit

10 naval spec ops unit

1 special boat unit

**COMBAT SERVICE SUPPORT**

1 EOD unit

**Air Force 15,000****FORCES BY ROLE****FIGHTER**

1 sqn with S-211\*

**GROUND ATTACK**1 sqn with OV-10A/C *Bronco*\***ISR**1 sqn with *Turbo Commander* 690A**SEARCH & RESCUE**4 (SAR/Comms) sqn with Bell 205 (UH-1M *Iroquois*); AUH-76**TRANSPORT**1 sqn with C-130B/H *Hercules*; L-100-201 sqn with N-22B *Nomad*; N-22SL *Searchmaster*1 sqn with F-27-200 MPA; F-27-500 *Friendship*1 VIP sqn with F-28 *Fellowship***TRAINING**

1 sqn with SF-260F/TP

1 sqn with T-41B/D/K *Mescalero***ATTACK HELICOPTER**

1 sqn with MD-520MG

**TRANSPORT HELICOPTER**

1 sqn with AUH-76

1 sqn with W-3 *Sokol*4 sqn with Bell 205 (UH-1H *Iroquois*)1 (VIP) sqn with Bell 412EP *Twin Huey*; S-70A *Black Hawk* (S-70A-5)**EQUIPMENT BY TYPE****AIRCRAFT** 22 combat capable**MP** 2: 1 F-27-200 MPA; 1 N-22SL *Searchmaster***ISR** 10 OV-10A/C *Bronco*\***TPT** 11: **Medium** 5: 1 C-130B *Hercules*; 3 C-130H *Hercules*;1 L-100-20; **Light** 5: 2 C-295; 1 F-27-500 *Friendship*; 1 N-22B *Nomad*; 1 *Turbo Commander* 690A; **PAX** 1 F-28 *Fellowship* (VIP)**TRG** 39: 12 S-211\*; 7 SF-260F; 10 SF-260TP; 10 T-41B/D/K *Mescalero***HELICOPTERS****MRH** 32: 8 W-3 *Sokol*; 3 AUH-76; 8 Bell 412EP *Twin**Huey*; 2 Bell 412HP *Twin Huey*; 11 MD-520MG**TPT** 48: **Medium** 1 S-70A *Black Hawk* (S-70A-5); **Light** 47:2 AW109E; 45 Bell 205 (UH-1H *Iroquois*)**UAV • ISR • Medium** 2 *Blue Horizon* II**Paramilitary****Philippine National Police 40,500**

Department of Interior and Local Government. 15 regional &amp; 73 provincial comd. 62,000 auxiliaries.

**EQUIPMENT BY TYPE****AIRCRAFT****TPT • Light** 5: 2 BN-2 *Islander*; 3 Lancair 320**Coast Guard****EQUIPMENT BY TYPE**

Rodman 38 and Rodman 101 owned by Bureau of Fisheries and Aquatic Resources

**PATROL AND COASTAL COMBATANTS 72****PCO** 5: 4 *San Juan*; 1 *Balsam***PCC** 2 *Tirad***PB** 54: 3 *De Haviland*; 4 *Ilocos Norte*; 1 *Palawan*; 12 PCF50 (US *Swift* Mk1/2); 10 PCF 46; 10 PCF 65 (US *Swift* Mk3); 4 Rodman 38; 10 Rodman 101**PBR** 11**AMPHIBIOUS • LANDING CRAFT 2****LCM** 1**LCVP** 1**LOGISTICS AND SUPPORT • ABU 3****AIRCRAFT • TPT • Light** 2 BN-2 *Islander***HELICOPTERS • TPT • Light** 2 Bo-105**Citizen Armed Force Geographical Units**

50,000 reservists

**MANOEUVRE****Other**

56 militia bn (part-time units which can be called up for extended periods)

**DEPLOYMENT****HAITI**

UN • MINUSTAH 137; 1 HQ coy

**INDIA/PAKISTAN**

UN • UNMOGIP 6 obs

**FOREIGN FORCES****Brunei** IMT 6**Indonesia** IMT 6**Malaysia** IMT 11

## Singapore SGP

Singapore Dollar S\$		2014	2015	2016
GDP	S\$	390bn	399bn	
	US\$	308bn	294bn	
<i>per capita</i>	US\$	56,287	53,224	
Growth	%	2.9	2.2	
Inflation	%	1.0	0.03	
Def bdtg	S\$	12.4bn	13.1bn	
	US\$	9.8bn	9.68bn	
US\$1=S\$		1.27	1.36	

Population 5,674,472

Ethnic groups: Chinese 76%; Malay 15%; Indian 6%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	6.7%	3.6%	5.0%	5.3%	24.4%	4.0%
Female	6.4%	3.5%	5.3%	5.7%	25.2%	4.8%

## Capabilities

Singapore's armed forces are the best equipped in Southeast Asia. They are organised essentially along Israeli lines; the air force and navy are staffed mainly by professional personnel while, apart from a small core of regulars, the much larger army is based on conscripts and reservists. There is a significant personnel challenge ahead, with an ageing population and declining conscript cohort, which the authorities say will be addressed by increased use of technology and lean manning. Defence budgets have increased to the extent that the city state far outspends any other southeast Asian states. Training is routinely carried out overseas, notably in Australia, Brunei, Taiwan, Thailand and the United States, while armoured forces also train in Germany. The armed forces also engage extensively in bilateral and multilateral exercises with regional and international partners, including through the Five Power Defence Arrangements. In lieu of a detailed explanation of its strategic outlook or military doctrine, it is widely presumed that the primary role of the armed forces is deterring attacks from within Singapore's immediate sub-region or interference with its vital interests. There is also a focus on new threats from terrorism and the cyber domain. Singaporean forces have increasingly become involved in multinational operations including the air offensive against ISIS, which has seen the deployment of a tanker aircraft and HQ staff. While these deployments have provided some operational experience, and training and operational readiness are high by international standards, the army's reliance on conscripts and reservists limits its capacity for sustained overseas operations.

**ACTIVE 72,500** (Army 50,000 Navy 9,000 Air 13,500)

**Paramilitary 75,100**

*Conscription liability* 24 months

**RESERVE 312,500** (Army 300,000 Navy 5,000 Air 7,500) **Paramilitary 44,000**

Annual trg to age of 40 for army other ranks, 50 for officers

## ORGANISATIONS BY SERVICE

**Army 15,000; 35,000 conscript (total 50,000)**

### FORCES BY ROLE

#### COMMAND

- 3 (combined arms) div HQ
- 1 (rapid reaction) div HQ
- 3 armd bde HQ
- 9 inf bde HQ
- 1 air mob bde HQ
- 1 amph bde HQ

#### SPECIAL FORCES

- 1 cdo bn

#### MANOEUVRE

##### Reconnaissance

- 3 lt armd/recce bn

##### Armoured

- 1 armd bn

##### Mechanised

- 6 mech inf bn

##### Light

- 2 (gds) inf bn

##### Other

- 2 sy bn

#### COMBAT SUPPORT

- 2 arty bn
- 1 STA bn
- 2 engr bn
- 1 EOD bn
- 1 ptn br bn
- 1 int bn
- 2 ISR bn
- 1 CBRN bn
- 3 sigs bn

#### COMBAT SERVICE SUPPORT

- 3 med bn
- 2 tpt bn
- 3 spt bn

#### Reserves

Activated units form part of divisions and brigades listed above; 1 op reserve div with additional inf bde; People's Defence Force Comd (homeland defence) with 12 inf bn

### FORCES BY ROLE

#### SPECIAL FORCES

- 1 cdo bn

#### MANOEUVRE

##### Reconnaissance

- 6 lt armd/recce bn

##### Mechanised

- 6 mech inf bn

##### Light

- ε56 inf bn

#### COMBAT SUPPORT

- ε12 arty bn
- ε8 engr bn

### EQUIPMENT BY TYPE

MBT 96 Leopard 2SG; (80–100 Tempest (upgraded Centurion) reported in store)

LT TK ε350 AMX-13 SM1



**RECCE 22 AMX-10 PAC 90**

**AIFV 707+:** 22 AMX-10P; 135 AV-81 *Terrex*; 250 IFV-25 *Bionix*; 250 IFV-40/50 *Bionix*; 50+ M113A1/A2 (some with 40mm AGL, some with 25mm gun)

**APC 1,395+**

**APC (T) 1,100+:** 700+ M113A1/A2; 400+ ATTC *Bronco*

**APC (W) 280:** 250 LAV-150 *Commando/V-200 Commando*; 30 V-100 *Commando*

**PPV 15 MaxxPro Dash**

**ARTY 798+**

**SP 155mm 54 SSPH-1 Primus**

**TOWED 88: 105mm (37 LG1 in store); 155mm 88: 18**

**FH-2000; ε18 Pegasus; 52 FH-88**

**MRL 227mm 18 M142 HIMARS**

**MOR 638+**

**SP 90+:** **81mm; 120mm 90:** 40 on *Bronco*; 50 on M113

**TOWED 548: 81mm 500 120mm 36 M-65; 160mm 12**

**M-58 Tampella**

**AT • MSL • MANPATS 60:** 30 *Milan*; 30 *Spike MR*

**RCL 290: 84mm ε200 Carl Gustav; 106mm 90 M40A1**

**UAV • ISR • Light Skylark**

**RADAR • LAND AN/TPQ-36 Firefinder; AN/TPQ-37 Firefinder (arty, mor); 3 ARTHUR (arty)**

**AEV 94:** 18 CET; 54 FV180; 14 *Kodiak*; 8 M728

**ARV Bionix; Büffel; LAV-150; LAV-300**

**VLB 72+:** *Bionix*; LAB 30; *Leguan*; M2; 60 M3; 12 M60

**MW 910-MCV-2; Trailblazer**

**Navy 3,000; 1,000 conscript; ε5,000 active reservists (total 9,000)**

**EQUIPMENT BY TYPE**

**SUBMARINES • TACTICAL • SSK 4:**

2 *Challenger* (ex-SWE *Sjoormen*) with 4 single 533mm TT

2 *Archer* (ex-SWE *Västergötland*-class) (AIP fitted) with 6 single 533mm TT for WASS *Black Shark* HWT

**PRINCIPAL SURFACE COMBATANTS 6:**

**FRIGATES • FFGHM 6 Formidable** with 2 quad Inchr with RGM-84 *Harpoon* ASHM, 4 octuple VLS with *Aster 15* SAM, 2 triple 324mm ASTT with A244 LWT, 1 76mm gun (capacity 1 S-70B *Sea Hawk* hel)

**PATROL AND COASTAL COMBATANTS 35**

**CORVETTES • FSGM 6 Victory** with 2 quad Mk140 Inchr with RGM-84C *Harpoon* ASHM, 2 octuple Inchr with *Barak* SAM, 2 triple 324mm ASTT with A244 LWT, 1 76mm gun

**PCO 11 Fearless** with 2 sextuple *Sadral* Inchr with *Mistral* SAM, 1 76mm gun

**PBF 6**

**PB 12**

**MINE WARFARE • MINE COUNTERMEASURES**

**MHC 4 Bedok**

**AMPHIBIOUS**

**PRINCIPAL AMPHIBIOUS SHIPS • LPD 4 Endurance** with 2 twin Inchr with *Mistral* SAM, 1 76mm gun (capacity 2 hel; 4 LCVP; 18 MBT; 350 troops)

**LANDING CRAFT 34 LCU 100 LCVP**

**LOGISTICS AND SUPPORT 2**

**ASR 1 Swift Rescue**

**AX 1**

**Naval Diving Unit****FORCES BY ROLE****SPECIAL FORCES**

1 SF gp

1 diving gp

**COMBAT SERVICE SUPPORT**

1 EOD gp

**Air Force 13,500 (incl 3,000 conscript)**

5 comds

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with F-5S/T *Tiger II*

1 sqn with F-15SG *Eagle*

3 sqn with F-16C/D *Fighting Falcon* (some used for ISR with pods)

**MARITIME PATROL/TRANSPORT**

1 sqn with F-50

**AIRBORNE EARLY WARNING & CONTROL**

1 sqn with G550-AEW

**TANKER**

1 sqn with KC-135R *Stratotanker*

**TANKER/TRANSPORT**

1 sqn with KC-130B/H *Hercules*; C-130H *Hercules*

**TRAINING**

1 (FRA-based) sqn with M-346 *Master*

4 (US-based) units with AH-64D *Apache*; CH-47D *Chinook*; F-15SG; F-16C/D

1 (AUS-based) sqn with PC-21

**ATTACK HELICOPTER**

1 sqn with AH-64D *Apache*

**TRANSPORT HELICOPTER**

1 sqn with CH-47SD *Super D Chinook*

2 sqn with AS332M *Super Puma*; AS532UL *Cougar*

**ISR UAV**

1 sqn with *Hermes 450*

1 sqn with *Heron 1*

1 sqn with *Searcher MkII*

**AIR DEFENCE**

1 AD bn with *Mistral* opcon Army

3 AD bn with RBS-70; 9K38 *Igla* (SA-18 *Grouse*) opcon Army

1 ADA sqn with Oerlikon

1 AD sqn with MIM-23 HAWK

1 AD sqn with *Spyder*

1 radar sqn with radar (mobile)

1 radar sqn with LORADS

**MANOEUVRE**

**Other**

4 (field def) sy sqn

**EQUIPMENT BY TYPE**

**AIRCRAFT 126** combat capable

**FTR 29:** 20 F-5S *Tiger II*; 9 F-5T *Tiger II*

**FGA 92+:** 32+ F-15SG *Eagle*; 20 F-16C *Fighting Falcon*; 40 F-16D *Fighting Falcon* (incl reserves)

**ATK (4 A-4SU Super Skyhawk; 10 TA-4SU Super Skyhawk in store)**

**MP 5 F-50 Maritime Enforcer\***

**AEW&C 4 G550-AEW**

**TKR 5:** 1 KC-130H *Hercules*; 4 KC-135R *Stratotanker*

TKR/TPT 4 KC-130B *Hercules*

TPT 9: **Medium** 5 C-130H *Hercules* (2 ELINT); **PAX** 4 F-50

TRG 31: 12 M-346 *Master*; 19 PC-21

#### HELICOPTERS

ATK 19 AH-64D *Apache*

ASW 6 S-70B *Seahawk*

TPT 51: **Heavy** 16: 6 CH-47D *Chinook*; 10 CH-47SD *Super D Chinook*; **Medium** 30: 18 AS332M *Super Puma* (incl 5 SAR); 12 AS532UL *Cougar*; **Light** 5 H120 *Colibri* (leased)

UAV • **ISR** 37+: **Heavy** 8+ *Heron* 1; **Medium** 29: 9+ *Hermes* 450; 20 *Searcher* MkII

#### AD

##### SAM

SP *Spyder*; *Mistral*; RBS-70; 9K38 *Igla* (SA-18 *Grouse*) (on V-200/M113)

TOWED *Mistral*; RBS-70; MIM-23 *HAWK*

MANPAD 9K38 *Igla* (SA-18 *Grouse*)

#### GUNS 34

SP 20mm GAI-C01

TOWED 34 20mm GAI-C01; 35mm 34 GDF (with 25 *Super-Fledermaus* fire control radar)

#### MSL

AAM • **IR** AIM-9N/P *Sidewinder*; *Python* 4 (reported);

IIR AIM-9X *Sidewinder* II; SARH AIM-7P *Sparrow*; ARH (AIM-120C AMRAAM in store in US)

ASM: AGM-65B/G *Maverick*; *Hellfire*

AShM AGM-84 *Harpoon*; AM-39 *Exocet*

ARM AGM-45 *Shrike*

#### Paramilitary 19,900 active

**Civil Defence Force** 5,600 (incl conscripts); 500 auxiliaries; (total 6,100)

**Singapore Police Force (including Coast Guard)** 8,500; 3,500 conscript (total 12,000)

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 102

PBF 81: 25 *Angler Ray*; 2 *Atlantic Ray*; 1 *Marlin*; 11 *Sailfish*; 10 *Shark*; 32 other

PB 21: 19 *Amberjack*; 2 *Manta Ray*

**Singapore Gurkha Contingent (under police)** 1,800

#### FORCES BY ROLE

##### MANOEUVRE

Other

6 paramilitary coy

#### Cyber

The Singapore Ministry of Defence has long identified the potential damage that could be caused by cyber attacks, with this concern perhaps more acute following its adoption of the Integrated Knowledge-based Command-and-Control (IKC2) doctrine, designed to aid the transition of Singapore's Armed Forces to a 'third-generation' force. A Cyber Defence Operations Hub was set up within the armed forces in 2013. In 2015 the government established the Cyber Security Agency Singapore to act as a national body overseeing cyber-security strategy, outreach and industrial development.

## DEPLOYMENT

#### AUSTRALIA

2 trg schools – 1 with 12 AS332 *Super Puma*/AS532 *Cougar* (flying trg) located at Oakey; 1 with PC-21 (flying trg) located at Pearce. Army: prepositioned AFVs and heavy equipment at Shoalwater Bay training area.

#### BRUNEI

1 trg camp with inf units on rotation; 1 hel det with AS332 *Super Puma*

#### FRANCE

200: 1 trg sqn with 12 M-346 *Master*

#### TAIWAN

3 trg camp (incl inf and arty)

#### THAILAND

1 trg camp (arty, cbt engr)

#### UNITED STATES

Trg units with F-16C/D; 12 F-15SG; AH-64D *Apache*; 6+ CH-47D *Chinook*

## FOREIGN FORCES

**United States** US Pacific Command: 180; 1 naval spt facility at Changi naval base; 1 USAF log spt sqn at Paya Lebar air base

## Sri Lanka LKA

Sri Lankan Rupee Rs	2014	2015	2016
GDP	Rs 9.78tr	10.6tr	
	US\$ 74.9bn	79.5bn	
<i>per capita</i>	US\$ 3,574	3,768	
Growth	% 7.4	6.5	
Inflation	% 3.3	1.7	
Def bdgt	Rs 252bn	247bn	263bn
	US\$ 1.93bn	1.85bn	
FMA (US)	US\$ 0.45m		
US\$1=Rs	130.59	133.60	

Population 22,053,488

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.5%	3.7%	3.8%	3.7%	21.3%	3.8%
Female	12.0%	3.5%	3.7%	3.6%	23.0%	5.2%

## Capabilities

Since the defeat of the Tamil Tigers, the armed forces have undergone a reorientation process to a peacetime internal-security role. The army is reducing in size, but overall plans remain unclear. Sri Lanka has little capacity for force projection beyond national territory, but has sent small numbers of troops on a variety of UN missions. The navy's littoral capability, based on fast-attack and patrol boats, is being strengthened with the acquisition of offshore-patrol vessels. There appears to have been little spending on new equipment since the end of the conflict, although military

support has been provided by China, in an indication of a growing military-to-military relationship.

**ACTIVE 160,900** (Army 200,000 Navy 15,000 Air 28,000) Paramilitary 62,200

**RESERVE 5,500** (Army 1,100 Navy 2,400 Air Force 2,000) Paramilitary 30,400

## ORGANISATIONS BY SERVICE

**Army** 140,000; 60,00 active reservists (recalled) (total 200,000)

Regt are bn sized

### FORCES BY ROLE

#### COMMAND

7 region HQ

22 div HQ

#### SPECIAL FORCES

1 indep SF bde

#### MANOEUVRE

##### Reconnaissance

3 armd recce regt

##### Armoured

1 armd bde (-)

##### Mechanised

1 mech inf bde

##### Light

65 inf bde

1 cdo bde

##### Air Manoeuvre

1 air mob bde

#### COMBAT SUPPORT

7 arty regt

1 MRL regt

8 engr regt

6 sigs regt

#### EQUIPMENT BY TYPE

**MBT** 62 T-55A/T-55AM2

**RECCE** 15 *Saladin*

**AIFV** 62: 13 BMP-1; 49 BMP-2

**APC** 211+

APC (T) 30+: some Type-63; 30 Type-85; some Type-89

APC (W) 181: 25 BTR-80/BTR-80A; 31 *Buffel*; 20 Type-92; 105 *Unicorn*

**ARTY** 908

**TOWED** 96: 122mm 20; 130mm 30 Type-59-I; 152mm 46 Type-66 (D-20)

**MRL** 122mm 28: 6 KRL-122; 22 RM-70

**MOR** 784: 81mm 520; 82mm 209; 120mm 55 M-43

**AT • RCL** 40: 105mm ε10 M-65; 106mm ε30 M40

**GUNS** 85mm 8 Type-56 (D-44)

**UAV • ISR • Medium** 1 *Seeker*

**RADAR • LAND** 4 AN/TPQ-36 *Firefinder* (arty)

**ARV** 16 VT-55

**VLB** 2 MT-55

**Navy** 15,000 (incl 2,400 recalled reservists)

#### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 131

PSOH 1 *Sayura* (IND *Vigraha*)

**PCG** 2 *Nandimithra* (ISR *Sa'ar* 4) with 3 single Inchr with *Gabriel* II ASHM, 1 76mm gun

**PCO** 2: 1 *Samadura* (ex-US *Reliance*); 1 *Sagara* (IND *Vikram*)

**PCC** 1 *Jayesagara*

**PBF** 79: 26 *Colombo*; 2 *Dvora*; 3 *Killer* (ROK); 6 *Shaldag*; 10 *Super Dvora* MkII/III; 5 *Trinity Marine*; 27 *Wave Rider*

**PB** 20: 4 *Cheverton*; 2 *Oshadi* (ex-AUS *Bay*); 2 *Prathapa* (PRC mod *Haizhui*); 3 *Ranajaya* (PRC *Haizhui*); 1 *Ranarisi* (PRC mod *Shanghai* II); 5 *Weeraya* (PRC *Shanghai* II); 3 (various)

**PBR** 26

#### AMPHIBIOUS

**LANDING SHIPS • LSM** 1 *Shakthi* (PRC *Yuhai*) (capacity 2 tanks; 250 troops)

#### LANDING CRAFT 8

**LCM** 2

**LCP** 3 *Hansaya*

**LCU** 2 *Yunnan*

**LCAC** 1 M 10 (capacity 56 troops)

**LOGISTICS AND SUPPORT** 2: 1 **AP**; 1 **AX**

**Air Force** 28,000 (incl SLAF Regt)

#### FORCES BY ROLE

##### FIGHTER

1 sqn with F-7BS/G; FT-7

##### FIGHTER/GROUND ATTACK

1 sqn with MiG-23UB *Flogger* C; MiG-27M *Flogger* J2

1 sqn with *Kfir* C-2/C-7/TC-2

1 sqn with K-8 *Karakorum*\*

##### TRANSPORT

1 sqn with An-32B *Cline*; C-130K *Hercules*; Cessna 421C *Golden Eagle*

1 sqn with Beech B200 *King Air*; Y-12 (II)

##### TRAINING

1 wg with PT-6, Cessna 150L

##### ATTACK HELICOPTER

1 sqn with Mi-24V *Hind* E; Mi-35P *Hind*

##### TRANSPORT HELICOPTER

1 sqn with Mi-17 *Hip* H; Mi-171Sh

1 sqn with Bell 206A/B (incl basic trg), Bell 212

1 (VIP) sqn with Bell 212; Bell 412 *Twin Huey*

##### ISR UAV

1 sqn with *Blue Horizon*-2

1 sqn with *Searcher* II

##### MANOEUVRE

###### Other

1 (SLAF) sy regt

#### EQUIPMENT BY TYPE

**AIRCRAFT** 30 combat capable

**FTR** 8: 3 F-7BS; 4 F-7GS; 1 FT-7

**FGA** 15: 4 *Kfir* C-2; 2 *Kfir* C-7; 2 *Kfir* TC-2; 6 MiG-27M *Flogger* J2; 1 MiG-23UB *Flogger* C (conversion trg)

**TPT** 21: **Medium** 2 C-130K *Hercules*; **Light** 19: 3 An-32B *Cline*; 6 Cessna 150L; 1 Cessna 421C *Golden Eagle*; 7 Y-12 (II); 2 Y-12 (IV)

**TRG** 14: 7 K-8 *Karakorum*\*; 7 PT-6

##### HELICOPTERS

**ATK** 11: 6 Mi-24P *Hind*; 3 Mi-24V *Hind* E; 2 Mi-35V *Hind* MRH 18: 6 Bell 412 *Twin Huey* (VIP); 2 Bell 412EP (VIP); 10 Mi-17 *Hip* H

**TPT** 16: **Medium** 4 Mi-171Sh; **Light** 12: 2 Bell 206A *Jet Ranger*; 2 Bell 206B *Jet Ranger*; 8 Bell 212

**UAV • ISR • Medium** 2+: some *Blue Horizon*-2; 2 *Searcher* II

**AD • GUNS • TOWED** 27: 40mm 24 L/40; 94mm 3 (3.7in)

**Paramilitary** €62,200**Home Guard** 13,000**National Guard** €15,000**Police Force** 30,200; 1,000 (women) (total 31,200) 30,400 reservists**Ministry of Defence Special Task Force** 3,000

Anti-guerrilla unit

**Coast Guard** n/k**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 11PBF 8: 1 *Dvora*; 4 *Super Dvora* MkI; 3 *Killer* (ROK)

PB 2 Simonneau Type-508

PBR 1

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 127; 5 obs; 1 hel sqn

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 4 obs

**HAITI**

UN • MINUSTAH 4

**LEBANON**

UN • UNIFIL 151; 1 inf coy

**SOUTH SUDAN**

UN • UNMISS 174; 4 obs; 1 hel sqn; 1 fd hospital

**SUDAN**

UN • UNISFA 1; 5 obs

**WESTERN SAHARA**

UN • MINURSO 3 obs

**Taiwan (Republic of China) ROC**

New Taiwan Dollar NT\$		2014	2015	2016
GDP	NT\$	16.1tr	16.2tr	
	US\$	530bn	519bn	
<i>per capita</i>	US\$	22,600	22,083	
Growth	%	3.8	2.2	
Inflation	%	1.2	-0.1	
Def bdgt	NT\$	304bn	319bn	322bn
	US\$	10bn	10.3bn	
US\$1=NT\$		30.37	31.13	

Population 23,415,126

Ethnic groups: Taiwanese 84%; mainland Chinese 14%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	7.0%	3.3%	3.5%	3.5%	26.7%	5.8%
Female	6.5%	3.1%	3.4%	3.4%	27.1%	6.7%

**Capabilities**

Taiwan's relationship with China and its attempts to sustain a credible military capability dominate its security policy. The armed forces remain well trained and exercise regularly, but Beijing's ongoing military recapitalisation continues to undermine Taipei's historic qualitative military advantage over the PLA. As a result, procurement efforts have been directed towards asymmetric and defensive items, such as development programmes for indigenous anti-ship and cruise missiles. Despite persistent US refusal to sanction the transfer of new combat aircraft, Taiwan has still been able to acquire modern US equipment to help it recapitalise in other areas, notably in anti-submarine warfare, helicopters, and air and missile defence. Demographic pressure has influenced plans for force reductions and a shift towards an all-volunteer force; however, recruitment difficulties mean that conscription is likely to remain in force in the near term.

**ACTIVE 215,000** (Army 130,000 Navy 40,000 Air 45,000) **Paramilitary 17,000***Conscript liability* 12 months**RESERVE 1,657,000** (Army 1,500,000 Navy 67,000 Air Force 90,000)

Some obligation to age 30

**ORGANISATIONS BY SERVICE****Space****EQUIPMENT BY TYPE**

SATELLITES • ISR 1 Rocsat-2

**Army** €130,000 (incl €10,000 MP)**FORCES BY ROLE****COMMAND**

3 corps HQ

5 defence comd HQ

**SPECIAL FORCES/AVIATION**

1 SF/avn comd (2 spec ops gp, 2 avn bde)

**MANOEUVRE****Armoured**

4 armd bde

**Mechanised**

3 mech inf bde

**Light**

6 inf bde

**COMBAT SUPPORT**

3 arty gp

1 (coastal defence) ASHM bn

3 engr gp

3 CBRN gp

3 sigs gp

**Reserves****FORCES BY ROLE****MANOEUVRE****Light**

21 inf bde

**EQUIPMENT BY TYPE**

**MBT** 565: 200 M60A3; 100 M48A5; 265 M48H *Brave Tiger*  
**LT TK** 625 M41/Type-64; (230 M24 *Chaffee* (90mm gun); in store)

**RECCE** 48+: **BIDS** (CBRN recce); 48 K216A1 (CBRN recce); KM453 (CBRN recce)

**AIFV** 225 CM-25 (M113 with 20–30mm cannon)

**APC** 1,180

**APC (T)** 650 M113

**APC (W)** 530: €230 CM-32 *Yunpao*; 300 LAV-150 *Commando*

**ARTY** 2,254

**SP** 488: **105mm** 100 M108; **155mm** 318: 225 M109A2/A5; 48 M44T; 45 T-69; **203mm** 70 M110

**TOWED** 1,060+: **105mm** 650 T-64 (M101); **155mm** 340+: 90 M59; 250 T-65 (M114); M44; XT-69; **203mm** 70 M115

**COASTAL** 54: **127mm** €50 US Mk32 (reported); **240mm** 4 M1

**MRL** 330: **117mm** 120 *Kung Feng VI*; **126mm** 210: 60 *Kung Feng III/Kung Feng IV*; 150 RT 2000 *Thunder* (KF towed and SP)

**MOR** 322+

**SP** 162+: **81mm** 72+: M29; 72 M125; **107mm** 90 M106A2

**TOWED** **81mm** 160 M29; T-75; **107mm** M30; **120mm** K5; XT-86

**AT • MSL**

**SP TOW**

**MANPATS** *Javelin*; **TOW**

**RCL** 500+: **90mm** M67; **106mm** 500+: 500 M40A1; Type-51

**HELICOPTERS**

**ATK** 96: 67 AH-1W *Cobra*; 29 AH-64E *Apache*

**MRH** 38 OH-58D *Kiowa Warrior*

**TPT** 92: **Heavy** 8 CH-47SD *Super D Chinook*; **Medium** 8

UH-60M *Black Hawk*; **Light** 76 Bell 205 (UH-1H *Iroquois*)

**TRG** 29 TH-67 *Creek*

**UAV • ISR • Light Mastiff III**

**AD**

**SAM**

**SP** 76: 74 M1097 *Avenger*; 2 M48 *Chaparral*

**MANPAD** FIM-92A *Stinger*

**GUNS** 400

**SP** **40mm** M42

**TOWED** **20: 35mm** 20 GDF-001 (30 systems with 20 guns) **40mm** L/70

**MSL • AShM** *Ching Feng*

**RADAR** 1 TPQ-37 *Firefinder*

**AEV** 18 M9

**ARV** CM-27/A1; 37 M88A1

**VLB** 22 M3; M48A5

**Navy 40,000**

3 district; 1 (ASW) HQ located at Hualien; 1 Fleet HQ located at Tsoying; 1 New East Coast Fleet

**EQUIPMENT BY TYPE**

**SUBMARINES • TACTICAL • SSK** 4:

2 *Hai Lung* with 6 single 533mm TT with SUT HWT; UGM-84L *Harpoon* AShM

2 *Hai Shih*† (ex-US *Guppy* II – trg role) with 10 single 533mm TT (6 fwd, 4 aft) with SUT HWT

**PRINCIPAL SURFACE COMBATANTS** 26

**CRUISERS • CGHM** 4 *Keelung* (ex-US *Kidd*) with 1 quad Inchr with RGM-84L *Harpoon* AShM, 2 twin Mk26

Inchr with SM-2MR SAM, 2 triple Mk32 324mm ASTT with Mk46 LWT, 2 *Phalanx* Block 1B CIWS, 2 127mm gun (capacity 1 S-70 ASW hel)

**FRIGATES** 22

**FFGHM** 20:

8 *Cheng Kung* with 2 quad Inchr with *Hsiung Feng* II/III AShM, 1 Mk13 GMLS with SM-1MR SAM, 2 triple 324mm ASTT with Mk 46 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 2 S-70C ASW hel)

6 *Chin Yang* (ex-US *Knox*) with 1 octuple Mk112 Inchr with ASROC/RGM-84C *Harpoon* AShM, 2 triple Inchr with SM-1MR SAM, 2 twin Inchr with SM-1MR SAM, 2 twin 324mm ASTT with Mk 46 LWT, 1 *Phalanx* Block 1B CIWS, 1 127mm gun (capacity 1 MD-500 hel)

6 *Kang Ding* with 2 quad Inchr with *Hsiung Feng* II AShM, 1 quad Inchr with *Sea Chaparral* SAM, 2 triple 324mm ASTT with Mk 46 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 1 S-70C ASW hel)

**FFGH** 2:

2 *Chin Yang* (ex-US *Knox*) with 1 octuple Mk112 Inchr with ASROC/RGM-84C *Harpoon* AShM, 2 twin 324mm ASTT with Mk 46 LWT, 1 *Phalanx* Block 1B CIWS, 1 127mm gun (capacity 1 MD-500 hel)

**PATROL AND COASTAL COMBATANTS** 51

**CORVETTES • FSG** 1 *Hsun Hai* with 8 twin Inchr with *Hsiung Feng* III AShM, 1 *Phalanx* Block 1B CIWS

**PCG** 12:

10 *Jin Chiang* with 1 quad Inchr with *Hsiung Feng* II/III AShM

2 *Jin Chiang* with 1 quad Inchr with *Hsiung Feng* III AShM, 1 76mm gun

**PBG** 31 *Kwang Hua* with 2 twin Inchr with *Hsiung Feng* II AShM

**PBF** 8 *Ning Hai*

**MINE WARFARE • MINE COUNTERMEASURES** 14

**MHC** 2 *Yung Jin* (ex-US *Osprey*)

**MSC** 8: 4 *Yung Chuan* (ex-US *Adjutant*); 4 *Yung Feng*

**MSO** 4 *Yung Yang* (ex-US *Aggressive*)

**COMMAND SHIPS • LCC** 1 *Kao Hsiung*

**AMPHIBIOUS**

**PRINCIPAL AMPHIBIOUS SHIPS • LSD** 1 *Shiu Hai* (ex-US *Anchorage*) with 2 *Phalanx* CIWS, 1 hel landing platform (capacity either 2 LCU or 18 LCM; 360 troops)

**LANDING SHIPS**

**LST** 12:

10 *Chung Hai* (capacity 16 tanks; 200 troops)

2 *Chung Ho* (ex-US *Newport*) with 1 *Phalanx* CIWS, 1 hel landing platform (capacity 3 LCVP, 400 troops)

**LANDING CRAFT** 278: 8 LCU; 100 LCVP; 170 LCM

**LOGISTICS AND SUPPORT** 37

**AGOR** 1 *Ta Kuan*

**AK** 1 *Wu Kang* with 1 hel landing platform (capacity 1,400 troops)

**AOEH** 1 *Panshih*

**AOE** 1 *Wu Yi* with 1 hel landing platform

**ARS** 6

**YFD** 6

**YTL** 10

**YTM** 12



**Marines 10,000****FORCES BY ROLE****MANOEUVRE****Amphibious**

3 mne bde

**COMBAT SUPPORT**

Some cbt spt unit

**EQUIPMENT BY TYPE**

AAV 202: 52 AAV-7A1; 150 LVTP-5A1

ARTY • TOWED 105mm; 155mm

AT • RCL 106mm

ARV 2 AAVR-7

**Naval Aviation****FORCES BY ROLE****ANTI SUBMARINE WARFARE**3 sqn with S-70C *Seahawk* (S-70C *Defender*)**EQUIPMENT BY TYPE**HELICOPTERS • ASW 20 S-70C *Seahawk* (S-70C *Defender*)**Air Force 45,000**

Flying hours 180 hrs/year

**FORCES BY ROLE****FIGHTER**3 sqn with *Mirage* 2000-5E/D (2000-5EI/DI)**FIGHTER/GROUND ATTACK**3 sqn with F-5E/F *Tiger* II6 sqn with F-16A/B *Fighting Falcon*5 sqn with F-CK-1A/B *Ching Kuo***ANTI-SUBMARINE WARFARE**1 sqn with S-2T *Turbo Tracker*/P-3C *Orion***ELECTRONIC WARFARE**1 sqn with C-130HE *Tien Gian***ISR**1 sqn with RF-5E *Tigereye***AIRBORNE EARLY WARNING & CONTROL**1 sqn with E-2T *Hawkeye***SEARCH & RESCUE**1 sqn with H225; S-70C *Black Hawk***TRANSPORT**2 sqn with C-130H *Hercules*

1 (VIP) sqn with B-727-100; B-737-800; Beech 1900; F-50;

S-70C *Black Hawk***TRAINING**1 sqn with AT-3A/B *Tzu-Chung\**

1 sqn with Beech 1900

1 (basic) sqn with T-34C *Turbo Mentor***EQUIPMENT BY TYPE**

AIRCRAFT 494 combat capable

FTR 288: 87 F-5E/F *Tiger* II (some in store); 145 F-16A/B *Fighting Falcon*; 9 *Mirage* 2000-5D (2000-5DI); 47 *Mirage* 2000-5E (2000-5EI)FGA 128 F-CK-1A/B *Ching Kuo*ASW 23: 11 S-2T *Tracker*; 12 P-3C *Orion*EW 1 C-130HE *Tien Gian*ISR 7 RF-5E *Tigereye*AEW&C 6 E-2T *Hawkeye*TPT 34: **Medium** 20 C-130H *Hercules*; **Light** 10 Beech 1900; **PAX** 4: 1 B-737-800; 3 F-50TRG 97: 55 AT-3A/B *Tzu-Chung\**; 42 T-34C *Turbo Mentor***HELICOPTERS**TPT • **Medium** 19: 3 H225; 16 S-70C *Black Hawk***MSL**ASM AGM-65A *Maverick*AShM AGM-84 *Harpoon*ARM *Sky Sword* IIAAAM • IR AIM-9J/P *Sidewinder*; R-550 *Magic* 2; *Shafir*;*Sky Sword* I; IR/ARH MICA; ARH AIM-120C AMRAAM;*Sky Sword* IIAD • SAM *Antelope***Missile Command****FORCES BY ROLE****COMBAT SUPPORT**3 SSM bty with *Hsiung Feng* IIE**AIR DEFENCE**

2 AD/SAM gp (total: 13 bty with MIM-23 HAWK; 4 bty

with MIM-104F *Patriot* PAC-3; 6 bty with *Tien Kung* I*Sky Bow*/*Tien Kung* II *Sky Bow*)**EQUIPMENT BY TYPE**MSL • LACM ε12 *Hsiung Feng* IIEAD • SAM • TOWED 624+: 24+ MIM-104F *Patriot* PAC-3;100 MIM-23 HAWK; ε500 *Tien Kung* I *Sky Bow*/*Tien Kung*II *Sky Bow***Paramilitary 17,000****Coast Guard 17,000****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 146

PSOH 2 *Yilan*PSO 7: 2 *Ho Hsing*; 3 *Shun Hu* 7; 2 *Tainan*PCO 14: 1 *Teh Hsing*; 2 *Kinmen*; 2 *Mou Hsing*; 1 *Shun**Hu* 1; 2 *Shun Hu* 2/3; 4 *Taichung*; 2 *Taipei*

PBF 63 (various)

PB 60: 1 *Shun Hu* 5; 1 *Shun Hu* 6; 58 (various)**Directorate General (Customs)****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 9

PCO 1 *Yun Hsing*PB 8: 4 *Hai Cheng*; 4 *Hai Ying***Cyber**

Although Taiwan has a highly developed civilian IT sector, the Taiwanese government has been relatively slow to exploit this advantage for national-defence purposes. But for the past decade, Taipei has worked on its *Po Sheng – Broad Victory – C4ISR* programme, an all-hazards-defence system with a significant defence component located in the Hengshan Command Center, which also houses the Tri-Service Command. The main focus of the military component of this programme is countering PLA IW and EW attacks. The authorities responsible for cyber activity include the National Security Bureau (NSB), the defence ministry, and the Research, Development and Evaluation Commission (RDEC). In 2015, it was reported that the National Security Bureau was to establish a cyber-security department to improve surveillance capacity.

**FOREIGN FORCES**

Singapore 3 trg camp (incl inf and arty)

## Thailand THA

Thai Baht b		2014	2015	2016
GDP	b	13.1tr	13.4tr	
	US\$	405bn	374bn	
<i>per capita</i>	US\$	5,896	5,426	
Growth	%	0.9	2.5	
Inflation	%	1.9	-0.9	
Def bdgt [a]	b	183bn	193bn	207bn
	US\$	5.63bn	5.37bn	
FMA (US)	US\$	1m	1m	
US\$1=b		32.48	35.93	

[a] Excludes military pensions

Population 67,976,405

Ethnic and religious groups: Thai 75%; Chinese 14%; Muslim 4%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	8.9%	3.6%	3.9%	3.6%	24.8%	4.3%
Female	8.5%	3.5%	3.8%	3.5%	26.1%	5.5%

## Capabilities

Thailand has large and generally well-equipped armed forces. In particular, its air force is one of the best equipped and trained in Southeast Asia. The introduction into service of *Gripen* combat aircraft and Saab 340 AEW platforms has significantly boosted the effectiveness of Thailand's air power. Despite the fact that, in recent years, the armed forces have benefited from substantially increased funding, and other factors such as involvement in multinational exercises and significant international deployments, their entanglement in domestic politics has often overshadowed efforts to sustain and modernise operational capability. The 2014 coup, which led to the armed forces becoming centrally involved again in the country's politics, undermined Thailand's alliance with the United States, leading to a downgrading of their joint training-exercise programme, but there has been a notable warming in the defence relationship with China, exemplified by Thai interest in purchasing Chinese submarines and a bilateral air exercise in November 2015. Operations against insurgents in the three southernmost provinces continue, but in effect the low-intensity war there remains deadlocked.

**ACTIVE 360,850 (Army 245,000 Navy 69,850 Air 46,000) Paramilitary 92,700**

*Conscription liability 2 years*

**RESERVE 200,000 Paramilitary 45,000**

## ORGANISATIONS BY SERVICE

**Army 130,000; €115,000 conscript (total 245,000)**

### FORCES BY ROLE

#### COMMAND

- 4 (regional) army HQ
- 3 corps HQ

#### SPECIAL FORCES

- 1 SF div
- 1 SF regt

## MANOEUVRE

### Mechanised

- 3 cav div
- 1 mech inf div

### Light

- 8 inf div
- 1 Rapid Reaction force (1 bn per region forming)

### Aviation

- Some hel flt

## COMBAT SUPPORT

- 1 arty div
- 1 ADA div (6 bn)
- 1 engr div

## COMBAT SERVICE SUPPORT

- 4 economic development div

## EQUIPMENT BY TYPE

**MBT** 293: 53 M60A1; 125 M60A3; (50 Type-69 in store); 105 M48A5; 10 T-84 *Oplot*

**LT TK** 194: 24 M41; 104 *Scorpion* (50 in store); 66 *Stingray*

**RECCE** 32+: 32 S52 Mk 3; M1114 HMMWV

**AIFV** 162 BTR-3E1 (incl variants)

**APC** 1,140

**APC (T)** 880: *Bronco*; 430 M113A1/A3; 450 Type-85

**APC (W)** 160: 18 *Condor*; 142 LAV-150 *Commando*

**PPV** 100 *Reva*

**ARTY** 2,622

**SP 155mm** 27: 1 ATMOS-2000; 6 CAESAR; 20 M109A5

**TOWED** 617: **105mm** 340: 24 LG1 MkII; 12 M-56; 200

M101/-Mod; 12 M102; 32 M618A2; 60 L119 Light Gun;

**155mm** 277: 90 GHN-45 A1; 48 M114; 118 M198; 21 M-71

**MRL** 78: **130mm** 60 Type-85; **302mm** 18 DTI-1

**MOR** 1,900+

**SP** 33+: **81mm** 21 M125A3; **107mm** M106A3; **120mm** 12 M1064A3

**TOWED** 1,867: **81mm**; **107mm**; **120mm**

## AT

### MSL

**SP** 24: 18+ M901A5 (TOW); 6 BTR-3RK

**MANPATS** M47 *Dragon*

**RCL** 180: **75mm** 30 M20; **106mm** 150 M40

## AIRCRAFT

**TPT • Light** 19: 2 Beech 200 *King Air*; 2 Beech 1900C; 1

C-212 *Aviocar*; 10 Cessna A185E (U-17B); 2 ERJ-135LR; 2 *Jetstream* 41

**TRG** 33: 11 MX-7-235 *Star Rocket*; 22 T-41B *Mescalero*

## HELICOPTERS

**ATK** 7 AH-1F *Cobra*

**MRH** 13: 8 AS550 *Fennec*; 2 AW139; 3 Mi-17V-5 *Hip H*

**TPT** 206: **Heavy** 5 CH-47D *Chinook*; **Medium** 12: 9 UH-

60L *Black Hawk*; 3 UH-60M *Black Hawk*; **Light** 189: 94 Bell

205 (UH-1H *Iroquois*); 27 Bell 206 *Jet Ranger*; 52 Bell 212

(AB-212); 16 Enstrom 480B

**TRG** 53 Hughes 300C

**UAV • ISR • Medium** *Searcher*; *Searcher II*

## AD • SAM

**SP** 8 *Starstreak*

**STATIC** *Aspide*

**MANPAD** 54 9K338 *Igla-S* (SA-24 *Grinch*)

**GUNS** 184

**SP** 54: **20mm** 24 M163 *Vulcan*; **40mm** 30 M1/M42 SP

**TOWED** 130: **20mm** 24 M167 *Vulcan*; **37mm** 52 Type-74; **40mm** 48 L/70; **57mm** ε6 Type-59 (S-60); (18+ more non-operational)

**RADAR** • **LAND AN/TPQ-36 Firefinder** (arty, mor); **RASIT** (veh, arty)

**ARV** 48: 5 BTR-3BR; 22 M88A1; 6 M88A2; 10 M113; 5 Type-653; WZT-4

**VLB** Type-84

**MW** *Bozena*; *Giant Viper*

## Reserves

### FORCES BY ROLE

#### COMMAND

1 inf div HQ

**Navy** 44,000 (incl Naval Aviation, Marines, Coastal Defence); 25,850 conscript (total 69,850)

### EQUIPMENT BY TYPE

#### PRINCIPAL SURFACE COMBATANTS 10

##### AIRCRAFT CARRIERS • CVH 1:

1 *Chakri Naruebet* with 2 sextuple *Sadral Inchr* with *Mistral* SAM (capacity 6 S-70B *Seahawk* ASW hel)

##### FRIGATES 9

###### FFGHM 2:

2 *Naresuan* with 2 quad Mk141 Inchr with RGM-84A *Harpoon* AShM, 1 8 cell Mk41 VLS with RIM-7M *Sea Sparrow* SAM (to be RIM-162 by 2015), 2 triple Mk32 324mm TT, 1 127mm gun (capacity 1 *Super Lynx* 300 hel)

###### FFGM 4:

2 *Chao Phraya* with 4 twin Inchr with C-802A AShM, 2 twin Inchr with HQ-61 (CSA-N-2) SAM (non-operational), 2 RBU 1200 A/S mor, 2 twin 100mm gun  
2 *Kraburi* with 4 twin Inchr with C-802A AShM, 2 twin Inchr with HQ-61 (CSA-N-2) SAM, 2 RBU 1200 A/S mor, 1 twin 100mm gun, 1 hel landing platform

**FFGH** 1 *Phuttha Yotfa Chulalok* (ex-US *Knox*) with 1 octuple Mk112 Inchr with RGM-84C *Harpoon* AShM/ASROC, 2 twin 324mm ASTT with Mk 46 LWT, 1 *Phalanx* CIWS, 1 127mm gun (capacity 1 Bell 212 (AB-212) hel)

###### FF 2:

1 *Makut Rajakumarn* with 2 triple 324mm ASTT, 2 114mm gun  
1 *Pin Klao* (trg role) with 6 single 324mm ASTT, 3 76mm gun

#### PATROL AND COASTAL COMBATANTS 84

##### CORVETTES 7

**FSG** 2 *Rattanakosin* with 2 quad Mk140 Inchr with RGM-84A *Harpoon* AShM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple Mk32 324mm ASTT with *Stingray* LWT, 1 76mm gun

##### FS 5:

3 *Khamronsin* with 2 triple 324mm ASTT with *Stingray* LWT, 1 76mm gun  
2 *Tapi* with 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun

**PSO** 1 *Krabi* (UK *River* mod) with 1 76mm gun

##### PCFG 6:

3 *Prabparapak* with 2 single Inchr with *Gabriel* I AShM, 1 triple Inchr with *Gabriel* I AShM, 1 57mm gun  
3 *Ratcharit* with 2 twin Inchr with MM-38 *Exocet* AShM, 1 76mm gun

**PCOH** 2 *Pattani* with 1 76mm gun

**PCO** 3 *Hua Hin* with 1 76mm gun

**PCC** 9: 3 *Chon Buri* with 2 76mm gun; 6 *Sattahip* with 1 76mm gun

**PBF** 4

**PB** 52: 7 T-11; 4 *Swift*; 3 T-81; 9 T-91; 3 T-111; 3 T-210; 13 T-213; 1 T-227; 3 T-228; 3 T-991; 3 T-994

#### MINE WARFARE • MINE COUNTERMEASURES 17

**MCM SPT** 1 *Thalang*

**MCO** 2 *Lat Ya*

**MCC** 2 *Bang Rachan*

**MSR** 12

#### AMPHIBIOUS

##### PRINCIPAL AMPHIBIOUS SHIPS 1

**LPD** 1 *Anthong* (SGP *Endurance*) with 1 76mm gun (capacity 2 hel; 19 MBT; 500 troops)

##### LANDING SHIPS 2

**LST** 2 *Sichang* with 2 hel landing platform (capacity 14 MBT; 300 troops)

##### LANDING CRAFT 56

**LCU** 13: 3 *Man Nok*; 6 *Mataphun* (capacity either 3–4 MBT or 250 troops); 4 *Thong Kao*

**LCM** 24

**LCVP** 12

**LCA** 4

**LCAC** 3 *Griffon* 1000TD

#### LOGISTICS AND SUPPORT 19

**ABU** 1

**AGOR** 1

**AGS** 2

**AOL** 6: 1 *Matra* with 1 hel landing platform; 4 *Prong*; 1 *Samui*

**AOR** 1 *Chula*

**AORH** 1 *Similan* (capacity 1 hel)

**AWT** 1

**YTL** 2

**YTM** 2

**YTR** 2

#### Naval Aviation 1,200

##### EQUIPMENT BY TYPE

**AIRCRAFT** 3 combat capable

**ASW** 2 P-3A *Orion* (P-3T)

**ISR** 9 *Sentry* O-2-337

**MP** 1 F-27-200 MPA\*

**TPT** • **Light** 15: 7 Do-228-212\*; 2 ERJ-135LR; 2 F-27-400M *Troopship*; 3 N-24A *Searchmaster*; 1 UP-3A *Orion* (UP-3T)

##### HELICOPTERS

**ASW** 8: 6 S-70B *Seahawk*; 2 *Super Lynx* 300

**MRH** 2 MH-60S *Knight Hawk*

**TPT** 13: **Medium** 2 Bell 214ST (AB-214ST); **Light** 11: 6 Bell 212 (AB-212); 5 S-76B

**MSL** • AShM AGM-84 *Harpoon*

#### Marines 23,000

##### FORCES BY ROLE

##### COMMAND

1 mne div HQ

##### MANOEUVRE

##### Reconnaissance

1 recce bn

**Light**

2 inf regt (total: 6 bn)

**Amphibious**

1 amph aslt bn

**COMBAT SUPPORT**

1 arty regt (3 fd arty bn, 1 ADA bn)

**EQUIPMENT BY TYPE**

AIFV 14 BTR-3E1

APC (W) 24 LAV-150 *Commando*

AAV 33 LVTP-7

ARTY • TOWED 48: 105mm 36 (reported); 155mm 12 GC-45

**AT • MSL**

SP 10 M1045A2 HMMWV with TOW

MANPATS M47 *Dragon*; TOW

AD • GUNS 12.7mm 14

ARV 1 AAVR-7

**Naval Special Warfare Command****Air Force €46,000**

4 air divs, one flying trg school

Flying hours 100 hrs/year

**FORCES BY ROLE****FIGHTER**2 sqn with F-5E/5F *Tiger II*3 sqn with F-16A/B *Fighting Falcon***FIGHTER/GROUND ATTACK**1 sqn with *Gripen C/D***GROUND ATTACK**1 sqn with *Alpha Jet\**1 sqn with AU-23A *Peacemaker*1 sqn with L-39ZA *Albatros\****ELINT/ISR**1 sqn with DA42 MPP *Guardian*; IAI-201 *Arava***AIRBORNE EARLY WARNING & CONTROL**1 sqn with Saab 340B; Saab 340 *Erieye***TRANSPORT**

1 (Royal Flight) sqn with A310-324; A319CJ; B-737-800

1 sqn with ATR-72; BAe-748

1 sqn with BT-67; N-22B *Nomad*1 sqn with C-130H/H-30 *Hercules***TRAINING**1 sqn with L-39ZA *Albatros\**1 sqn with CT-4A/B *Airtrainer*; T-41D *Mescalero*1 sqn with CT-4E *Airtrainer*

1 sqn with PC-9

**TRANSPORT HELICOPTER**1 sqn with Bell 205 (UH-1H *Iroquois*)1 sqn with Bell 412 *Twin Huey*; S-92A**EQUIPMENT BY TYPE**

AIRCRAFT 150 combat capable

FTR 78: 1 F-5B *Freedom Fighter*; 21 F-5E *Tiger II*; 3 F-5F *Tiger II* (F-5E/F being upgraded); 38 F-16A *Fighting Falcon*; 15 F-16B *Fighting Falcon*FGA 12: 8 *Gripen C*; 4 *Gripen D*ATK 17 AU-23A *Peacemaker*EW 2 IAI-201TH *Arava*ISR 5 DA42 MPP *Guardian*AEW&C 2 Saab 340 *Erieye*TPT 50: **Medium** 14: 6 C-130H *Hercules*; 6 C-130H-30 *Hercules*; 2 Saab 340B; **Light** 25: 3 ATR-72; 3 Beech 200 *King Air*; 8 BT-67; 1 *Commander* 690; 6 DA42M; 4 N-22B *Nomad*; PAX 11: 1 A310-324; 1 A319CJ; 1 A320CJ; 1 B-737-800; 5 BAe-748TRG 110: 16 *Alpha Jet\**; 13 CT-4A *Airtrainer*; 6 CT-4B *Airtrainer*; 20 CT-4E *Airtrainer*; 27 L-39ZA *Albatros\**; 21 PC-9; 7 T-41D *Mescalero***HELICOPTERS**MRH 11: 2 Bell 412 *Twin Huey*; 2 Bell 412SP *Twin Huey*; 1 Bell 412HP *Twin Huey*; 6 Bell 412EP *Twin Huey*CSAR 4 H225M *Super Cougar*TPT 20: **Medium** 3 S-92A *Super Hawk*; **Light** 17 Bell 205 (UH-1H *Iroquois*)**MSL**AAM • IR AIM-9B/J *Sidewinder*; *Python III*; ARH AIM-120 AMRAAMASM AGM-65 *Maverick***Paramilitary** €92,700 active Border Patrol  
Police 20,000 Marine Police 2,200**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 92

PCO 1 *Srinakrin*PCC 2 *Hameln*PB 43: 2 *Chasanyabadee*; 3 *Cutlass*; 1 *Sriyanont*; 1 *Yokohama*; 36 (various)

PBR 46

**National Security Volunteer Corps** 45,000 –  
Reserves**Police Aviation** 500**EQUIPMENT BY TYPE**

AIRCRAFT 6 combat capable

ATK 6 AU-23A *Peacemaker*TPT 16: **Light** 15: 2 CN-235; 8 PC-6 *Turbo-Porter*; 3 SC-7 3M *Skyvan*; 2 Short 330UTT; PAX 1 F-50**HELICOPTERS**MRH 6 Bell 412 *Twin Huey*TPT • **Light** 61: 27 Bell 205A; 14 Bell 206 *Jet Ranger*; 20 Bell 212 (AB-212)**Provincial Police** 50,000 (incl est. 500 Special  
Action Force)**Thahan Phran (Hunter Soldiers)** 21,000

Volunteer irregular force

**FORCES BY ROLE****MANOEUVRE****Other**

22 paramilitary regt (total: 275 paramilitary coy)

**DEPLOYMENT****Legal provisions for foreign deployment:****Constitution:** In addition to the below, government has to ensure no violation of Para. 1 and 2 of Provision 190 of the Constitution of the Kingdom of Thailand, BE 2550**Decision on deployment of troops abroad:** Depends on operation. In case of PSO or HADR, cabinet resolution endorsing deployment and defence-council concurrence would constitute legislation. Legal provisions for foreign deploy-

ment generally under the Defence Act, BE 2551 (2008). Justification for overseas missions is in accordance with following sections of the Act: Provision 37, Art. 4: Minister of Defence has exclusive authority to arrange and deploy armed forces to areas considered appropriate; Provision 38, Art. 4: Employment of armed forces for peace operations shall be endorsed by council of ministers with concurrence of defence council. No terms of reference on 'the foreign deployment of forces for combat operations in [a] conventional war area are stipulated' in the Act, so deployment purpose and operation type should be clearly determined.

#### INDIA/PAKISTAN

UN • UNMOGIP 3 obs

#### SUDAN

UN • UNAMID 9; 4 obs

### FOREIGN FORCES

United States US Pacific Command: 300

### Timor-Leste TLS

US\$		2014	2015	2016
GDP	US\$	4.97bn	4.23bn	
<i>per capita</i>	US\$	4,037	3,330	
Growth	%	4.5	4.3	
Inflation	%	0.7	1.1	
Def bdgt	US\$	69m	72m	75m
FMA (US)	US\$	0.3m	0.3m	

Population 1,231,116

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	21.5%	5.6%	4.5%	3.5%	13.2%	1.8%
Female	20.3%	5.3%	4.5%	3.8%	13.8%	2.0%

### Capabilities

Timor-Leste has a small military force capable only of internal- and border-security roles. It has a number of patrol vessels for maritime security – an area where it has ongoing disputes with Australia and Indonesia. Irrespective of these, Australia has provided considerable training support for the army, while Timor-Leste's relationship with Indonesia has improved to the point where the two countries are considering a closer military relationship, including in training activity. In 2015 army units held small-scale training exercises with the US Marine Corps at the squad and platoon level. The armed forces are still being reconstituted following the collapse of the defence forces in 2006 and the intervention of an international stabilisation force. This predominantly Australian force remained in the country until the start of 2013.

**ACTIVE 1,330 (Army 1,250 Naval Element 80)**

### ORGANISATIONS BY SERVICE

**Army 1,250**

Training began in January 2001 with the aim of deploying 1,500 full-time personnel and 1,500 reservists. Authorities are engaged in developing security structures with international assistance.

#### FORCES BY ROLE

##### MANOEUVRE

Light

2 inf bn

##### COMBAT SUPPORT

1 MP pl

##### COMBAT SERVICE SUPPORT

1 log spt coy

#### Naval Element 80

##### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 7

PB 7: 2 *Albatros*; 2 *Dili* (ex-ROK); 2 *Shanghai II*; 1 *Kamenassa* (ex-ROK *Chamsuri*)

### DEPLOYMENT

#### SOUTH SUDAN

UN • UNMISS 3 obs

### Vietnam VNM

Vietnamese Dong d		2014	2015	2016
GDP	d	3,938tr	4,294tr	
	US\$	186bn	199bn	
<i>per capita</i>	US\$	2,051	2,171	
Growth	%	6.0	6.5	
Inflation	%	4.1	2.2	
Def exp	d	€91tr		
	US\$	€4.3bn		
FMA (US)	US\$	10m	10m	12m
US\$1=d		21,183.00	21,598.90	

Population 94,348,835

**Ethnic groups:** Kinh 86%, Tay 2%, Thai 2%, Muang 1%, Khmei 1%, Mong 1%, Nung 1%, Hua 1%, Dao 1%, Other 4%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.7%	4.2%	4.8%	4.8%	21.4%	2.2%
Female	11.4%	3.9%	4.5%	4.6%	22.1%	3.6%

### Capabilities

Communist Vietnam has a stronger military tradition and more operational experience than any of its Southeast Asian neighbours. Its defence efforts and conscript-based armed forces also have broad popular support, particularly in the context of current tensions with China. With rapid economic growth over the last decade, defence spending has increased, and particular efforts have been made to re-equip the navy and air force, mainly with a view to deterring Chinese military pressure in the disputed Spratly Islands. While Hanoi cannot hope to balance China's power on its own, acquisition of a submarine capability in the 2010s, with six *Kilo*-class boats ordered from Russia in 2009, may



complicate Beijing's naval options, as might the procurement of additional Su-30MK2 combat aircraft. In its efforts to enhance its maritime and air capabilities, Vietnam is now turning to Western defence suppliers, and has ordered *Sigma*-class frigates from the Netherlands. Residual sensitivities and restrictions on both sides have meant that a growing US-Vietnamese defence relationship has been slow to develop, although there was a partial lifting of the ban on US defence sales in late 2014, and an intention to expand defence trade and to collaborate more on maritime security was declared in a 'joint vision statement' in June 2015.

### ACTIVE 482,000 (Army 412,000 Navy 40,000 Air 30,000) Paramilitary 40,000

*Conscript liability* 2 years army and air defence, 3 years air force and navy, specialists 3 years, some ethnic minorities 2 years

### RESERVES 5,000,000

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

SATELLITES • ISR 1 VNREDSat

### Army €412,000

8 Mil Regions (incl capital)

#### FORCES BY ROLE

##### COMMAND

4 corps HQ

##### SPECIAL FORCES

1 SF bde (1 AB bde, 1 demolition engr regt)

##### MANOEUVRE

###### Armoured

6 armd bde

3 armd regt

###### Mechanised

2 mech inf div

###### Light

23 inf div

##### COMBAT SUPPORT

13 arty bde

1 arty regt

11 AD bde

10 engr bde

1 engr regt

1 EW unit

3 sigs bde

2 sigs regt

##### COMBAT SERVICE SUPPORT

9 economic construction div

1 log regt

1 med unit

1 trg regt

### Reserve

#### MANOEUVRE

##### Light

9 inf div

### EQUIPMENT BY TYPE

MBT 1,270: 70 T-62; 350 Type-59; 850 T-54/T-55; (45 T-34† in store)

LT TK 620: 300 PT-76; 320 Type-62/Type-63

RECCE 100 BRDM-1/BRDM-2

AIFV 300 BMP-1/BMP-2

APC 1,380

APC (T) 280: 200 M113 (to be upgraded); 80 Type-63

APC (W) 1,100 BTR-40/BTR-50/BTR-60/BTR-152

ARTY 3,040+

SP 30+: 122mm 2S1; 152mm 30 2S3; 175mm M107

TOWED 2,300 100mm M-1944; 105mm M101/M102;

122mm D-30/Type-54 (M-1938)/Type-60 (D-74); 130mm

M-46; 152mm D-20; 155mm M114

MRL 710+: 107mm 360 Type-63; 122mm 350 BM-21;

140mm BM-14

MOR 82mm; 120mm M-43; 160mm M-43

AT • MSL • MANPATS 9K11 *Malyutka* (AT-3 *Sagger*)

RCL 75mm Type-56; 82mm Type-65 (B-10); 87mm Type-51

#### GUNS

SP 100mm SU-100; 122mm SU-122

TOWED 100mm T-12 (arty)

AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K310

*Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*)

GUNS 12,000

SP 23mm ZSU-23-4

TOWED 14.5mm/30mm/37mm/57mm/85mm/100mm

MSL • SRBM *Scud-B/C*

### Navy €40,000 (incl €27,000 Naval Infantry)

#### EQUIPMENT BY TYPE

##### SUBMARINES • TACTICAL 6

SSK 4 *Hanoi* (RUS *Varshavyanka*) with 6 533mm TT with

TEST-71ME HWT

SSI 2 *Yugot* (DPRK)

##### PRINCIPAL SURFACE COMBATANTS 2

###### FRIGATES • FFGM 2

2 *Dinh Tien Hoang* (RUS *Gepard* mod) with 2 quad Inchr

with Kh-35 *Uran* (SS-N-25 *Switchblade*) ASHM, 1 *Palma*

Inchr with *Sosna-R* SAM, 2 twin 533mm TT, 1 RBU

6000 *Smerch* 2 A/S mor, 2 AK630 CIWS, 1 76mm gun

##### PATROL AND COASTAL COMBATANTS 71

###### CORVETTES • FSG 6:

1 BPS-500 with 2 quad Inchr with 3M24 *Uran* (SS-N-

25 *Switchblade*) ASHM, 9K32 *Strela-2M* (SA-N-5 *Grail*)

SAM (manually operated), 2 twin 533mm TT, 1 RBU-

1600 A/S mor, 1 AK630 CIWS, 1 76mm gun

3 *Petya* II (FSU) with 1 quintuple 406mm ASTT, 4 RBU

6000 *Smerch* 2 A/S mor, 2 twin 76mm gun

2 *Petya* III (FSU) with 1 triple 533mm ASTT, 4 RBU 2500

*Smerch* 1 A/S mor, 2 twin 76mm gun

###### PCFGM 10:

4 *Tarantul* (FSU) with 2 twin Inchr with P-15 *Termit* (SS-

N-2D *Styx*) ASHM, 1 quad Inchr with 9K32 *Strela-2M*

(SA-N-5 *Grail*) SAM (manually operated), 2 AK630

CIWS, 1 76mm gun

6 *Tarantul* V with 4 quad Inchr with 3M24 *Uran* (SS-

N-25 *Switchblade*) ASHM; 1 quad Inchr with 9K32

*Strela-2M* (SA-N-5 *Grail*) SAM (manually operated),

2 AK630 CIWS, 1 76mm gun

PCC 10: 6 *Svetlyak* with 1 AK630 CIWS, 1 76mm gun; 4 TT-400TP with 2 AK630 CIWS, 1 76mm gun  
 PBFG 8 *Osa II* with 4 single Inchr with P-15 *Termit* AShM  
 PBFT 2 *Shershen*† (FSU) with 4 single 533mm TT  
 PH 2 *Turyat*† with 1 twin 57mm gun  
 PHT 3 *Turyat*† with 4 single 533mm TT, 1 twin 57mm gun  
 PB 26: 2 *Poluchat* (FSU); 14 *Zhuk*†; 4 *Zhuk* (mod); 6 (various)  
 PBR 4 *Stolkraft*

**MINE WARFARE • MINE COUNTERMEASURES 13**

MSO 2 *Yurka*  
 MSC 4 *Sonya*  
 MHI 2 *Yeogenya*  
 MSR 5 K-8

**AMPHIBIOUS****LANDING SHIPS 8****LSM 5:**

1 *Polnochny A*† (capacity 6 MBT; 180 troops)  
 2 *Polnochny B*† (capacity 6 MBT; 180 troops)  
 2 *Nau Dinh*

LST 3 LST-510-511 (US) (capacity 16 tanks; 200 troops)

**LANDING CRAFT 30: 15 LCU; 12 LCM; 3 LCVP****LOGISTICS AND SUPPORT 30**

AFD 2; AGS 1; AGSH 1; AKSL 18; AP 1; AT 2; AWT 1;  
 YDT 2; YTM 2

AShM K-300P *Bastion-P* (SS-C-5 *Stooge*)

**Naval Infantry €27,000****Navy Air Wing****FORCES BY ROLE****ASW/SAR**

1 regt with H225; Ka-28 (Ka-27PL) *Helix A*; Ka-32 *Helix C*

**EQUIPMENT BY TYPE**

**AIRCRAFT • TPT • Light** 6 DHC-6-400 *Twin Otter*

**HELICOPTERS**

ASW 10 Ka-28 *Helix A*  
 TPT • **Medium** 4: 2 H225; 2 Ka-32 *Helix C*

**Air Force 30,000**

3 air div, 1 tpt bde

**FORCES BY ROLE****FIGHTER**

4 regt with MiG-21bis *Fishbed L*; MiG-21UM *Mongol B*

**FIGHTER/GROUND ATTACK**

1 regt with Su-22M3/M4/UM *Fitter* (some ISR)  
 1 regt with Su-27SK/Su-27UBK *Flanker*  
 1 regt with Su-27SK/Su-27UBK *Flanker*; Su-30MK2  
 1 regt with Su-30MK2

**TRANSPORT**

2 regt with An-2 *Colt*; An-26 *Curl*; Bell 205 (UH-1H *Iroquois*); Mi-8 *Hip*; Mi-17 *Hip H*; M-28 *Bryza*

**TRAINING**

1 regt with L-39 *Albatros*  
 1 regt with Yak-52

**ATTACK/TRANSPORT HELICOPTER**

2 regt with Mi-8 *Hip*; Mi-17 *Hip H*; Mi-171; Mi-24 *Hind*

**AIR DEFENCE**

4 ADA bde  
 Some (People's Regional) force (total: €1,000 AD unit, 6 radar bde with 100 radar stn)

**EQUIPMENT BY TYPE****AIRCRAFT 101 combat capable**

FGA 101: 25 MiG-21bis *Fishbed L & N*; 8 MiG-21UM *Mongol B*; 28 Su-22M3/M4/UM *Fitter* (some ISR); 6 Su-27SK *Flanker*; 5 Su-27UBK *Flanker*; 29 Su-30MK2 *Flanker*  
 TPT • **Light** 21: 6 An-2 *Colt*; 12 An-26 *Curl*; 2 C-295M; 1 M-28 *Bryza*  
 TRG 48: 18 L-39 *Albatros*; 30 Yak-52

**HELICOPTERS**

ATK 26 Mi-24 *Hind*  
 MRH 6 Mi-17 *Hip H*  
 TPT 28: **Medium** 17: 14 Mi-8 *Hip*; 3 Mi-171; **Light** 11 Bell 205 (UH-1H *Iroquois*)

**AD • SAM**

SP 12+: 2K12 *Kub* (SA-6 *Gainful*); 12 S-300PMU1 (SA-20 *Gargoyle*)  
 TOWED S-75 *Dvina* (SA-2 *Guideline*); S-125-2TM *Pechora* (SA-26)  
 MANPAD 9K32 *Strela-2* (SA-7 *Grail*)†; 9K310 *Igla-1* (SA-16 *Gimlet*)  
**GUNS 37mm; 57mm; 85mm; 100mm; 130mm**

**MSL**

ASM Kh-29T/L (AS-14 *Kedge*); Kh-31A (AS-17B *Krypton*); Kh-59M (AS-18 *Kazoo*)  
 ARM Kh-28 (AS-9 *Kyle*); Kh-31P (AS-17A *Krypton*)  
 AAM • **IR** R-3 (AA-2 *Atoll*)†; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR/SARH** R-27 (AA-10 *Alamo*)

**Paramilitary 40,000+ active****Border Defence Corps €40,000****Coast Guard****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 40+**

PSO 2 Damen 9014  
 PCO 3+: 1 *Mazinger* (ex-ROK) 2+ other  
 PCC 4 TT-400TP  
 PBF 2 *Shershen*  
 PB 29: 2 *Hae Uri* (ex-ROK); 1 MS-50; 12 TT-200; 13 TT-120; 1 other

**LOGISTICS AND SUPPORT • ATF 4****AIRCRAFT • MP 3 C-212-400 MPA****Fisheries Surveillance Force****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 4**

PSOH 2  
 PCO 2

**Local Forces €5,000,000 reservists**

Incl People's Self-Defence Force (urban units), People's Militia (rural units); comprises static and mobile cbt units, log spt and village protection pl; some arty, mor and AD guns; acts as reserve.

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 3

**SOUTH SUDAN**

UN • UNMISS 2 obs

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Afghanistan (AFG)</b>								
EMB-314 <i>Super Tucano</i>	Trg ac	20	US\$427m	BRZ	Embraer	2013	2014	USAF Light Air Support programme. Deliveries ongoing
MD530F	MRH	12	US\$36.6m	US	MD Helicopters	2014	n.k.	Exercised option from the 2011 contract. To be armed. Deliveries ongoing
<b>Australia (AUS)</b>								
<i>Hobart-class</i>	DDGHM	3	A\$8.8bn (US\$8.0bn)	AUS/ESP	AWD Alliance	2007	2017	<i>Air Warfare Destroyer</i> . Delivery of first vessel delayed to Jun 2017 and programme has run over budget. Option on fourth. All to be fitted with <i>Aegis</i> system. First of class launched May 2015
<i>Canberra-class</i>	LHD	2	A\$3.1bn (US\$2.8bn)	AUS/ESP	Navantia	2007	2014	To replace HMAS <i>Tobruk</i> and <i>Kanimbla-class</i> . Second of class to commission in Dec 2015
F-35A <i>Lightning II</i>	FGA ac	2	n.k.	US	Lockheed Martin	2012	2014	First two test and trg ac. Two ordered in LRIP 6. Two ac being used for trg in US
EA-18G <i>Growler</i>	EW ac	12	n.k.	US	Boeing	2013	n.k.	IOC planned for 2018. Training has begun at NAS Whidbey Island. First ac rolled out in the US
P-8A <i>Poseidon</i>	ASW ac	12	A\$4.43bn (US\$4.0bn)	US	Boeing	2014	2017	All to be in service by 2021. Four more ordered in late 2015
A330 MRTT	Tkr/Tpt ac	2	A\$408m (US\$310m)	Int'l	Airbus Group (Airbus Defence & Space)	2015	2018	-
C-27J <i>Spartan</i>	Med tpt ac	10	A\$1.4bn (US\$1.4bn)	ITA	Finmeccanica (Alenia Aermacchi)	2012	2015	To replace navy's DHC-4s. Contract price includes logistics support and training
MH-60R <i>Seahawk</i>	ASW hel	24	US\$3bn+	US	Lockheed Martin (Sikorsky)	2011	2013	To replace navy's S-70Bs. Deliveries ongoing
NH90 NFH/TTH	ASW/ Med tpt hel	47	A\$2bn (US\$1.47bn)	FRA/GER/ ITA/NLD	NH Industries	2005	2007	12 ordered in 2005, 34 more in 2006 and one hel added in 2013. First four built in Europe; remainder in AUS. Deliveries ongoing
<b>Bangladesh (BGD)</b>								
<i>Minerva-class</i>	FS	4	n.k.	ITA	Government surplus/ Fincantieri	2015	n.k.	Fincantieri to refit ships before delivery to BGD
C-13B (PRC Type-056)	FS	2	n.k.	PRC	Wuchang Shipyard	n.k.	2016	Two vessels in trials in PRC as of late 2015
Yak-130	Trg ac	16	US\$800m	RUS	UAC (Irkut)	2013	2015	Part of arms order made from €US\$1bn loan from RUS. Deliveries ongoing
Mi-171	Med tpt hel	7	n.k.	RUS	Russian Helicopters	2015	n.k.	Financed by US\$1bn loan from RUS. Six Mi-171Sh and one Mi-171E
<b>China (PRC)</b>								
JL-2 (CSS-N-X-14)	SLBM	n.k.	n.k.	PRC	n.k.	1985	n.k.	In development; range 8,000km. To equip Type-094 SSBN. ISD uncertain
Type-96A	MBT	n.k.	n.k.	PRC	NORINCO	n.k.	n.k.	Deliveries ongoing

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
Type-99A	MBT	n.k.	n.k.	PRC	NORINCO	n.k.	n.k.	In limited production
Type-05 (ZBD-05)	AIFV	n.k.	n.k.	PRC	NORINCO	n.k.	n.k.	Amph aslt veh family. Issued to marine and amph army units
Type-04A (ZBD-04A)	AIFV	n.k.	n.k.	PRC	NORINCO	n.k.	2011	Infantry fighting vehicle family. Improved version of Type-04 with extra armour
Type-09 (ZBL-09)	AIFV	n.k.	n.k.	PRC	NORINCO	n.k.	n.k.	IFV family including aslt gun (ZTL-09) and 122mm SP how (PLL-09) variants. Being issued to lt mech units
Type-07 (PLZ-07)	Arty (122mm SP)	n.k.	n.k.	PRC	n.k.	n.k.	n.k.	122mm tracked SP howitzer
Type-09 (PLC-09)	Arty (122mm SP)	n.k.	n.k.	PRC	n.k.	n.k.	n.k.	Truck mounted 122mm howitzer. Also referred to as AH2
Type-05 (PLZ-05)	Arty (155mm SP)	n.k.	n.k.	PRC	n.k.	n.k.	n.k.	155mm tracked SP howitzer
Type-03 (PHL-03)	MRL (300mm SP)	n.k.	n.k.	PRC	n.k.	n.k.	n.k.	8x8 truck mounted MRL; also referred to as AR2
Type-07 (PGZ-07)	AD	n.k.	n.k.	PRC	n.k.	n.k.	n.k.	Twin 35mm-armed tracked veh
Shang II-class (Type-093 mod)	SSN	4	n.k.	PRC	Bohai Shipyard	n.k.	n.k.	All four vessels launched. First of class in sea trials
Yuan II-class (Type-039B)	SSK	n.k.	n.k.	PRC	Wuchang Shipyard/ Jiangnan Shipyard	n.k.	2011	Follow-on to Type-039A Yuan-class
Luyang III-class (Type-052D)	DDGHM	12	n.k.	PRC	Jiangnan Shipyard/Dalian Shipyard	n.k.	2014	Second of class commissioned Aug 2015
Jiangkai II-class (Type-054A)	FFGHM	24	n.k.	PRC	Huangpu Shipyard/ Hudong Shipyard	2005	2008	20th of class commissioned Sep 2015
Jiangdao-class (Type-056/ Type-056A)	FSG	26	n.k.	PRC	Huangpu Shipyard/ Hudong Shipyard/ Wuchang Shipyard/ Liaonan Shipyard	n.k.	2013	Replacing Hainan-class PCCs. Type-056A is ASW variant. 22nd of class commissioned Jul 2015
Zhaotou-class	PSOH	n.k.	n.k.	PRC	Jiangnan Shipyard	n.k.	2015	For coast guard. 10,000-tonne patrol ship. First of class in service and second of class in trials as of late 2015
Yuzhao-class	LPD	6	n.k.	PRC	Hudong Shipyard	n.k.	2007	Fourth of class launched Jan 2015
J-10B	FGA ac	n.k.	n.k.	PRC	AVIC (Shenyang)	n.k.	2014	First regt set up in 2014
J-11B/BS	FGA ac	n.k.	n.k.	PRC	AVIC (Shenyang)	n.k.	2007	Upgraded J-11; now fitted with indigenous WS-10 engines. In service with PLAAF and PLANAF
J-15/J-15S	FGA ac	n.k.	n.k.	PRC	AVIC (Shenyang)	n.k.	2012	For PLANAF. To operate from Liaoning CV
J-16	FGA ac	n.k.	n.k.	PRC	AVIC (Shenyang)	n.k.	2015	For PLAAF
Su-35 Flanker	FGA ac	24	US\$2bn	RUS	UAC (Sukhoi)	2015	n.k.	To equip one PLAAF regt

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
Y-9	Med tpt ac	n.k.	n.k.	PRC	AVIC (Shaanxi)	n.k.	2012	In production for transport and special missions
Il-78	Tkr ac	3	US\$44.7m	UKR	Government surplus	2011	2014	First delivered by Nov 2014
KJ-500	AEW&C ac	n.k.	n.k.	PRC	Shaanxi Aircraft Corporation	n.k.	2015	Two in service with PLAAF as of late 2015
Z-10	Atk hel	n.k.	n.k.	PRC	AVIC (Harbin)	n.k.	2010	In service with eight army avn bde/regt
Z-19	Atk hel	n.k.	n.k.	PRC	AVIC (Harbin)	n.k.	n.k.	In service with at least eight army avn bde/regt
HQ-16A	SAM	n.k.	n.k.	PRC	n.k.	n.k.	2011	First delivered to 39th Group Army in 2011
S-400 <i>Triumf</i> (SA-X-21B <i>Growler</i> )	SAM	See notes	n.k.	RUS	Almaz-Antey	2014	n.k.	Six batteries to be delivered
PL-10	AAM	n.k.	n.k.	PRC	LEOC	n.k.	n.k.	In low-rate production
<b>India (IND)</b>								
<i>Agni-V</i>	ICBM	n.k.	n.k.	IND	DRDO	n.k.	2012	In development. ε5,000km range
<i>Dhanush</i>	SRBM	n.k.	n.k.	IND	DRDO	n.k.	n.k.	Ship-launched SRBM in test
<i>Sagarika K-15</i>	SLBM	n.k.	n.k.	IND	Bharat Dynamics	1991	n.k.	Test-firing programme under way. ε700km range with one-ton payload
K-4	SLBM	n.k.	n.k.	IND	DRDO	n.k.	n.k.	3,500km SLBM in test
K-5	SLBM	n.k.	n.k.	IND	DRDO	n.k.	n.k.	5,000km SLBM under development
<i>Brahmos Block II (Land Attack)</i>	AShM/LACM	n.k.	US\$1.73bn	IND/RUS	BrahMos Aerospace	2010	n.k.	In service with three army regts. Fourth regt ordered
<i>Nirbhay</i>	ALCM	n.k.	n.k.	IND	DRDO	n.k.	n.k.	In test
T-90S <i>Bhishma</i>	MBT	236	n.k.	IND/RUS	Ordnance Factory Board	2013	n.k.	-
<i>Arjun II</i>	MBT	118	n.k.	IND	CVRDE	2014	2017	Upgraded variant. Currently in trials. To be delivered by 2017
BMP-2/2K	AIFV	362	US\$293m	IND	Ordnance Factory Board	2014	n.k.	Acquisition approved by DAC
<i>Arjun Catapult</i>	Arty (130mm SP)	40	US\$150m	IND	CVRDE	2014	n.k.	-
<i>Spike MR</i>	MANPATS	300	INR3,200 crore (US\$525m)	ISR	Rafael	2014	n.k.	With transfer of technology
<i>Arihant-class</i>	SSBN	5	n.k.	IND	DRDO	n.k.	2014	First of class currently in trials following delays; ISD now expected 2017. Second keel laid down mid-2011
<i>Kalvari-class (Project 75)</i>	SSK	6	INR235.62bn (US\$4.3bn)	FRA	DCNS	2005	2016	<i>Scorpene-class</i> built under licence in IND. First delivery delayed again; now expected end of 2016. Option for a further six. First of class launched late 2015
<i>Vikrant-class (Project 71)</i>	CV	1	US\$730m	IND	Cochin Shipyard	2001	2017	Formerly known as Air Defence Ship. Launched Aug 2013. Expected ISD has slipped to 2017. Second vessel of class anticipated



Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
Improved <i>Shivalik</i> -class (Project 17A)	DDGHM	7	INR450bn (US\$9.24 bn)	IND	Mazagon Dock/ GRSE	2009	2017	Follow-up to Project 17. Requires shipyard upgrade
<i>Kolkata</i> -class (Project 15A)	DDGHM	3	US\$1.75bn	IND	Mazagon Dock	2000	2014	Second of class commissioned Sep 2015
<i>Kolkata</i> II-class (Project 15B)	DDGHM	4	US\$6.5bn	IND	Mazagon Dock	2011	2017	Follow-on from <i>Kolkata</i> -class with increased stealth capabilities. First vessel launched Apr 2015
<i>Kamorta</i> -class (Project 28)	FFH	4	INR70bn (US\$1.5bn)	IND	GRSE	2003	2014	ASW role. Second of class being outfitted in late 2015
Su-30MKI	FGA ac	82	US\$4.9bn	IND/RUS	HAL/UAC (Sukhoi)	2007	2008	2007 and 2011 contracts for 80 aircraft and two accident replacements. 15 RUS-built ac all delivered. Remaining ac being built in IND; deliveries ongoing
MiG-29K <i>Fulcrum</i> D	FGA ac	29	US\$1.5bn	RUS	UAC (MiG)	2010	2014	23 ac due to be delivered by end of 2015; remaining six due 2016
<i>Tejas</i>	FGA ac	20	INR20bn (US\$445m)	IND	HAL	2005	2015	Limited series production. To be delivered in initial op config. Option for a further 20 in full op config. First series production ac delivered Jan 2015
EMB-145	AEW&C ac	3	US\$210m	BRZ	Embraer	2008	2015	Part of a INR18bn (US\$400m) AEW&C project. First two in trials; entry into service was due by late 2015
C-130J-30 <i>Hercules</i>	Med tpt ac	7	US\$564.7m	US	Lockheed Martin	2014	n.k.	Follow-up to initial order for six. Will be based at Panagargh. Attrition replacement approved in 2015. All to be delivered by 2020
<i>Hawk</i> Mk132 Advanced Jet Trainer	Trg ac	57	US\$780m	IND	HAL	2010	2013	40 for air force and 17 for navy. Delivery to be complete by 2016. 33rd ac of this contract delivered Feb 2015
AH-64E <i>Apache Guardian</i>	Atk hel	22	n.k.	US	Boeing	2015	n.k.	For air force
CH-47F <i>Chinook</i>	Hvy tpt hel	15	n.k.	US	Boeing	2015	n.k.	For air force
<i>Dhruv</i>	MRH hel	191	n.k.	IND	HAL	2004	2004	Total includes additional 32 navy and coast guard hel ordered Jul 2014
<b>Indonesia (IDN)</b>								
<i>Leopard</i> 2A4/2 <i>Revolution</i>	MBT	103	See notes	GER	Rheinmetall	2012	2013	Ex-GER surplus. 42 <i>Leopard</i> 2A4 and 61 <i>Leopard</i> 2 <i>Revolution</i> . Part of US\$280m deal including 42 <i>Marder</i> 1A3 AIFVs and 11 ARV/AEVs. Deliveries ongoing
<i>Marder</i> 1A3	AIFV	42	See notes	GER	Rheinmetall	2012	2013	Ex-GER surplus. Part of US\$280m deal including 103 <i>Leopard</i> 2 MBTs and 11 ARV/AEVs. Deliveries ongoing
CAESAR	Arty (155mm SP)	37	€108m (US\$135m)	FRA	Nexter	2012	2014	Deliveries ongoing
ASTROS Mk6	MRL (127mm SP)	36	US\$405m	BRZ	Avibras	2013	2014	First 13 delivered 2014

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
Type-209/1400	SSK	3	US\$1.1bn	IDN/ROK	PT PAL/DSME	2012	2017	First to be built in ROK; second to be partially assembled in IDN and third to be largely built in IDN
SIGMA 10514	FFGHM	1	US\$220m	NLD	Damen Schelde Naval Shipbuilding	2012	2016	Further acquisitions expected, with technology transfers allowing greater proportions to be built in IDN. Keel laid Apr 2014
<i>Teluk Bintuni-class</i>	LST	3	n.k.	IDN	PT Daya Radar Utama	2012	2014	First vessel commissioned Sep 2014
F-16C/D <i>Fighting Falcon</i>	FGA ac	24	US\$670m	US	Government surplus	2012	2014	19 F-16C and five F-16D. All ex-USAF ac. Deliveries ongoing
C-295M	Lt tpt ac	9	US\$325m	Int'l	Airbus Group (Airbus Defence & Space)	2012	2012	Seven ESP-built ac delivered by late 2014. Final two IDN-built ac in test
C-130H <i>Hercules</i>	Med tpt ac	9	Free transfer	AUS	Government surplus	2012	2013	AUS surplus aircraft
AH-64E <i>Apache Guardian</i>	Atk hel	8	US\$632m	US	Boeing	2015	2017	-
AS565 Mbe <i>Panther</i>	ASW hel	11	n.k.	Int'l	Airbus Group (Airbus Helicopters)	2014	2016	For navy. First four to be delivered in 2016 and the remainder in 2017
H225M	Hvy tpt hel	6	n.k.	Int'l	Airbus Group (Airbus Helicopters)	2012	2014	First delivered to PT Digrantara for modification before final delivery Nov 2014
H125M	MRH hel	12	n.k.	Int'l	Airbus Group (Airbus Helicopters)	n.k.	2014	For army; first delivered Nov 2014
<b>Japan (JPN)</b>								
Type-10	MBT	68	JPY55.1bn (US\$628m)	JPN	MHI	2010	2011	Deliveries expected to be complete by end of 2016
Type-12	AShM	n.k.	n.k.	JPN	MHI	2013	2015	Entered service 2015
<i>Soryu-class</i>	SSK	11	n.k.	JPN	KHI/MHI	2004	2009	Sixth of class commissioned Mar 2015. Eighth of class launched Nov 2015
<i>Izumo-class</i>	CVH	2	US\$1.3bn	JPN	Japan Marine United	2010	2015	First vessel commissioned Mar 2015
Improved <i>Atago-class</i>	CGHM	See notes	JPY168bn (US\$1.38bn)	JPN	MHI	2015	n.k.	First of class and <i>Aegis</i> system budgeted for in FY15
Improved <i>Akizuki-class</i>	DDGHM	2	JPY143bn (US\$1.47bn)	JPN	MHI	2013	2017	Two vessels budgeted for by late 2015
<i>Awaji-class</i>	MSO	3	n.k.	JPN	Japan Marine United	n.k.	2017	First of class launched Oct 2015
F-35A <i>Lightning II</i>	FGA ac	10	US\$2.2bn	US	Lockheed Martin	2012	2017	Including four ac as part of LRIP 8 and two as part of LRIP 9
P-1	ASW ac	20	JPY350.4bn (US\$4.4bn)	JPN	Kawasaki Heavy Industries	2001	2013	Deliveries ongoing
E-2D <i>Hawkeye</i>	AEW&C ac	1	US\$151.3m	US	Northrop Grumman	2015	2018	-
C-130R <i>Hercules</i>	Med tpt ac	6	US\$42m	US	Government surplus	2012	2015	Ex-USMC ac
V-22B Blk C <i>Osprey</i>	Tiltrotor ac	5	US\$332.4m	US	Bell Helicopter/Boeing Rotorcraft Systems	2015	n.k.	For GSDF; deliveries to be complete by mid-2018
S-76D	SAR hel	11	n.k.	US	Lockheed Martin (Sikorsky)	2013	2015	First hel delivered to coast guard Feb 2015

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Republic of Korea (ROK)</b>								
<i>Hyonmu II</i> B	SRBM	n.k.	n.k.	ROK	Agency for Defense Development	2012	2015	In test
K2	MBT	297	n.k.	ROK	Hyundai Rotem	2007	2014	Production delayed again due to continuing problems with engine and transmission
K21	AIFV	€500	n.k.	ROK	Doosan Infracore	2008	2009	Deliveries resumed after accident investigation
<i>Chunmoo</i>	MRL (239mm)	58	n.k.	ROK	Hanwha	n.k.	2015	To replace K136 <i>Kooryong</i>
<i>Son Won-il</i> -class	SSK	6	€US\$3bn	ROK	DSME	2008	2014	Second batch of six KSS-II (with AIP). Second batch to be fitted with <i>Haeseong</i> -3 SLCM. Third vessel of order launched May 2015
KSS-III	SSK	n.k.	n.k.	ROK	DSME/ Hyundai Heavy Industries	2007	2017	Steel cut for first of class Nov 2014
<i>Incheon</i> -class	FFGHM	6	KRW1.7bn (US\$1.8bn)	ROK	Hyundai Heavy Industries/STX Marine	2006	2013	To replace current <i>Ulsan</i> -class FFG. Fourth and fifth vessels contracted to STX Marine. Up to 15 vessels may be built. Third of class commissioned Jan 2015
<i>Gumdoksuri</i> -class	FSG	18	n.k.	ROK	Hanjin Heavy Industries/ STX Offshore & Shipbuilding	2005	2008	17th commissioned Nov 2014
<i>Cheonwang-bong</i> -class	LPD	4	n.k.	ROK	Hanjin Heavy Industries	2011	2014	First of class commissioned Nov 2014
<i>Dokdo</i> -class	LPD	1	US\$355.1m	ROK	Hanjin Heavy Industries	2015	n.k.	Order for second of class
F-35A <i>Lightning II</i>	FGA ac	40	US\$6.2bn	US	Lockheed Martin	2014	2018	-
FA-50 <i>Fighting Eagle</i>	FGA ac	€60	US\$1.6bn	ROK	KAI	2012	2013	To replace F-5E/F. Deliveries ongoing
AH-64E <i>Apache Guardian</i>	Atk hel	36	KRW1.8tr (US\$1.6bn)	US/ROK	Boeing/KAI	2013	2016	Deliveries to commence late 2016
Light Armed Helicopter	MRH hel	See notes	€1.5bn (US\$1.67bn)	Int'l/ROK	Airbus Helicopters/ KAI	2015	2022	214 Light Armed Helicopters and 100 civilian versions. Based on H155
AW159 <i>Wildcat</i>	MRH hel	8	€270m (US\$358m)	ITA	Finmeccanica (Agusta-Westland)	2013	2015	Part of US\$560m contract including support and training. To be equipped with <i>Spike</i> NLOS missiles
<i>Surion</i>	Med tpt hel	See notes	See notes	ROK	KAI	2012	2013	Up to 242 to be ordered
RQ-4B <i>Global Hawk</i>	UAV	4	US\$657.4m	USA	Northrop Grumman	2014	2018	-
<b>Malaysia (MYS)</b>								
AV8 <i>Pars 8x8</i>	APC (W)	257	US\$559m	TUR	FNSS	2010	2013	Letter of intent signed Apr 2010. To include 12 variants. Deliveries ongoing
Second Generation Patrol Vessel	FFGM	6	MYR9bn (US\$2.8bn)	MYS	Boustead Naval Shipyard	2011	2017	Licence-built DCNS <i>Gowind</i> 100m design. First ISD expected to be 2019. First of class under construction

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
A400M <i>Atlas</i>	Hvy tpt ac	4	MYR907m (US\$246m)	Int'l	Airbus Group (Airbus Defence & Space)	2006	2015	In development. Official unit cost US\$80m. First ac delivered Mar 2015
<b>Myanmar (MMR)</b>								
JF-17 <i>Thunder</i> (FC-1)	FGA ac	n.k.	n.k.	PAK/PRC	PAC	2015	n.k.	-
G120TP	Trg ac	20	n.k.	GER	Grob Aircraft	2014	2015	Deliveries ongoing
Mi-35P <i>Hind</i>	Atk hel	12+	n.k.	RUS	Russian Helicopters (Rosvertol)	2009	2010	-
HQ-12/KS-1A	SAM	24	PRC	PRC	China Jiangnan Space and Industry Company	n.k.	2015	For army. Deliveries ongoing
<b>New Zealand (NZL)</b>								
T-6C <i>Texan</i> II	Trg ac	11	n.k.	US	Textron	2014	2014	Deliveries ongoing
<b>Pakistan (PAK)</b>								
<i>Ra'ad</i> (Hatf-8)	ALCM	n.k.	n.k.	PAK	n.k.	n.k.	n.k.	In development
<i>Al Khalid</i> I	MBT	€110	n.k.	PAK/PRC	Heavy Industries Taxila/NORINCO	2012	2013	Version unclear
S20 ( <i>Yuan</i> -class)	SSK	8	n.k.	PAK/PRC	Karachi Shipyard/Wuchang Shipyard	2015	n.k.	PAK and PRC to build four each
JF-17 <i>Thunder</i> (FC-1)	FGA ac	150	n.k.	PAK/PRC	PAC	2006	2008	Blk 2 being delivered; Blk 3 in development
<b>Philippines (PHL)</b>								
M113A2	AIFV	114	US\$27.8m	US	Government surplus	2014	2015	Deliveries ongoing
OPV 270	PSO	1	See notes	FRA	OCEA	2012	2016	For coast guard. Part of €90m (US\$116m) order including four FPB 72 MKII
Strategic Sealift Vessel	LPD	2	US\$86.9m	IDN	PT PAL	2014	2016	Modified <i>Makassar</i> -class
FA-50PH <i>Fighting Eagle</i>	FGA ac	12	US\$420m	ROK	KAI	2014	2015	Delivery to be completed by 2018
C-295M	Lt tpt ac	3	US\$118m	Int'l	Airbus Group (Airbus Defence & Space)	2014	2015	To replace Fokker F-27s. Deliveries ongoing
<b>Singapore (SGP)</b>								
Type-218SG	SSK	2	n.k.	GER	TKMS	2013	2020	To replace remaining <i>Challenger</i> -class SSKs. Construction of first of class begun mid-2015
<i>Independence</i> -class	PCO	8	n.k.	SGP	ST Engineering	2013	2016	Littoral Mission Vessel. To replace <i>Fearless</i> -class PCOs. First of class launched Jul 2015
A330 MRTT	Tkr/Tpt ac	6	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2014	n.k.	-

Table 10 Selected Arms Procurements and Deliveries, Asia

Designation	Type	Quantity	Contract Value (Current)	Supplier Country	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Sri Lanka (LKA)</b>								
OPV	PCO	2	n.k.	IND	Goa Shipyard	2013	2017	-
<b>Taiwan (ROC)</b>								
CM-32 <i>Yunpao</i>	APC (W)	Up to 650	n.k.	ROC	Ordnance Readiness Development Centre	2010	2011	Replacing existing M113s
<i>Oliver Hazard Perry</i> -class	FFH	4	US\$175m	US	Government surplus	2013	2016	To replace two <i>Knox</i> -class frigates
<i>Yilan</i> -class	PSOH	n.k.	n.k.	ROC	Jong Shyn Shipbuilding Company	n.k.	2015	First two vessels entered service Jun 2015
UH-60M <i>Black Hawk</i>	Med tpt hel	56	US\$3.1bn	US	Lockheed Martin (Sikorsky)	2012	2015	Deliveries ongoing
<i>Hsiung Feng</i> IIE	AShM	n.k.	n.k.	ROC	CSIST	2005	n.k.	In production
<i>Hsiung Feng</i> III	AShM	n.k.	n.k.	ROC	CSIST	n.k.	n.k.	-
MIM-104F <i>Patriot</i> PAC-3	SAM	24	US\$6bn	US	Raytheon	2009	2013	Four batteries. Three existing batteries also being upgraded from PAC-2 to PAC-3. Upgrades and deliveries ongoing
<b>Thailand (THA)</b>								
T-84 <i>Oplot</i>	MBT	54	THB7bn (US\$241m)	UKR	KMP	2011	2013	Deliveries ongoing
BTR-3E1 8x8	AIFV	121	US\$140m	UKR	KMDB	2011	2013	Further deliveries delayed as a result of UKR conflict
DW3000H	FFGHM	1	KRW520bn (US\$464m)	ROK	DSME	2013	2018	Order for second vessel anticipated. Based on KDX-1 derivative
<i>Oliver Hazard Perry</i> -class	FFH	2	Donation	US	Government surplus	2014	n.k.	-
T-50 <i>Golden Eagle</i>	Trg ac	4	US\$110m	ROK	KAI	2015	n.k.	For air force; will replace L-39ZA <i>Albatros</i>
H225M	Hvy tpt hel	6	n.k.	Int'l	Airbus Group (Airbus Helicopters)	2012	2015	SAR configuration; for air force
<b>Vietnam (VNM)</b>								
<i>Hanoi</i> -class	SSK	6	US\$1.8bn	RUS	Admiralty Shipyards	2009	2014	RUS <i>Varshavyanka</i> -class ( <i>Kilo</i> ); sixth of class launched Sep 2015
<i>Gepard</i>	FFGM	2	n.k.	RUS	Zelenodolsk Shipyard	2014	2017	Third order
SIGMA 9814	FFGHM	2	n.k.	NLD	Damen Schelde Naval Shipbuilding	2013	n.k.	First two to be built in NLD, option for two more to be built in VNM
Damen 9014	PSOH	4	n.k.	VNM	189 Shipbuilding Company/Son Thu Company/Ha Long Shipbuilding	2011	2012	For marine police
Su-30MK2	FGA ac	12	US\$600m	RUS	UAC (Sukhoi)	2013	2014	Deliveries ongoing
VNREDSat-1b	ISR satellite	1	€60m (US\$77m)	FRA/VNM	Airbus Group/VAST	2012	2017	-



# Middle East and North Africa

## Regional states deploy amid worsening security

Regional security further deteriorated in 2015. The security and humanitarian situations in Libya, Yemen and Syria worsened, while Iraq saw no decisive improvement. Islamic State of Iraq and al-Sham (ISIS) extremists remained in control of significant swathes of territory in both Syria and northwestern Iraq. Despite setbacks, and the attentions of an American-led air coalition that had been attacking ISIS in Syria since September 2014 (and in Iraq since earlier in the year), the jihadist organisation continued to resist and expand, surprising local and international audiences with its resilience, adaptability and brutality. Meanwhile, the Syrian regime of Bashar al-Assad clung to power. Assad received a boost in late 2015, when Russia deployed military force to assist its ally and, after the downing of an airliner over Sinai, increased attacks on ISIS, but the grinding civil war continued and large numbers of civilians – largely those from the middle class – decided to leave, compounding the difficulties that will be faced in eventually rebuilding the country. To this scenario was added the conflict in Yemen, where regional states grew increasingly concerned about the significant expansion of Houthi control and, it was alleged, Iranian influence, at the expense of the government of President Abd Rabbo Mansour Hadi.

This confluence of crises meant that there were greater imperatives for cooperation among regional states. These countries decided to take action themselves, displaying their still-growing strategic extroversion. But the degree of cooperation, and how durable this would prove, remained unclear. Regional states' military activity against ISIS in Syria were joined by another operation in March 2015, when Gulf Cooperation Council (GCC) states began a military operation in Yemen. The Saudi-led operations *Decisive Storm* and *Restoring Hope* saw a substantial deployment of ground forces, as well as air and naval capabilities. Regional armed forces, particularly those of the United Arab Emirates (UAE), also suffered what were for them significant casualties. The UAE's approach to the repatriation of the dead and wounded, and how the conflict was portrayed at

home, was indicative of not only a growing military maturity but also an acknowledgement of the risks inherent in military action – of the kind potentially valuable for states that increasingly see their military forces as a tool to be used in support of national-security objectives.

Furthermore, the growth in regional military activities will generate many lessons in areas such as managing coalition operations (and its implications for future inter-operability needs); integrating air, ground and naval operations; and logistics and training requirements. External military powers in the region, such as the United States, United Kingdom and France, will also be studying these operations to see, among other things, how they can best offer assistance.

While regional states are concerned about the rise of extremism, the growing number of failed states and what they perceive as a decline in international political and military focus on the Middle East, GCC countries also have long-standing concerns about Tehran's growing influence, the actions of its proxies and its military capabilities.

## Worries about Iran

Iran's military interventions in the region became more evident in 2015. Tehran's financial and material support for Shia militias in Iraq had been public knowledge for some time, with personnel from the Islamic Revolutionary Guard Corps (IRGC) deployed there, but the degree to which Iran was actively supporting the Assad regime became more clear when news emerged that Brigadier-General Hossein Hamadani, a senior IRGC commander, had been killed in October near Aleppo. It then became apparent that a number of other high-ranking officers from the IRGC and Basij (an Iranian paramilitary force) had also died while advising Syrian forces, amid emerging reports from the Syrian opposition that hundreds of Iranian troops were deployed in the country. Meanwhile, Iran continued to support Hizbullah, the Lebanese militant organisation that maintained significant military deployments in Syria in support of the regime. GCC states also alleged that Iran was providing material support to the Houthi

rebels in Yemen and supporting militant groups in some GCC states. Illustrating this concern, both sides at the September GCC–US Strategic Cooperation Forum ‘pledged to work together to counter [Iran’s] interference, particularly attempts to undermine the security of and interference in the domestic affairs of GCC member states’.

Iran’s military capabilities remained a concern in the region and beyond. Although the embargo on the sale of many conventional weapons to Iran is to remain in force for five years after the 18 October adoption of the Joint Comprehensive Plan of Action (JCPOA) – the deal designed to limit Iran’s nuclear activities signed by the P5+1, Iran and the European Union – regional states and concerned external powers were aware that Tehran was likely planning a significant military-recapitalisation programme when it was once more able to utilise revenues for procurements on the open market. Russia, which in 2010 had interpreted the Security Council ban on exports to Iran to also include an air-defence system it had previously contracted to provide (widely

believed to be the S-300PMU), reversed that decision as the nuclear deal was being finalised. Russian defence-industry officials were suggesting in late October 2015 that work was under way once more on an initiative to provide a medium-range surface-to-air-missile system to Tehran.

Iran responded to the JCPOA in its own way by, for the first time, displaying road-mobile missiles arrayed in underground storage. Although the missiles appeared without any supporting infrastructure, the footage was likely intended to show the domestic audience that although limits had been accepted on its nuclear programme, Iran was not diminishing its military capabilities. This refocused attention on the future of Iran’s missile arsenal, not least given that, after the JCPOA, the UN Security Council ban on Iran’s ballistic-missile developments is supposed to be lifted after eight years. While this relaxation might cause worry about potential future trade in this area, Iran will remain, as the IISS noted in September, ‘unable legally to import missile-related parts and technology because the volun-

### Reforming Iraq’s army

Following the effective disintegration of Iraq’s ground forces in 2014, in the face of the move by ISIS on Baghdad (which was later aborted), new Iraqi prime minister Haidar al-Abadi adopted a three-point strategy to reform and rebuild the army.

Firstly, Abadi purged its senior ranks of corrupt, incompetent or politically tainted officers. He quickly disbanded the Office of the Commander in Chief, the institutional vehicle that former prime minister Nuri al-Maliki had used to concentrate military power in his own hands. In late 2014, Abadi sacked 320 senior officers, many of whom had been responsible for the areas of northwestern Iraq in which ISIS had triumphed. Secondly, Abadi sought to tackle the corruption that had become endemic in the security forces. He did this through an audit of the army’s payroll to identify ‘ghost soldiers’, who were paid by the ministry of defence but did not show up for work, instead splitting their wages with senior military officers complicit in the deception. The audit uncovered 50,000 cases of such fraud. Thirdly, as part of a plan to devolve power to the provinces, Abadi embarked on the creation of a locally raised National Guard. This, he hoped, would create a more religiously balanced security force, diminishing the sense among Sunnis that the army was primarily aligned with Shia religious parties. In February 2015, after prolonged negotiations, parliament passed the National Guard bill.

### Popular Mobilisation Forces

With Baghdad under threat the most senior Shia cleric, Grand Ayatollah Ali al-Sistani, issued a fatwa calling on all able-bodied men to defend ‘their country and their people and their holy places’. Though Sistani explicitly asked volunteers to join Iraqi-government forces, and Baghdad had quickly moved to set up Hashd al-Shaabi (Popular Mobilisation Forces (PMF)) to manage the tens of thousands of young men who had volunteered to fight, the main beneficiaries of this popular mobilisation were the militias run by Shia religious parties. The government could not organise, let alone deploy, so many volunteers. Instead, violent and radically sectarian Shia militias who had been active in the civil war – such as Kata’ib Hizbullah and the Badr Brigade – began arming and deploying the recruits. Hadi al-Ameri, the senior Badr commander, became their public face. Together, the militia and Hashd al-Shaabi were estimated to have at least 100,000 men under arms.

The problems of raising a primarily Shia force mobilised through sectarian appeals and controlled by Shia militias soon became apparent. As the militias and Hashd al-Shaabi began to retake Sunni-dominated areas previously controlled by ISIS, there were reports, from Human Rights Watch and others, of summary executions, human-rights abuses and attempts at religious cleansing.

tary constraints imposed by the Missile Technology Control Regime will remain in place for most exporting countries’.

### The war against ISIS

By late 2015, after nearly one year of air operations by the US-led coalition, ISIS still controlled considerable territory, which was home to approximately five million people and stretched from Mosul in Iraq to Palmyra in Syria, with Raqqa announced as the capital of the ISIS ‘caliphate’ in summer 2014. A pattern had emerged whereby ISIS was largely able to expand in areas that were dominated by Sunni Arabs but was contained and rolled back in those that were not.

The group demonstrated an ability to steadily recruit new members, even while under sustained attack. Its brutality shocked audiences at home and abroad, and also appealed to would-be recruits. It was estimated that by mid-2015 around 25,000 foreigners (mostly from Arab states, but also from Asia and the West) had joined ISIS, as many as 7,000

of them in the first nine months of the year. This exposed the challenge for counter-radicalisation and counter-terrorism efforts. In a manner similar to al-Qaeda in the previous decade, ISIS became the brand with which other terrorist and insurgent groups in other parts of the region sought to associate themselves. Groups from as far afield as Afghanistan, Egypt’s Sinai Peninsula, Libya, Yemen and even Nigeria (Boko Haram) pledged allegiance to the group.

Meanwhile, despite optimistic pronouncements, the US-led coalition struggled to contain ISIS and, given the multitude of coalition partners, even agree on a realistic strategy, with Washington’s Iraq-first approach contested on political and operational grounds.

In Iraq, the disparate anti-ISIS coalition consisted of Western countries providing airpower, intelligence and military assistance, and several large Arab states (including Saudi Arabia, the UAE and Jordan) providing mainly airpower. In parallel, the Iraqi government mobilised its security forces along-

This raised doubts about the sustainability of the victories against ISIS, making it even more difficult to find Sunni allies for the fight against the jihadists. The militias also had goals that conflicted with the central government: the former appeared interested in securing the immediate vicinity of Baghdad and winning influence there, while the government sought to recover territory nationally.

#### Training starts – again

Rebuilding effective military capability among the regular forces was a different matter. New platforms started to arrive – such as Iraq’s first F-16 combat aircraft and L-159 trainers, Chinese UAVs and some armour – while the first new T-50 trainers were rolled out in South Korea. However, significant land assets had either been lost to ISIS, destroyed or damaged beyond repair. The most significant debate was over how to reconstruct the army, given that it had effectively lost at least four divisions. The lack of financial resources, due to the 2014–15 decline in the oil price, made it hard to develop adequate funding support, while there was little pause for breath: constant combat was complicating the rebuilding process.

The US and its coalition partners invested considerable effort in training Kurdish fighters in the north. As of October 2015, there were over 4,000 Peshmerga being trained by coalition troops at the Kurdish Training Co-ordination Center. The idea is to develop a deployment

cycle, so forces emerging from combat have a rest period and then enter the training centre for up to five weeks, before returning to the front lines. According to the Pentagon, the training package covers marksmanship, infantry tactics and military medicine, as well as skills for forward observers – vital for artillery-spotting and aerial targeting.

Less certain was the status of training for the wider army, though similar training cycles were under development at the Al-Asad, Besmaya, Erbil and Taji training centres. Combat against ISIS indicated that the significant training investment made in the 2000s had been undermined by factors such as Iraqi institutional failings, and that benefits were only really seen in Iraq’s special forces. These troops, while depleted, still spearheaded many of Iraq’s counter-ISIS operations, working in tandem with federal police and the PMF. New training programmes for the Iraqi security forces were directed at current needs, focusing on small-unit tactics and capabilities to counter improvised explosive devices. However, much remained to be done. The training programme was criticised as having significant weaknesses, and the combination of forces deployed on anti-ISIS operations – often, police with the PMF – raised further questions about command and control, as well as the steps that would need to be taken to generate a robust, inclusive and cohesive force.

side the Popular Mobilisation Forces. In the north, the Peshmerga fighters of the Kurdistan Regional Government (KRG) and the main Kurdish factions benefited from both Western and Iranian support.

These forces were able to deal military setbacks to ISIS, especially in the north. There, pressure was relieved around Erbil and along the disputed KRG border, and Kurdish forces established sustainable defensive lines over time. However, the strategy was put to the test in the south. The Iraqi government prioritised the retaking of Tikrit in March and April, but its forces struggled in this effort, despite allying with the PMF and receiving Iranian support. The US coalition later provided decisive air support. Nevertheless, much of the city was destroyed in the fighting, and its Sunni residents who had fled ISIS rule were deterred from returning by fear of Shia revenge attacks.

Taking Tikrit and the refinery town of Baiji was seen as crucial to the effort to capture Mosul, which US Central Command prioritised. To this purpose, the US sought to organise a coalition of Iraqi military forces, Kurdish Peshmerga and Sunni tribal

groups. This effort was undercut by the ISIS capture of Ramadi, in Anbar Province, and the slower-than-expected rebuilding of government forces. The Ramadi setback forced a rethink of the strategy. The plan to move on Mosul was dropped, and the Iraqi government, the PMF and the coalition focused on Ramadi and Fallujah. However, ISIS proved tenacious and the heralded offensive in Ramadi dragged on for considerably longer than planned.

In Syria, the Kurdish forces of the People's Protection Units (YPG) – allied with some Free Syrian Army units under their joint Burqan al-Furat 'operations room' – managed to defeat ISIS and expel the group from Kobane, as well as much of the region stretching from Hasakah to the Euphrates. Western military support proved essential to Kurdish success. The US perceived the Kurdish units as their most competent and trustworthy ally against ISIS: Washington's plan to capture Raqqa relied on them. Kurdish priorities, however, lay in establishing control of a contiguous territory along the Syrian–Turkish border. This meant defeating ISIS, which advanced against Arab rebels in Aleppo, and

### ISIS in combat

Several factors contributed to the difficulties in pushing ISIS further back. Firstly, the Iraqi Shia militias, though willing to fight for Shia-majority territory, appeared reluctant to take risks in recapturing Sunni areas. Additionally, the US-led effort to train both Iraqi-government forces and pro-government Sunni militias struggled to generate the force levels that Washington had anticipated. Command-and-control was complex, with key Iranian-aligned Shia militias taking direction from their Iranian advisers, including IRGC Quds Force commander Qassem Suleimani. Integrating their efforts with Iraqi-government forces and coalition airstrikes proved difficult, and a major source of friction and delay.

The spring–summer 2015 Iraqi operation to recapture Tikrit also showed that ISIS fighters were tenacious in defending urban terrain, particularly when they had time to prepare defensive positions. They also made extensive use of improvised explosive devices, which imposed casualties and delays on attacking forces. Although ISIS was put on the strategic defensive in Iraq, it conducted a very active defence, mounting tactical counter-attacks to disrupt its opponent's plans and close dangerous gaps in its front line. These offensives also contributed to its propaganda efforts by showing it to be still conquering territory and killing 'apostates'.

ISIS also demonstrated an ability to identify and then attack weak points in enemy defences, and to sequence its attacks in space and time to distract and deceive its opponents. For example, since June 2014 it had been seeking to capture Ramadi. Several attacks were repelled by government forces and Sunni tribes fighting on their side. But beginning in April 2015, ISIS mounted a coordinated offensive of shaping and diversionary attacks north and west of Baghdad. In May, Iraqi government forces were tactically overmatched by ISIS, in competence and probably in motivation and leadership; they were evicted from Ramadi, and appeared to rapidly withdraw in a state of disorder. There are credible reports that the decisive ISIS attack took place during a sandstorm, which provided cover from coalition airpower.

The war against ISIS will be won on the ground, by measures including those to combat ISIS ideology, but all the anti-ISIS actors in Iraq, including the government and Shia militias, have a shared assumption that there is no place for coalition ground troops in Iraq (or Syria). This reflects the complex legacy of recent wars in Iraq and Afghanistan, where US-led international forces often struggled to achieve the necessary levels of popularity and legitimacy.

### The US-led coalition against ISIS

Most of the direct combat between ISIS and coalition forces consisted of airstrikes. By mid-October 2015, the coalition had conducted 7,600 airstrikes: 4,900 in Iraq and 2,700 in Syria. Precision-guided munitions were heavily employed and their use was subject to very tight rules of engagement so as to minimise civilian casualties and collateral damage. However, these factors limited their effectiveness, as did a lack of airborne-surveillance platforms. A further limitation for much of the year was the lack of access to Turkish air bases, which reduced the endurance of aircraft on station over Syria.

ISIS suffered most from the airstrikes that played a major role in helping the Kurdish defenders of Kobane. The air campaign also had some success in degrading the ISIS oil enterprise, and there was evidence that the strikes reduced the group's operational tempo. But ISIS adapted and was still capable of concentrating forces for opera-

tional- and tactical-level offensives in both Syria and Iraq.

It is to be assumed that the US and its coalition allies were making a considerable effort to develop their intelligence picture by using UAVs and surveillance aircraft, such as the UK's *Sentinel* and US Air Force's *Rivet Joint*, as well as by developing human-intelligence networks. There was occasional evidence of intelligence successes. These included a successful May 2015 US special-operations forces raid in eastern Syria: an ISIS finance officer was killed, his wife captured, a slave liberated and considerable amounts of evidence seized. Another precision strike was the successful October 2015 raid by Kurdish commandos and US advisers to rescue prisoners in imminent danger of being executed by ISIS; this provided further evidence of coalition intelligence successes, but it was unclear whether this improved intelligence was having a decisive effect.

then these very forces. However, this development heightened Turkish and Arab fears of Kurdish expansionism, which led Ankara to conduct airstrikes against the Kurdistan Workers' Party in Iraq and the YPG in Syria, as well as to clashes between Arab Islamist forces and the YPG.

ISIS continued to advance, and in May achieved its most significant symbolic victory of 2015, with the stealthy conquest of the historic city of Palmyra against weakening Syrian-regime forces. The city sits at a strategic crossroads that puts much of Syria within reach. ISIS also established a presence in the Al-Hajar Al-Aswad district south of Damascus, and attempted to infiltrate the besieged Yarmouk refugee camp. It seized territory in Homs and Hama provinces, where it committed atrocities against soldiers and members of minority groups while encountering ferocious rebel and, increasingly, regime resistance. Nevertheless, ISIS showed signs of internal weakness. Its funding base retracted, with more money coming from taxation and extortion than the sale of commodities such as oil, cotton or grain, or from foreign donations, while growing numbers of disillusioned fighters defected.

ISIS persisted in committing highly publicised acts of brutality and destruction. It continued to hold large-scale executions, murder opponents and demolish historical monuments, including in Palmyra, guaranteeing continuous media coverage. The immolation of captured Jordanian pilot Moaz al-Kasasbeh momentarily galvanised anti-ISIS sentiment in the

Arab world, and was followed by Jordanian and Emirati airstrikes in Syria. But misgivings within the coalition about US strategy and, later, the GCC intervention in Yemen diverted military resources away from the anti-ISIS effort, leaving the US carrying most of the military burden.

### War in Syria: towards year five

By late 2014, the Assad regime appeared to have largely recovered from setbacks suffered in previous years. Yet in a matter of months, its military position worsened considerably, reaching its lowest point since late 2012. This was due to a combination of general fatigue, resource and personnel shortages, and unforeseen rebel consolidation.

However, despite being weakened, Assad still benefited from superior firepower, airpower and command and control, as well as sustained foreign support and a tacit preference among some states not to precipitate his fall, lest there be a jihadist takeover of Damascus. His hold over the capital and the country's main cities remained uncontested, but by late 2015 Syria was looking more and more like a partitioned country, with various parties controlling increasingly coherent and linked areas.

The expansion of ISIS aided Assad's argument that he was a barrier against jihadism, but it also weakened him militarily. Previously, both ISIS and regime forces had focused on fighting the mainstream rebel groups rather than each other. But ISIS began to seize poorly defended regime areas across



Table 11 **Selected Extra-Regional Air Deployments, by Force Location (as at Nov 2015)**

<b>TURKEY</b>	<b>QATAR</b>	<b>KUWAIT</b>	<b>SYRIA</b>
<b>United States</b> (Incirlik Air Base) ■ 6 F-15C <i>Eagle</i> Ftr ac ■ 12 A-10C <i>Thunderbolt II</i> Atk ac ■ 1+ AC-130U Atk ac ■ MQ-1B <i>Predator</i> CISR UAV	<b>United Kingdom</b> (Al Udeid Air Base) ■ 1 RC-135W <i>Rivet Joint</i> ELINT ac <b>United States</b> (Al Udeid Air Base) ■ 6 B-1B <i>Lancer</i> Bbr ac ■ 4 RC-135V/W <i>Rivet Joint</i> ELINT ac	<b>Canada</b> (to be withdrawn) (Ahmed al Jaber Air Base) ■ 6 CF-18A <i>Hornet</i> FGA ac ■ 2 CP-140A <i>Aurora</i> MP ac <b>Italy</b> (Ahmed al Jaber Air Base) ■ 4 <i>Tornado</i> IDS FGA ac (ISR only) ■ MQ-1B <i>Predator</i> ISR UAV <b>United Kingdom</b> (Ali al Salem AB) ■ MQ-9A <i>Reaper</i> CISR UAV <b>United States</b> (Ahmed al Jaber Air Base) ■ 12 A-10C <i>Thunderbolt II</i> Atk ac (Ali al Salem Air Base) ■ MQ-1B <i>Predator</i> CISR UAV ■ MQ-9A <i>Reaper</i> CISR UAV	<b>Russia</b> (Basel al-Assad Air Base) ■ 12 Su-24M <i>Fencer</i> FGA ac ■ 4 Su-30SM FGA ac ■ 4 Su-34 <i>Fullback</i> FGA ac ■ 10 Su-25SM <i>Frogfoot</i> Atk ac ■ 2 Su-25UBM <i>Frogfoot</i> Atk ac ■ 1 Il-20M ELINT ac ■ 12 Mi-24P <i>Hind</i> Atk hel ■ 6 Mi-8AMTSh <i>Hip</i> TPT hel (CSAR)
<b>JORDAN</b> <b>France</b> (Mowafaq al Salti Air Base) ■ 3 <i>Mirage</i> 2000D FGA ac ■ 3 <i>Mirage</i> 2000N FGA ac <b>Netherlands</b> (Mowafaq al Salti Air Base) ■ 4 F-16AM <i>Fighting Falcon</i> Ftr ac <b>United States</b> (Mowafaq al Salti Air Base) ■ 6 F-16V <i>Fighting Falcon</i> FGA ac	<b>UNITED ARAB EMIRATES</b> <b>Australia</b> (Minhad Air Base) ■ 6 F/A-18A <i>Hornet</i> FGA ac <b>France</b> (Al Dhafra Air Base) ■ 6 <i>Rafale</i> FGA ac ■ 1 <i>Atlantique 2</i> MP ac <b>United States</b> (Al Dhafra Air Base) ■ 6 F-22A <i>Raptor</i> Ftr ac ■ 12 F-15E <i>Strike Eagle</i> FGA ac ■ U-2S ISR ac RQ-4B <i>Global Hawk</i> ISR UAV	<b>CYPRUS</b> <b>United Kingdom</b> (RAF Akrotiri) ■ 8 <i>Tornado</i> GR4 FGA ac ■ 1 <i>Sentinel</i> R1 ISR ac	

eastern Syria, and committed large-scale massacres at the Al-Tabqa military airport in Raqqa Province, as well as in Palmyra.

Assad's position had also been weakened in autumn 2014, when ISIS victories in Iraq forced Iraqi Shia militiamen to redeploy back to their country. This deprived the regime of hardened fighters who had led the defence of Damascus, its surrounding areas and southern Syria. Pakistani and Afghan Shia recruits replaced them, but these poorly trained fighters demonstrated little operational effectiveness or commitment.

By mid-2015, ISIS had seized significant quantities of territory in Syria. It operated in Homs Province – threatening Alawite, Christian and Ismaili villages – and besieged regime-controlled parts of Deir ez-Zor, but suffered setbacks in the northeast, mainly at the hands of the YPG.

In February, pro-Assad forces failed to encircle Aleppo and break the sieges of the nearby Shia towns of Nubl and Zahra, marking a turning point for the regime's presence in northern Syria. Subsequently, there were a string of advances by Jaysh al-Fateh (Army of Conquest, or the JAF) coalition, comprising Islamist and jihadist factions. Benefiting from an influx of weaponry and superior organisation, the JAF mounted well-orchestrated campaigns, seizing Idlib city in March and, weeks later, the town of Jisr al-Shougour. In spring and summer, the JAF and allied groups reached Latakia Province and pushed

through the strategic al-Ghab valley. These advances were assisted by more secular forces, such as Suqour al-Ghab and Division 13, supported by Western states. These groups had access to superior training and anti-tank weapons, but remained too small to be dominant.

#### *Regime acknowledges personnel shortage*

Since early 2015, Iran and Hizbullah had been urging Assad to adopt a strategy of retrenchment, and to focus on defending Damascus and core areas linking it to the main northern and coastal cities. Assad instead preferred a nationwide strategy, designed to maintain the illusion of wider state power.

But in a July speech, he admitted for the first time the limitations in government strategy. Referring to the recent setbacks, he said: 'it was necessary to specify critical areas for our armed forces to hang on to. Concern for our soldiers forces us to let go of some areas.' In terms of personnel, he recognised that 'there is a lack of human resources ... Everything is available [for the army], but there is a shortfall in human capacity.'

Unsurprisingly, the Syrian army has struggled to replenish its depleted numbers, particularly in the ranks (some analysts have argued that the benefits provided to officers – such as subsidised housing – have led to fewer defections and less avoidance of service in the officer class). Many regime supporters preferred to join militias rather than the army: the

former were cohesive and often intended for static and communal defence, while the army mounted costly offensive operations. Meanwhile, regime setbacks and the rise of jihadist groups provoked a shift in the Druze community, known for providing tough combatants. The killing of Druze in Idlib and the ISIS seizure of Palmyra (which is near Suweida Province, home to large Druze populations) prompted Druze leaders to decide that men of fighting age should no longer join regime forces but instead focus on local self-defence. This caused tension, but Damascus was forced to acquiesce. The government also lifted the sentences given to conscripts who had failed to report for duty.

#### *Other actors*

The YPG, supported by the international coalition, achieved considerable successes against ISIS, pushing it back from most areas bordering Turkey and expelling it from Hasakah, in northeast Syria. The result was a largely contiguous Kurdish-controlled region in northern Syria that led to growing clashes with Arab residents and Islamist militias. The YPG aimed to link the regions surrounding Kobane and Afrin, putting it at odds with Arab and Islamist forces, and Turkey.

Hizbullah's involvement in Syria increased significantly, in part to make up for the departed Iraqi Shia fighters and in part to secure its own interests as it sensed that the regime had weakened. Though air superiority and strong command and control gave the regime an advantage, the terrain in the Qalamoun area, east of the Lebanese border, allowed militant groups (notably ISIS, Ahrar al-Sham and others) to often elude government forces.

Russia's military intervention was intended to shore up the fragile Syrian army. It involved attack and fighter aircraft, helicopters, air-defence systems and special-forces advisers; while Russia presented the intervention as designed to contain and fight ISIS, the target set was aimed more at relieving pressure on the regime.

The Russian intervention significantly complicated an already multifaceted situation, and raised the costs and risks associated with Western, Turkish and Arab options. It also created a new alignment of interests and efforts between Russia, the Syrian regime, Iran, Iraq and Shia militias. But intervention also carried high stakes and costs for Moscow, as it led to greater consolidation and radicalisation among the rebels.

## LIBYA

Libya witnessed a further fracturing of governance and security in 2015, enabling ISIS to expand its presence in the country and exacerbating refugee flows from North Africa. The split between the Tripoli-based General National Congress (GNC) and the Tobruk-based House of Representatives (HoR) – and their associated militias, the so-called Dawn and Dignity alliances respectively – persisted despite intensive efforts by the UN and other international parties to negotiate a unity government. While overall casualty levels dropped, fighting extended to multiple fronts.

In March, the internationally recognised HoR and the Dignity coalition appointed General Khalifa Haftar to lead Libya's formal armed forces, which remain limited in terms of personnel and overall capability. The primary forces under Haftar's command are the al-Saiqa Special Forces Brigade led by Colonel Wanis Bukhamada, tribal forces in eastern Libya and the remnants of the Libyan Air Force. The air force has been used liberally against the Dawn coalition, and has been accused of indiscriminate bombing attacks utilising, according to Human Rights Watch, cluster munitions. On at least three occasions, it has also been accused of attacking ships suspected of illegally carrying arms.

Violence in western Libya declined during 2014–15, after the Dawn coalition successfully expelled its Dignity rivals from their positions in Tripoli. However, a late-January attack on the Corinthia Hotel announced the presence of an ISIS branch in Libya. By August, ISIS had captured Sirte, the hometown of former Libyan leader Muammar Gadhafi. Despite being some of the most powerful forces in the country, militias from Misrata (Libya's third-largest city), in particular Libya Dawn's 166th Brigade, were forced to retreat from Sirte and complained of a lack of support from the government in Tripoli.

These security challenges continue to stem in part from the inability of the GNC and the HoR to reach an agreement to establish a 'Government of National Accord' (GNA), despite efforts by UN Special Representative Bernardino León. By mid-September, León's repeated threats to withdraw international support and his grave warnings about Libya's future had yielded little progress.

Even if the two sides were to reach an agreement, it remains unclear how a GNA would enforce the deal among the many disparate militia factions. The international community has discussed plans to deploy a

peacekeeping force to protect government institutions and international representatives, and potentially to train Libyan forces (despite the failure of all previous training efforts). Italy would be the most likely candidate to lead such a force, by virtue of its willingness to deploy the largest number of troops. However, such plans remain beholden to a political agreement and would be limited to Tripoli. Moreover, such an international force would have to be accepted by Libyans – who have traditionally opposed any foreign-troop presence on Libyan soil – and would also attract the attention of ISIS and other extremist groups.

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## YEMEN

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### GCC military operations

The Houthis' territorial expansion from September 2014 onwards precipitated civil war in Yemen, prompting an unprecedented intervention in the country by Gulf states, led by Saudi Arabia. The Houthi advance was facilitated by an alliance with former president Ali Abdullah Saleh, who retained the loyalty of many army units as he manoeuvred to undermine President Hadi.

Within a few months, the Houthis had gained control of the capital, Sana'a; captured Hadi (who later escaped); seized state institutions and critical infrastructure; and launched an offensive that would take them to the southern coastal city of Aden by March 2015. This rapid expansion, combined with Saudi concerns about a potential Iranian role, prompted regional states to respond. As the Houthis approached Aden in March, the Saudi and Emirati air forces and navies imposed an air and naval blockade, and launched air operations to slow and ultimately reverse the Houthi advance.

The Saudi-led intervention came as a surprise to many, although it was preceded by intense consultations among the Gulf states. They (aside from Oman) announced their support for the operation, named *Decisive Storm* and later *Restoring Hope*, and contributed varying levels of military resources, with Saudi Arabia and the UAE clearly in the lead. They also conducted intense diplomacy to secure the backing of key regional and neighbouring countries.

There was considerable scepticism in the West about the intervention's wisdom and strategy, as well as about the competence of Saudi forces: their record during the 2009 Saudi–Houthi war was mixed, at best. Nevertheless Riyadh was able to secure the support of the US, the UK and France; these states

provided intelligence and logistical support to the broader operation.

The coalition's campaign ostensibly focused on assets of the Houthis and Saleh loyalists, destroying much of the Yemeni air force, as well as arsenals of missiles and other weapons. The coalition was, however, criticised by international non-governmental organisations for disproportionately affecting civilians, hitting non-military sites such as hospitals and food stores, and – as was alleged by Human Rights Watch – apparently using cluster munitions.

Within weeks, the broader coalition strategy came under scrutiny. At first, GCC forces focused on defending and retaking Aden, but air power was not sufficient for this task. For their part, the battle-hardened Houthis and their allies proved resilient, mounting cross-border attacks, including at least one *Scud*-missile attack, against Saudi territory. This compelled the deployment of Saudi Army and National Guard troops along the border, and intense bombing of the Sa'ada region, the Houthi heartland.

The role of Tehran remained opaque. Iran had maintained a significant presence in Yemen for years, and there were reports that Iranian and Hizbullah military advisers were active in the country, but there was no publicly available evidence of Iranian direction or command and control. The air and naval blockade prevented resupply, and though Iran attempted to send a ship to Yemen, it claimed that the vessel carried only humanitarian supplies.

By late spring, with Aden still contested, Saudi Arabia and the UAE adopted a more ambitious strategy. They co-opted local commanders and launched ambitious train-and-equip programmes for anti-Houthi Yemeni fighters. The effect was rapid: in late July, a force from the elite UAE Presidential Guard (see *The Military Balance 2015*, p. 314) arrived in Aden to support the city's re-conquest and to push Houthi–Saleh forces back north. In August, Saudi forces entered northern Yemen, though there was no indication of a major push against Sa'ada. Instead, the announced (though debated) goal was to seize Sana'a and force a Houthi capitulation. The focus of the fighting was Ma'rib Province, to the east of Sana'a, as well as Ibb and the vital city of Ta'izz to the south.

### UAE forces

While largely silent over its role, the Emirati force capitalised on years of combat experience gained across the region, including in Libya and Afghanistan. But the scale and complexity of this Yemen undertaking

Table 12 **Operation Restoring Hope: Estimated Regional Coalition Forces and Equipment** (as at Nov 2015)

Country	Personnel	Forces	Ground equipment	Air equipment
Bahrain	250	■ 1 mech coy; some SF	■ <i>Arma</i> 6x6 APC	■ 4-6 F-16C <i>Fighting Falcon</i> FGA ac
Egypt	0	-	-	■ 4-6 F-16C <i>Fighting Falcon</i> FGA ac
Jordan	0	-	-	■ 6 F-16C <i>Fighting Falcon</i> FGA ac
Kuwait	0	-	-	■ 4 F/A-18A <i>Hornet</i> FGA ac
Morocco	0	-	-	■ 5 F-16C <i>Fighting Falcon</i> FGA ac
Qatar	1,000	■ 1 mechanised battlegroup	■ <i>Piranha</i> II 90mm AIFV ■ VAB APC ■ VAB with HOT SP AT	■ 4 <i>Mirage</i> 2000-5EDA FGA ac
Saudi Arabia	750	■ Some special-forces units	■ M-ATV PPV ■ MIM-104D <i>Patriot</i> PAC-2 GEM ■ MIM-104F <i>Patriot</i> PAC-3	■ Up to 100 F-15S <i>Eagle/Typhoon/Tornado</i> FGA ac ■ Some AH-64D/E <i>Apache</i> atk hel ■ Some GJ-1 Hvy CISR UAV
Sudan	950	■ 1 mechanised battlegroup	■ BTR-70M	■ 3 Su-24 <i>Fencer</i> FGA ac
United Arab Emirates	4,000	■ 1 brigade HQ ■ Some special-forces units ■ 2-3 armoured battlegroups	■ <i>Leclerc</i> MBT ■ BMP-3 AIFV ■ M-ATV PPV ■ G-6 155mm SP arty ■ M109A3 155mm SP arty ■ <i>Agrab</i> Mk2 120mm SP mor ■ HMMWV/Nimr with <i>Kornet</i> ATGW SP AT ■ <i>Pantsir</i> -S1 AD ■ MIM-104F <i>Patriot</i> PAC-3	■ 12-24 F-16E <i>Fighting Falcon</i> FGA ac ■ 4-6 <i>Mirage</i> 2000-9 FGA ac ■ 4-8 AH-64D <i>Apache</i> atk hel ■ 2 Bell 407 MRH hel ■ 2-4 CH-47F <i>Chinook</i> hvy tpt hel ■ 4-8 UH-60M <i>Black Hawk</i> med tpt hel

dwarfed previous missions, and led to significant losses – notably, in September 2015, when a missile killed around 50 Emirati soldiers, as well as ten Saudi and five Bahraini troops. But, as noted earlier, the way the UAE dealt with these casualties indicated a growing acceptance of military risk. The Presidential Guard, led by a retired Australian special-forces chief, are reportedly capable troops, while the UAE has demonstrated the ability to rapidly deploy military hardware and personnel.

In October meanwhile, Emirati forces rotated their troops in-theatre. Emirati forces have done this elsewhere before but this operation will be a test of how the UAE – and also the Saudi armed forces and others – can manage deployment cycles and sustain a ground force while deployed in combat. Also, Yemen's terrain increases the risk of ambush for armoured formations moving on metalled roads, potentially raising new force-protection requirements, while large-scale movements towards Sana'a from Ma'rib will require significant logistics support. This makes it more important for the coalition to work with Yemen's loyal military and tribal structure to minimise vulnerabilities and benefit from local knowledge; indeed, coalition forces have deployed with these troops, while engaging in a parallel training track for elements of Yemen's air and ground forces.

#### *Saudi forces*

Saudi Arabia was believed to have deployed smaller numbers of troops than the UAE, mainly those from its special forces and the Saudi Arabian National Guard. While its air force was believed able to maintain relatively healthy sortie rates, it ran low on munitions, prompting reports that the UK was diverting some of its *Paveway* IV precision-guided bombs to replenish Saudi stocks. More broadly, images emerging from the campaign indicated not only the difficulty of engaging targets in urban environments with large munitions, but also the requirement for precise targeting information; experts believed that coalition forces were short of tactical air controllers, a capability honed by Western armed forces as a result of operations since *Iraqi Freedom*. Saudi Arabia also requested significant ammunition resupply for its ground forces, with the US Defense Security Cooperation Agency (DSCA) issuing its notification of this request in July. Meanwhile, the Saudi Western Fleet helped impose a naval blockade in the Bab al-Mandeb Strait and the Red Sea, though the Egyptian Navy also played a significant role. The Saudi Eastern Fleet is due to be upgraded under the Saudi Naval Expansion Programme; in October there was a DSCA notification for the possible sale to Riyadh of four upgraded *Freedom*-class Littoral Combat Ships.

*GCC defence cooperation*

Analysts have debated what the Yemen operation might mean for the future of GCC defence cooperation. The GCC has been developing cooperative military structures for decades, particularly through the Peninsula Shield force but also in areas such as communications links between regional air-defence commands and joint exercises. In late 2014, the GCC decided to establish a Joint Military Command, and in March 2015, just before the Arab League summit, a 40,000-strong Arab Defense Force was announced. The confluence of rising security threats and a perception of relative decline in international military attention has led regional states to take action. Within the GCC, a convergence of interests afforded an opportunity to strengthen ties between nations, including defence relationships.

The Yemen operation could be seen as a crucible for future GCC cooperation. But it remained unclear how much joint action there had been and whether coordination was developing in a way that would lead to effective and cooperative joint operations. Regional missile defence remained a case in point. The presumed missile threat was real, and local forces were procuring significant radar and engagement assets, including US *Patriot* and Terminal High-Altitude Area Defense (THAAD) systems, but there was little progress in developing shared early-warning capabilities or in managing protocols that would create a more effective and integrated air-and missile-defence network in the Gulf. For all that, perhaps the most significant cooperative endeavour for the region's states will be required in the aftermath of the Syrian, Libyan and Yemeni conflicts, when massive investments will be needed to stabilise these states and support inclusive and resilient governance structures.

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## REGIONAL DEFENCE ECONOMICS

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### Macroeconomics

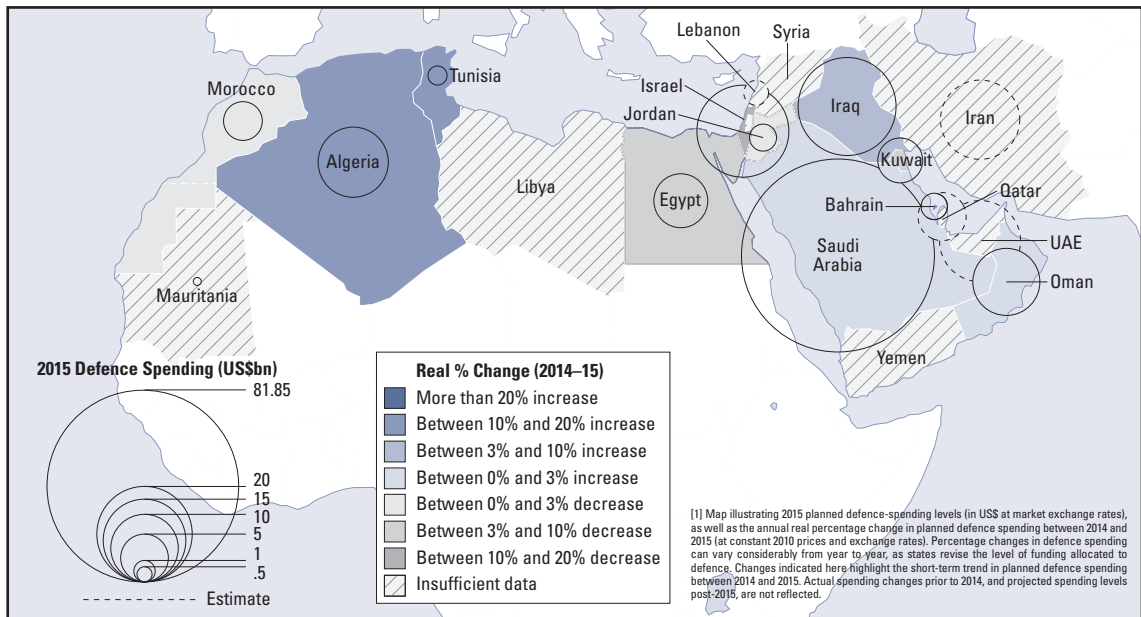
The decline in global oil prices from mid-2014 onwards and the protracted conflicts in Syria, Libya, Yemen and Iraq were major factors adversely affecting regional economic performance. After falling by more than 50% in six months – from around US\$115 per barrel in June 2014 to below US\$50 per barrel in January 2015 – oil prices rebounded to nearly US\$70 per barrel between February and May, before declining again to under US\$50 per barrel by August. Lower prices were driven by slower-than-expected global

growth (particularly in China), which depressed crude demand, as well as by higher-than-expected levels of crude supply, particularly from Saudi Arabia. Saudi Arabia maintained record production levels – of around 10.5m barrels per day, despite falling prices – as part of a price war aimed principally at US shale-oil producers, which had eroded Riyadh's market share in recent years. Additionally, despite financial and security constraints limiting Iranian and Libyan oil supply respectively, increased production in Iraq, Iran, Angola and the UAE meant that, by mid-2015, OPEC producers were collectively producing more than 32m barrels of crude oil per day – their highest output since 2012. Broadly resilient non-OPEC production levels (those in the US and Russia, for example) also added to global stocks, with the International Energy Agency stating in August that global oil supplies were still growing at 'break-neck speed'.

The impact of lower oil prices on regional oil-exporting states' fiscal balances was significant, particularly given heavy government-spending commitments for food and fuel subsidies, infrastructure development and social programmes, made since the 2011 Arab Spring. The fiscal break-even price – the oil price at which state budgets are balanced, under existing expenditure plans – for 2015 was estimated by the IMF to be at or above US\$100 per barrel for Algeria, Bahrain, Iran, Iraq, Libya, Oman, Saudi Arabia and Yemen. Most states in the region, including Algeria, Bahrain, Kuwait, Libya, Oman and Saudi Arabia, were on course to run budget deficits above 5% of GDP in 2015, with the IMF estimating that the GCC's collective fiscal deficit would be 6.3% of GDP.

Consequently, to balance their finances in the short term, oil exporters resorted to increasing tax revenues, reducing expenditure (or at least reducing expenditure growth), issuing debt and running down foreign-reserve and sovereign-wealth-fund assets. For example, Saudi Arabia was forced to run down around US\$65 billion of its US\$730bn in foreign reserves to support its public-spending levels, including an estimated US\$32bn in succession-related public-sector bonuses and investments instituted by King Salman bin Abdulaziz after his accession to the throne, in January 2015. To reduce the strain on its foreign reserves, the Saudi Arabian Monetary Agency planned to raise US\$27bn in bonds to cover part of the deficit. Kuwait and Iraq were also planning bond issuances on international and domestic capital markets respectively; Bahrain raised its debt ceiling





Map 6 Middle East and North Africa Regional Defence Spending<sup>1</sup>

to allow for more borrowing, while Algeria allowed reserves in its oil-savings fund to fall by around one-third.

### Defence spending

The recalibration of medium-term fiscal plans across the region raised the prospect that regional defence-spending growth might decelerate or even reverse, following annual double-digit real-terms increases since 2011. However, after several years of high oil prices, many regional exporters have a sizeable fiscal buffer, as well as low debt levels: gross debt averaged just 6.5% of GDP for Saudi Arabia, the UAE, Kuwait and Oman. This means that many oil-exporting states are likely to be able to finance large deficits for at least a few more years. Additionally, defence remains a priority spending area for many regional governments, and it is likely that fiscal consolidation will instead fall initially on non-salary current-expenditure items, as well as on some infrastructure and capital projects.

For states that do not export oil, growing military-aid flows have become more significant in recent years. In 2013 Saudi Arabia provided a US\$3bn grant to Lebanon to buy French land, air and naval equipment, and the first shipments began arriving in April 2015. The French plan is to provide not just combat capabilities but also equipment to improve surveillance and help in restructuring Lebanon's armed

forces. A further US\$1bn Saudi grant was agreed in late 2014 to assist Beirut in funding six EMB-314 *Super Tucano* combat aircraft, while Iran has reportedly offered to provide Lebanon with military hardware. The Gulf states also helped Egypt fund its purchase of 24 *Rafale* combat aircraft from France's Dassault, and in July 2015 the GCC announced the establishment of an armed-forces commission to supply financial and military aid – including equipment acquired from French, Italian, Serbian and Ukrainian producers – to the counter-terrorism programmes of Bahrain, Egypt, Iraq and Libya. Meanwhile, the US lifted restrictions on the provision of foreign military financing (FMF) to Egypt in March 2015, and resumed its FMF assistance to Bahrain in June (the request was for US\$7.5m), although restrictions on sales to the country's interior ministry continued to apply. Additionally, in 2015 the US and Israel reportedly commenced preliminary bilateral negotiations over renewing the current ten-year, US\$30bn FMF agreement, set to expire in 2017. Some analysts suggest that annual disbursements under the new agreement could rise to US\$3.5–4.5bn, to assist Israel in acquiring technologically advanced equipment such as the F-35 Joint Strike Fighter.

Nonetheless, defence spending growth is estimated to have decelerated in 2015, despite multi-year acquisition programmes continuing apace and higher operational disbursements in Syria and Yemen on the part of GCC states, Jordan and Lebanon driving

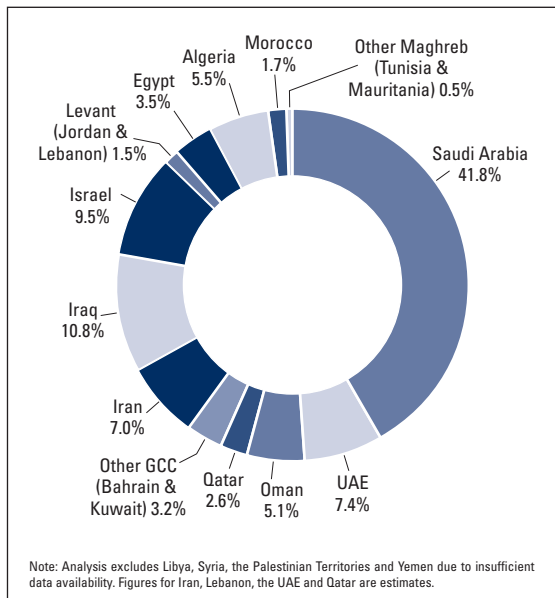


Figure 17 **Estimated MENA Defence Expenditure 2015: Sub-Regional Breakdown**

outlays. Iran also faces higher operational expenses, with a senior military commander calling in May 2015 for the defence budget to be raised to allow the IRGC to recapitalise and overhaul its transport-vehicle and helicopter inventories to aid its fight in Syria. Overall, real-terms regional defence spending (i.e. after accounting for inflation and exchange-rate affects) is estimated to have risen by 1.2% in 2015, to a total of US\$205bn. (Note: Due to exchange-rate depreciation in some parts of the region, this figure is lower, in US dollar terms, than the US\$212bn allocated in 2014.) However, aggregate figures should be treated with a degree of caution due to the widespread lack of budgetary transparency and the use of off-budget funding sources in the region. The paucity of budgetary documentation in many conflict-afflicted states means that aggregate figures do not reflect the military outlays of a significant number of states in the region.

However, with lower oil prices likely reflecting a structural shift in the global economy rather than a temporary blip, it will eventually become necessary for oil-exporting states to start reining in future expenditure levels, including those on defence allocations, if fiscal stability is to be maintained in the long term.

## Procurement

With double-digit spending increases since 2011, regional defence procurement has proceeded at a

rapid pace in recent years. As shown in Figure 18, between 2011 and 2015 the Gulf states were some of the most active regionally in terms of procurement: these states accounted, on average, for around 40% of all countries acquiring equipment in each category. Those Gulf states with larger procurement budgets – such as Saudi Arabia, the UAE and Qatar – were active in around 60% of equipment categories. Other states such as Algeria, Egypt, Iraq and Lebanon each acquired or upgraded platforms in between one-third and two-thirds of all equipment categories. In many cases, this reflected requirements to replace ageing inventories, and in the cases of Iraq and Lebanon, to bolster their armed forces after years of limited military capacity.

### Combat aviation, air and missile defence

Nearly two-thirds of regional states sought to acquire combat aircraft or upgrade their fleets in the five years to 2015, aiming to recapitalise existing inventories and plug capability gaps. Dassault was particularly successful in 2015, securing orders for its *Rafale* multi-role combat aircraft from Egypt as well as Qatar, while the US commenced its long-delayed F-16C/D *Fighting Falcon* deliveries to Egypt and Iraq. Meanwhile, Kuwait was reportedly considering the F/A-18E/F *Super Hornet* aircraft to replace its legacy F/A-18 aircraft, though it also reached in September an agreement with Italy for the supply of 28 Eurofighter *Typhoons*. Negotiations over Saudi Arabia's order of a second tranche of *Typhoons* continued throughout the year. Lebanon, meanwhile, ordered six *Super Tucano* (using Saudi funds).

A similar proportion of states have been active in the market for air- and missile-defence systems. Gulf-state acquisitions centred on the *Patriot* and THAAD systems. After large-scale purchases by the UAE and Qatar in recent years, Saudi Arabia signed in April 2015 a US\$2bn contract with Raytheon for the supply of *Patriot* missiles and equipment, before requesting in July the sale of up to 600 PAC-3 missiles and other equipment to modernise and replenish its existing stockpiles. Elsewhere, Egypt and Russia continue to negotiate over the potential delivery schedule of the S-300VM air-defence system.

### Land systems and airlift

Land-systems and helicopter acquisitions and upgrades were pursued by an average of around 40% of countries but were significant nonetheless. Iraq's loss in 2014 and 2015 of armoured vehicles, including

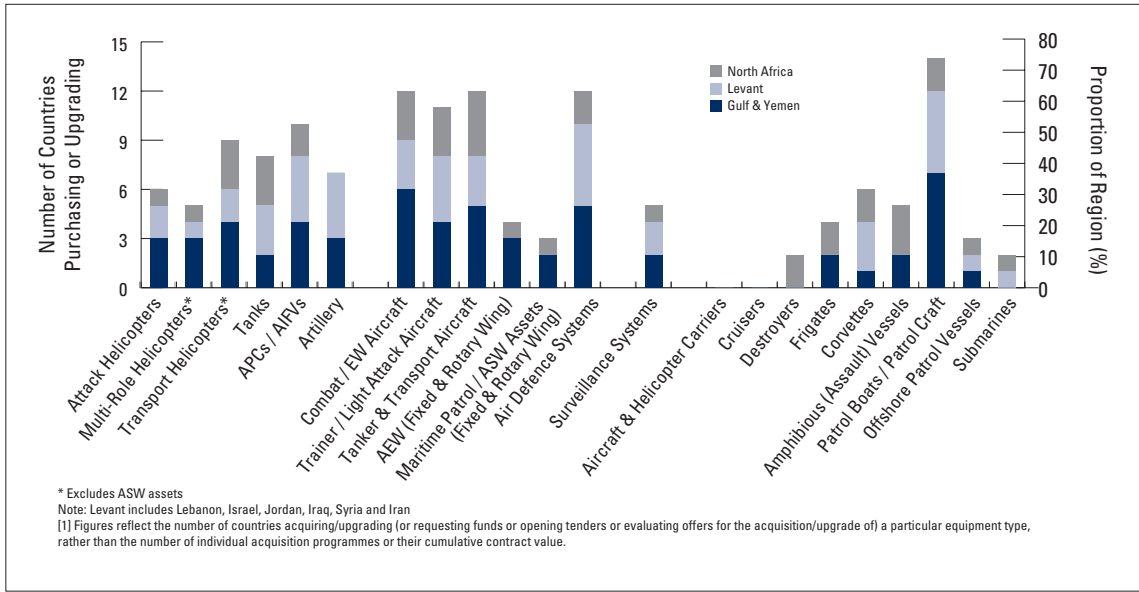


Figure 18 Middle East and North Africa: Selected Procurement & Upgrade Priorities Since 2011<sup>1</sup>

a large number of HMMWVs, led it to acquire replacements in 2015. In February, Baghdad also signed a contract for T-72 main battle tanks (MBTs) and BVP-1 (Czech-variant BMP-1) armoured infantry fighting vehicles from old European stocks, and took delivery of six M1A1 MBTs donated by the US.

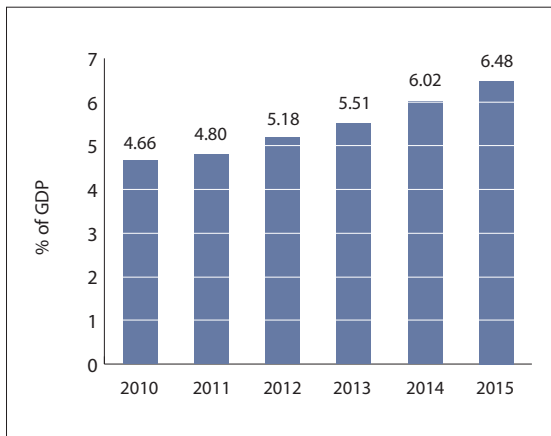
Rotary-wing assets have been sought by nearly half of the states in the region since 2011. Saudi Arabia was set to receive ten MH-60R *Sea Hawk* helicopters, likely as part of the Saudi Naval Expansion Programme; a DCSA notification was issued in May. Meanwhile, nearly two-thirds of regional states have pursued airlift capabilities since 2011. In 2015 the

UAE ordered two more C-17A *Globemaster* aircraft and Qatar ordered four, while Saudi Arabia ordered four C295W transport aircraft.

*Surface vessels and coastal-patrol assets*

A more recent, but fast-growing, area of regional acquisitions is that for small- and medium-sized naval surface ships. The most common platform purchases across all equipment categories were in the patrol-boat and patrol-craft sub-sector, with nearly three-quarters of regional states acquiring these assets (albeit in small numbers). In February the UAE announced that it had taken delivery of all 12 new-build *Ghannatha*-class fast patrol boats, and in July Oman announced that it had ordered 14 *Watercat* K13 fast interceptor craft. Meanwhile, corvette and frigate acquisition was on the rise in the region, particularly in Algeria, Egypt, Iran, Israel and the UAE. Continuing acquisitions included Chinese-made C-28A and German MEKO A-200 frigates destined for Algeria, and *Gowind*-class corvettes and one FREMM vessel for Egypt, which also purchased both the *Mistral*-class landing-helicopter docks originally constructed for Russia. In a significant move, the DCSA issued a notification on 30 October that, if approved, would lead to Saudi Arabia receiving four upgraded *Freedom*-class Littoral Combat Ships (called Multi-Mission Combat Ships) as part of the Naval Expansion Programme.

Figure 19 Middle East and North Africa Regional Defence Expenditure as % of GDP



Algeria <b>ALG</b>				
Algerian Dinar D		2014	2015	2016
GDP	D	17.2tr	16.9tr	
	US\$	214bn	175bn	
<i>per capita</i>	US\$	5,406	4,345	
Growth	%	3.8	3.0	
Inflation	%	2.9	4.2	
Def bdgt	D	956bn	1.05tr	
	US\$	11.9bn	10.8bn	
US\$1=D		80.58	96.69	

Population 39,542,166

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	14.5%	4.1%	4.8%	4.8%	20.0%	2.4%
Female	13.9%	3.9%	4.6%	4.6%	19.6%	2.8%

## Capabilities

Defence planners remain concerned by the conflict in Mali, instability in Libya, regional terrorist activity and porous eastern and southern borders. These have motivated changing policy priorities, structures and deployments, including a focus on professionalisation and regional cooperation. There is also a focus on equipment upgrades and modernisation. As the strongest military force in its neighbourhood, Algeria has been a leading proponent of combined training with neighbouring powers, in particular Mali, Mauritania and Nigeria, partially to build counter-terrorist capacity in the Sahel and Maghreb regions. The armed forces have substantial counter-insurgency experience and took over the counter narcotics-trafficking role in 2013. In 2015 the army finished installing a fibre-optic network along the border as a forerunner to an electronic-surveillance system. A Russian firm was reported to have begun upgrading some of Algeria's BMP-1s with the *Berzhok* combat system, including additional weapons, while contracts for 14 Russian heavy Mi-26T2 helicopters, including related training, were reportedly agreed. Algeria is part of the African Union's North African Regional Capability Standby Force, hosting the force's logistics base in Algiers.

**ACTIVE 130,000 (Army 110,000 Navy 6,000 Air 14,000) Paramilitary 187,200**

*Conscript liability* 18 months, only in the army (6 months basic, 12 months with regular army often involving civil projects)

**RESERVE 150,000 (Army 150,000) to age 50**

## ORGANISATIONS BY SERVICE

**Army 35,000; 75,000 conscript (total 110,000)**

### FORCES BY ROLE

6 Mil Regions; re-org into div structure on hold

### MANOEUVRE

#### Armoured

2 (1st & 8th) armd div (3 tk regt; 1 mech regt, 1 arty gp)  
1 indep armd bde

### Mechanised

2 (12th & 40th) mech div (1 tk regt; 3 mech regt, 1 arty gp)

3 indep mech bde

### Light

2 indep mot bde

### Air Manoeuvre

1 AB div (4 para regt; 1 SF regt)

### COMBAT SUPPORT

2 arty bn

7 AD bn

4 engr bn

### EQUIPMENT BY TYPE

**MBT** 1,195: 300 T-90S; 325 T-72; 300 T-62; 270 T-54/T-55

**RECCE** 134: 44 AML-60; 26 BRDM-2; 64 BRDM-2M with 9M133 *Kornet* (AT-14 *Spriggan*)

**AIFV** 1,089: 100 BMP-3; 304 BMP-2M with 9M133 *Kornet* (AT-14 *Spriggan*); 685 BMP-1

**APC** 883+

**APC (W)** 881+: 250 BTR-60; 150 BTR-80; 150 OT-64; 55 M3 Panhard; 176+ *Fuchs* 2; 100 *Fahd*

**PPV** 2 *Marauder*

**ARTY** 1,091

**SP** 224: **122mm** 140 2S1; **152mm** 30 2S3; **155mm** ε54 PLZ-45  
**TOWED** 393: **122mm** 345: 160 D-30; 25 D-74; 100 M-1931/37; 60 M-30; **130mm** 10 M-46; **152mm** 20 ML-20 (M-1937); **155mm** 18 Type-88 (PLL-01)

**MRL** 144: **122mm** 48 BM-21; **140mm** 48 BM-14/16; **240mm** 30 BM-24; **300mm** 18 9A52 *Smerch*

**MOR** 330: **82mm** 150 M-37; **120mm** 120 M-1943; **160mm** 60 M-1943

### AT

**MSL** • **MANPATS** *Milan*; 9K135 *Kornet-E* (AT-14 *Spriggan*); 9K115-2 *Metis-M1* (AT-13 *Saxhorn-2*); 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*)

**RCL** 180: **107mm** 60 B-11; **82mm** 120 B-10

**GUNS** 250: **57mm** 160 ZIS-2 (M-1943); **85mm** 80 D-44: **100mm** 10 T-12

### AD

#### SAM

**SP** 106+: ε48 9K33M *Osa* (SA-8B *Gecko*); ε20 9K31 *Strela-1* (SA-9 *Gaskin*); 38 9K66 *Pantsir-S1* (SA-22 *Greyhound*)

**MANPAD** 9K32 *Strela-2* (SA-7A/B *Grail*)‡

**GUNS** ε830

**SP** **23mm** ε225 ZSU-23-4

**TOWED** ε605: **14.5mm** 100: 60 ZPU-2; 40 ZPU-4; **23mm** 100 ZU-23; **37mm** ε150 M-1939; **57mm** 75 S-60; **85mm** 20 M-1939 KS-12; **100mm** 150 KS-19; **130mm** 10 KS-30

## Navy ε6,000

### EQUIPMENT BY TYPE

**SUBMARINES** • **TACTICAL** • **SSK** 4:

2 *Kilo* (FSU *Paltus*) with 6 single 533mm TT with Test-71ME HWT/3M54 *Klub-S* (SS-N-27B) AShM

2 Improved *Kilo* (RUS *Varshavyanka*) with 6 single 533mm TT with Test-71ME HWT/3M54 *Klub-S* (SS-N-27B) AShM

**PRINCIPAL SURFACE COMBATANTS • FRIGATES 4**

**FFGHM** 1 *Adhafer* with 2 quad Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 1 FM-90 Inchr with HQ-7 SAM, 2 triple 324mm ASTT, 2 Type-730B CIWS, 1 76mm gun (capacity 1 hel)

**FF** 3 *Mourad Rais* (FSU *Koni*) with 2 twin 533mm TT, 2 RBU 6000 *Smerch* 2 A/S mor, 2 twin 76mm gun

**PATROL AND COASTAL COMBATANTS 24****CORVETTES 6**

**FSGM** 3 *Rais Hamidou* (FSU *Nanuchka II*) with up to 4 twin Inchr with 3M24 *Uran* (SS-N-25 *Switchblade*) ASHM, 1 twin Inchr with 9M33 *Osa-M* (SA-N-4 *Gecko*) SAM, 1 AK630 CIWS, 1 twin 57mm gun

**FSG** 3 *Djebel Chenoua* with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 1 AK630 CIWS, 1 76mm gun

**PBFG** 9 *Osa II* (3+) with 4 single Inchr with P-15 *Termit* (SS-N-2B *Styx*) ASHM

**PB** 9 *Kebir* with 1 76mm gun

**AMPHIBIOUS**

**PRINCIPAL AMPHIBIOUS SHIPS • LPD** 1 *Kalaat Beni Abbas* with 1 8-cell A50 VLS with *Aster-15* SAM, 1 76mm gun (capacity 5 med hel; 3 LCVP; 15 MBT; 350 troops)

**LANDING SHIPS 3:**

**LSM** 1 *Polnochny B* with 1 twin AK230 CIWS (capacity 6 MBT; 180 troops)

**LST** 2 *Kalaat beni Hammad* (capacity 7 MBT; 240 troops) with 1 med hel landing platform

**LANDING CRAFT • LCVP 3****LOGISTICS AND SUPPORT 11**

**AGS** 1 *El Idrissi*

**AX** 1 *Daxin* with 2 twin AK230 CIWS, 1 76mm gun, 1 hel landing platform

**YGS** 2 *Ras Tara*

**YPT** 1 *Poluchat I* (used for SAR)

**YTB** 6: 1 *El Chadid*; 1 *Kader*; 4 *Mazafran*

**Naval Aviation****EQUIPMENT BY TYPE****HELICOPTERS**

**SAR** 10: 6 AW101 SAR; 4 *Super Lynx* Mk130

**Coast Guard ε500****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 55**

**PBF** 6 *Baglietto* 20

**PB** 49: 6 *Baglietto Mangusta*; 12 *Jebel Antar*; 21 *Deneb*; 4 *El Mounkid*; 6 *Kebir* with 1 76mm gun

**LOGISTICS AND SUPPORT 9**

**ARL** 1 *El Mourafek*

**ARS** 3 *El Moundjid*

**AXL** 5 *El Mouderrib* (PRC *Chui-E*) (2 more in reserve)

**Air Force 14,000**

Flying hours 150 hrs/year

**FORCES BY ROLE****FIGHTER**

1 sqn with MiG-25PDS/RU *Foxbat*

4 sqn with MiG-29C/UB *Fulcrum*

**FIGHTER/GROUND ATTACK**

2 sqn with Su-24M/MK *Fencer D*

3 sqn with Su-30MKA *Flanker*

**ELINT**

1 sqn with Beech 1900D

**MARITIME PATROL**

2 sqn with Beech 200T/300 *King Air*

**ISR**

1 sqn with Su-24MR *Fencer E\**; MiG-25RBSh *Foxbat D\**

**TANKER**

1 sqn with Il-78 *Midas*

**TRANSPORT**

1 sqn with C-130H/H-30 *Hercules*; L-100-30

1 sqn with C-295M

1 sqn with Gulfstream IV-SP; Gulfstream V

1 sqn with Il-76MD/TD *Candid*

**TRAINING**

2 sqn with Z-142

1 sqn with Yak-130 *Mitten*

2 sqn with L-39C/ZA *Albatros*

1 hel sqn with PZL Mi-2 *Hoplite*

**ATTACK HELICOPTER**

3 sqn with Mi-24 *Hind*

**TRANSPORT HELICOPTER**

1 sqn with AS355 *Ecureuil*

5 sqn with Mi-8 *Hip*; Mi-17 *Hip H*

1 sqn with Ka-27PS *Helix D*; Ka-32T *Helix*

**AIR DEFENCE**

3 ADA bde

3 SAM regt with S-75 *Dvina* (SA-2 *Guideline*)/S-125 *Neva* (SA-3 *Goa*)/2K12 *Kub* (SA-6 *Gainful*); S-300PMU2 (SA-20 *Gargoyle*)

**EQUIPMENT BY TYPE****AIRCRAFT 119 combat capable**

**FTR** 34: 11 MiG-25 *Foxbat*; 23 MiG-29C/UB *Fulcrum*

**FGA** 77: 44 Su-30MKA; 33 Su-24M/MK *Fencer D*

**ISR** 8: 4 MiG-25RBSh *Foxbat D\**; 4 Su-24MR *Fencer E\**

**TKR** 6 Il-78 *Midas*

**TPT** 67: **Heavy** 12: 3 Il-76MD *Candid B*; 9 Il-76TD *Candid*;

**Medium** 17: 9 C-130H *Hercules*; 6 C-130H-30 *Hercules*; 2

L-100-30; **Light** 32: 3 Beech C90B *King Air*; 5 Beech 200T

*King Air*; 6 Beech 300 *King Air*; 12 Beech 1900D (electronic

surv); 5 C-295M; 1 F-27 *Friendship*; **PAX** 6: 1 A340; 4

Gulfstream IV-SP; 1 Gulfstream V

**TRG** 99: 36 L-39ZA *Albatros*; 7 L-39C *Albatros*; 16 Yak-130

*Mitten*; 40 Z-142

**HELICOPTERS**

**ATK** 31 Mi-24 *Hind*

**SAR** 3 Ka-27PS *Helix D*

**MRH** 3 Bell 412EP

**MRH/TPT** 75 Mi-8 *Hip* (med tpt)/Mi-17 *Hip H*

**TPT** 47: **Heavy** 2 Mi-26T2 *Halo*; **Medium** 4 Ka-32T *Helix*;

**Light** 41: 8 AS355 *Ecureuil*; 5 AW139 (SAR); 28 PZL Mi-2 *Hoplite*

**UAV • ISR • Medium Seeker II****AD**

**SAM** S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora-M* (SA-3 *Goa*); 2K12 *Kvadrat* (SA-6 *Gainful*); S-300PMU2 (SA-20 *Gargoyle*)

**GUNS** 725 100mm/130mm/85mm

**MSL**

**ASM** Kh-25 (AS-10 *Karen*); Kh-29 (AS-14 *Kedge*); Kh-23



(AS-7 *Kerry*); Kh-31P/A (AS-17A/B *Krypton*); Kh-59ME (AS-18 *Kazoo*); ZT-35 *Ingwe*

ARM Kh-25MP (AS-12 *Kegler*)

AAM • IR R-3 (AA-2 *Atoll*); R-60 (AA-8 *Aphid*); R-73 (A-11 *Archer*); IR/SARH R-40/46 (AA-6 *Acrid*); R-23/24 (AA-7 *Apex*); R-27 (AA-10 *Alamo*); ARH R-77 (AA-12 *Adder*)

## Paramilitary €187,200

### Gendarmerie 20,000

Ministry of Defence control; 6 regions

#### EQUIPMENT BY TYPE

RECCE AML-60

APC (W) 210: 100 *Fahd*; 110 M3 Panhard

HELICOPTERS • TPT • Light Some PZL Mi-2 *Hoplite*

### National Security Forces 16,000

Directorate of National Security. Small arms

### Republican Guard 1,200

#### EQUIPMENT BY TYPE

RECCE AML-60

APC (T) M3 half-track

### Legitimate Defence Groups €150,000

Self-defence militia, communal guards (60,000)

## DEPLOYMENT

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 5 obs

## Bahrain BHR

Bahraini Dinar D		2014	2015	2016
GDP	D	12.7bn	11.6bn	
	US\$	33.9bn	30.9bn	
<i>per capita</i>	US\$	26,701	23,899	
Growth	%	4.5	3.4	
Inflation	%	2.7	2.0	
Def bdtg [a]	D	502m	574m	573m
	US\$	1.33bn	1.53bn	
FMA (US)	US\$	10m	7.5m	7.5m
US\$1=D		0.38	0.38	

[a] Includes expenditure on National Guard in 2012. Excludes funds allocated to the Ministry of the Interior.

Population 1,346,613

Ethnic groups: Nationals 64%; Asian 13%; other Arab 10%; Iranian 8%; European 1%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.9%	3.9%	5.0%	6.4%	34.0%	1.3%
Female	9.6%	3.3%	3.6%	4.0%	17.5%	1.4%

## Capabilities

Bahrain has small but comparatively well-equipped and -trained armed forces. It has contributed both ground and air units to the Saudi-led coalition of GCC states that intervened in Yemen in 2015 to counter the Houthi-led in-

tervention, notably units from the Royal Guard. Bahraini ground forces suffered combat losses during the operation. In late year, the navy sent a frigate to take part in the naval blockade. The Royal Bahrain Air Force has also supported the air campaign against ISIS in Syria, with F-16C Block 40 aircraft deployed to Jordan to take part in the operation. The core role of the military is to protect the territorial integrity of Bahrain, although this is underpinned fundamentally by the presence of the US 5th Fleet and Bahrain's membership of the GCC. Prior to its recent involvement in the campaign against ISIS and the war in Yemen, along with other elements of the security forces, it had also been focused on internal-security tasks.

**ACTIVE 8,200** (Army 6,000 Navy 700 Air 1,500)

Paramilitary 11,260

## ORGANISATIONS BY SERVICE

### Army 6,000

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bn

##### MANOEUVRE

###### Armoured

1 armd bde(-) (1 recce bn, 2 armd bn)

###### Mechanised

1 inf bde (2 mech bn, 1 mot bn)

###### Light

1 (Amiri) gd bn

##### COMBAT SUPPORT

1 arty bde (1 hvvy arty bty, 2 med arty bty, 1 lt arty bty, 1 MRL bty)

1 AD bn (1 ADA bty, 2 SAM bty)

1 engr coy

##### COMBAT SERVICE SUPPORT

1 log coy

1 tpt coy

1 med coy

#### EQUIPMENT BY TYPE

MBT 180 M60A3

RECCE 22 AML-90

AIFV 25 YPR-765 (with 25mm)

APC 200+

APC (T) 200 M113A2

APC (W) *Arma* 6x6

ARTY 151

SP 82: 155mm 20 M109A5; 203mm 62 M110A2

TOWED 36: 105mm 8 L118 Light Gun; 155mm 28 M198

MRL 227mm 9 M270 MLRS (with 30 ATACMS)

MOR 24: SP 120mm 12 M113A2; 81mm 12 L16

AT

##### MSL

SP HMMWV with BGM-71A TOW

MANPATS *Javelin*; BGM-71A TOW

RCL 31: 106mm 25 M40A1; 120mm 6 MOBAT

AD • SAM

SP 7 *Crotale*

TOWED 6 MIM-23B I-HAWK

MANPAD FIM-92A *Stinger*; RBS-70

GUNS 24: 35mm 12 Oerlikon; 40mm 12 L/70  
ARV 53 *Fahd* 240

## Navy 700

### EQUIPMENT BY TYPE

#### PRINCIPAL SURFACE COMBATANTS 1

FRIGATES • FFGHM 1 *Sabha* (ex-US *Oliver Hazard Perry*) with 1 Mk13 GMLS with SM-1MR SAM/RGM-84C *Harpoon* ASHM, 2 triple 324mm Mk32 ASTT with Mk46 LWT, 1 *Phalanx* Block 1B CIWS, 1 76mm gun (capacity 1 Bo-105 hel)

#### PATROL AND COASTAL COMBATANTS 12

CORVETTES • FSG 2 *Al Manama* (GER Lurssen 62m) with 2 twin Inchr with MM-40 *Exocet* ASHM, 1 76mm gun, 1 hel landing platform

PCFG 4 *Ahmed el Fateh* (GER Lurssen 45m) with 2 twin Inchr with MM-40 *Exocet* ASHM, 1 76mm gun

PB 4: 2 *Al Jarim* (US *Swift* FPB-20); 2 *Al Riffa* (GER Lurssen 38m)

PBF 2 Mk V SOC

#### AMPHIBIOUS • LANDING CRAFT 9

LCU 7: 1 *Loadmaster*; 4 *Mashtan*; 2 *Dinar* (ADSB 42m)

LCVP 2 *Sea Keeper*

#### LOGISTICS AND SUPPORT 2

YFL 1 *Tighatlib*

YFU 1 *Ajeera*

## Naval Aviation

### EQUIPMENT BY TYPE

HELICOPTERS • TPT • Light 2 Bo-105

## Air Force 1,500

### FORCES BY ROLE

#### FIGHTER

2 sqn with F-16C/D *Fighting Falcon*

#### FIGHTER/GROUND ATTACK

1 sqn with F-5E/F *Tiger II*

#### TRANSPORT

1 (Royal) flt with B-727; B-747; BAe-146; Gulfstream II; Gulfstream IV; Gulfstream 450; Gulfstream 550; S-92A

#### TRAINING

1 sqn with *Hawk* Mk129\*

1 sqn with T-67M *Firefly*

#### ATTACK HELICOPTER

2 sqn with AH-1E/F *Cobra*; TAH-1P *Cobra*

#### TRANSPORT HELICOPTER

1 sqn with Bell 212 (AB-212)

1 sqn with UH-60M *Black Hawk*

1 (VIP) sqn with Bo-105; S-70A *Black Hawk*; UH-60L *Black Hawk*

### EQUIPMENT BY TYPE

#### AIRCRAFT 39 combat capable

FTR 12: 8 F-5E *Tiger II*; 4 F-5F *Tiger II*

FGA 21: 17 F-16C *Fighting Falcon*; 4 F-16D *Fighting Falcon*

TPT • PAX 10: 1 B-727; 2 B-747; 1 Gulfstream II; 1 Gulfstream IV; 1 Gulfstream 450; 1 Gulfstream 550; 3 BAe-146

TRG 9: 6 *Hawk* Mk129\*; 3 T-67M *Firefly*

#### HELICOPTERS

ATK 28: 16 AH-1E *Cobra*; 12 AH-1F *Cobra*

TPT 27: **Medium** 13: 3 S-70A *Black Hawk*; 1 S-92A (VIP); 1 UH-60L *Black Hawk*; 8 UH-60M *Black Hawk*; **Light** 14: 11 Bell 212 (AB-212); 3 Bo-105

TRG 6 TAH-1P *Cobra*

#### MSL

ASM AGM-65D/G *Maverick*

AAM • IR AIM-9P *Sidewinder*; SARH AIM-7 *Sparrow*;

ARH AIM-120 AMRAAM

#### AT • MSL some TOW

#### BOMBS

Laser-guided GBU-10/12 *Paveway II*

## Paramilitary €11,260

### Police 9,000

Ministry of Interior

### EQUIPMENT BY TYPE

RECCE 8 S52 *Shorland*

#### APC

APC (W) Otokar ISV

PPV *Cobra*

#### HELICOPTERS

MRH 2 Bell 412 *Twin Huey*

ISR 2 Hughes 500

TPT • Light 1 Bo-105

## National Guard €2,000

### FORCES BY ROLE

#### MANOEUVRE

##### Other

3 paramilitary bn

### EQUIPMENT BY TYPE

#### APC

APC (W) *Arma* 6x6

PPV *Cobra*

## Coast Guard €260

Ministry of Interior

#### PATROL AND COASTAL COMBATANTS 52

PBF 23: 2 *Ares* 18; 4 *Jaris*; 6 *Saham*; 6 *Fajr*; 5 *Jarada*

PB 29: 6 *Haris*; 1 *Al Muharraq*; 10 *Deraa* (of which 4 *Halmatic* 20, 2 *Souter* 20, 4 *Rodman* 20); 10 *Saif* (of which 4 *Fairey Sword*, 6 *Halmatic* 160); 2 *Hawar*

#### AMPHIBIOUS • LANDING CRAFT • LCU 1 *Loadmaster II*

#### LOGISTICS AND SUPPORT • YAG 1 *Safra*

## DEPLOYMENT

### SAUDI ARABIA

*Operation Restoring Hope* 6 F-16C *Fighting Falcon*

### YEMEN

*Operation Restoring Hope* 250; *Arma* 6x6

## FOREIGN FORCES

Saudi Arabia GCC (SANG): Peninsula Shield €1,500

United Kingdom Air Force 1 BAe-146

United States US Central Command 3,250; 1 HQ (5th Fleet); 2 AD bty with MIM-104E/F *Patriot* PAC-2/3

Egypt EGY				
Egyptian Pound E£		2014	2015	2016
GDP	E£	2tr	2.31tr	
	US\$	286bn	300bn	
<i>per capita</i>	US\$	3,304	3,389	
Growth	%	2.2	4.2	
Inflation	%	10.1	11.0	
Def bdtg	E£	38bn	39.3bn	43.2bn
	US\$	5.45bn	5.47bn	
FMA (US)	US\$	1.3bn	1.3bn	1.3bn
US\$1=E£		6.97	7.18	

Population 88,487,396

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	16.3%	4.6%	4.4%	4.4%	18.5%	2.3%
Female	15.6%	4.4%	4.2%	4.2%	18.2%	2.8%

## Capabilities

Increased Islamist activity, including by ISIS-affiliated groups in Sinai, has led to substantive troop deployments and military operations, whilst insurgent activity on Egypt's borders has led to closer security cooperation with other North African states. State breakdown in Libya and Syria, and smuggling across the border, is of particular concern. In 2015, Egypt was part of the Saudi-led coalition in Yemen, supplying 800 troops, and warships to enforce a maritime blockade in the Bab el-Mandeb. While training is at a high standard for many within the armed forces, the large number of conscripts – and reports of conscripts employed in expanding military-owned industry and business concerns – makes effectiveness across the entire force difficult to estimate. Egypt's relationship with the US came under strain after army chief Abdel Fattah el-Sisi's ouster of President Muhammad Morsi in 2013; equipment deliveries were delayed, but recommenced in March 2015 with the release of F-16 aircraft, *Harpoon* missiles and M1A1 *Abrams* tank parts. In July, the possible sale of a US mobile surveillance-sensor system was approved to bolster currently limited capabilities on the border with Libya. Egypt's navy also received a FREMM destroyer and Cairo agreed with France the sale of *Rafale* fighters (reportedly with funding support from the Gulf) and two *Mistral*-class LHDs as well as Ka-52 attack helicopters from Russia.

**ACTIVE 438,500 (Army 310,000 Navy 18,500 Air 30,000 Air Defence Command 80,000) Paramilitary 397,000**

*Conscription liability* 12 months–3 years (followed by refresher training over a period of up to 9 years)

**RESERVE 479,000 (Army 375,000 Navy 14,000 Air 20,000 Air Defence 70,000)**

## ORGANISATIONS BY SERVICE

**Army 90,000–120,000; 190,000–220,000 conscript (total 310,000)**

## FORCES BY ROLE

### SPECIAL FORCES

5 cdo gp  
1 counter-terrorist unit

### MANOEUVRE

#### Armoured

4 armd div (2 armd bde, 1 mech bde, 1 arty bde)

4 indep armd bde

1 Republican Guard bde

#### Mechanised

8 mech div (1 armd bde, 2 mech bde, 1 arty bde)

4 indep mech bde

#### Light

1 inf div

2 indep inf bde

#### Air Manoeuvre

2 air mob bde

1 para bde

### COMBAT SUPPORT

15 arty bde

1 SSM bde with FROG-7

1 SSM bde with *Scud-B*

6 engr bde (3 engr bn)

2 spec ops engr bn

6 salvage engr bn

24 MP bn

18 sigs bn

### COMBAT SERVICE SUPPORT

36 log bn

27 med bn

### EQUIPMENT BY TYPE

**MBT** 2,710: 1,360 M1A1 *Abrams*; 300 M60A1; 850 M60A3; 200 T-62 (260 *Ramses II* (mod T-54/55); 840 T-54/T-55; 300 T-62 all in store)

**RECCE** 412: 300 BRDM-2; 112 *Commando Scout*

**AIFV** 390 YPR-765 25mm; (220 BMP-1 in store)

**APC** 4,060+

**APC (T)** 2,500: 2,000 M113A2/YPR-765 (incl variants); 500 BTR-50/OT-62

**APC (W)** 1,560: 250 BMR-600P; 250 BTR-60S; 410 *Fahd*-30/TH 390 *Fahd*; 650 *Walid*

**PPV** Some *Reva V LWB*

**ARTY** 4,468

**SP** 492: **122mm** 124 SP 122; **155mm** 368: 164 M109A2; 204 M109A5

**TOWED** 962: **122mm** 526: 190 D-30M; 36 M-1931/37; 300 M-30; **130mm** 420 M-46; **155mm** 16 GH-52

**MRL** 450: **122mm** 356: 96 BM-11; 60 BM-21; 50 *Sakr*-10; 50 *Sakr*-18; 100 *Sakr*-36; **130mm** 36 K136 *Kooryong*; **140mm** 32 BM-14; **227mm** 26 M270 MLRS; **240mm** (48 BM-24 in store)

**MOR** 2,564

**SP** 136: **107mm** 100: 65 M106A1; 35 M106A2 **120mm** 36 M106A3

**81mm** 50 M125A2; **82mm** 500; **120mm** 1,848; 1,800 M-1943; 48 Brandt; **160mm** 30 M160

**AT • MSL**

**SP** 262: 52 M-901, 210 YPR-765 PRAT

**MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*) (incl BRDM-2); *Milan*; TOW-2

**UAV • ISR • Medium** R4E-50 *Skyeye*; ASN-204

**AD****SAM**

SP 96: 50 M1097 *Avenger*; 26 M48 *Chaparral*; 20 9K31 *Strela-1* (SA-9 *Gaskin*)

MANPAD *Ayn al-Saqr*/9K32 *Strela-2* (SA-7 *Grail*); FIM-92A *Stinger*; 9K38 *Igla* (SA-18 *Grouse*)

**GUNS**

SP 355: 23mm 165: 45 *Sinai-23*; 120 ZSU-23-4; 37mm 150; 57mm 40 ZSU-57-2

TOWED 700: 14.5mm 300 ZPU-4; 23mm 200 ZU-23-2; 57mm 200 S-60

RADAR • LAND AN/TPQ-36 *Firefinder*; AN/TPQ-37 *Firefinder* (arty/mor)

MSL • TACTICAL • SSM 42+: 9 FROG-7; 24 *Sakr-80*; 9 *Scud-B* ARV 355+: *Fahd* 240; GMR 3560.55; 220 M88A1; 90 M88A2; M113 ARV; 45 M578; T-54/55 ARV

VLB KMM; MTU; MTU-20

MW *Aardvark* JFSU Mk4

**Navy** €8,500 (incl 2,000 Coast Guard); 10,000 conscript (total 18,500)

**EQUIPMENT BY TYPE**

SUBMARINES • TACTICAL • SSK 4 *Romeot* (PRC Type-033) with 8 single 533mm TT with UGM-84C *Harpoon* ASHm/Mk37 HWT

**PRINCIPAL SURFACE COMBATANTS 9**

DESTROYERS • DDGHM 1 *Tahya Misr* (FRA *Aquitaine*) with 2 quad Inchr with MM-40 *Exocet* Block 3 ASHm, 2 octuple A43 VLS with *Aster* 15 SAM, 2 twin B515 324mm ASTT with MU90 LWT, 1 76mm gun (capacity 1 med hel)

**FRIGATES 8**

FFGHM 4 *Alexandria* (ex-US *Oliver Hazard Perry*) with 1 Mk13 GMLS with RGM-84C *Harpoon* ASHm/SM-1MP SAM, 2 triple 324mm ASTT with Mk 46 LWT, 1 *Phalanx* CIWS, 1 76mm gun (capacity 2 SH-2G *Super Seasprite* ASW hel)

FFGH 2 *Damyat* (ex-US *Knox*) with 1 octuple Mk16 GMLS with RGM-84C *Harpoon* ASHm/ASROC, 2 twin 324mm Mk 32 TT with Mk 46 LWT, 1 *Phalanx* CIWS, 1 127mm gun, (capacity 1 SH-2G *Super Seasprite* ASW hel)

FFG 2 *Najim Al Zaffer* (PRC *Jianghu* I) with 2 twin Inchr with HY-2 (CSS-N-2 *Safflower*) ASHm, 4 RBU 1200 A/S mor, 2 twin 57mm guns

**PATROL AND COASTAL COMBATANTS 60****CORVETTES • FSGM 2:**

2 *Abu Qir* (ESP *Descubierta* – 1+) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* ASHm, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple Mk32 324mm ASTT with *Sting Ray* LWT, 1 twin 375mm A/S mor, 1 76mm gun

**PCFG 16:**

4 *Ezzat* (US *Ambassador* IV) with 2 quad Inchr with RGM-84L *Harpoon* Block II ASHm, 1 21-cell Mk49 Inchr with RAM Block 1A SAM, 1 Mk15 Mod 21 Block 1B *Phalanx* CIWS 1 76mm gun

1 *Molnya* (RUS *Tarantul* IV) with 2 twin Inchr with 3M80E *Moskit* (SS-N-22 *Sunburn*), 2 AK630 CIWS, 1 76mm gun

6 *Ramadan* with 4 single Inchr with *Otomat* MkII ASHm, 1 76mm gun

5 *Tiger* with 2 twin Inchr with MM-38 *Exocet* ASHm, 1 76mm gun

**PCC 5:**

5 *Al-Nour* (ex-PRC *Hainan* – 3 more in reserve) with 2 triple 324mm TT, 4 RBU 1200 A/S mor, 2 twin 57mm guns

**PBFG 17:**

4 *Hegu* (PRC – *Komar* type) with 2 single Inchr with SY-1 ASHm (2 additional vessels in reserve)

5 *October* (FSU *Komar* – 1+) with 2 single Inchr with *Otomat* MkII ASHm (1 additional vessel in reserve)

8 *Osa* I (ex-YUG – 3+) with 1 9K32 *Strela-2* (SA-N-5 *Grail*) SAM (manual aiming), 4 single Inchr with P-15 *Termit* (SS-N-2A *Styx*) ASHm

**PBFM 4:**

4 *Shershen* (FSU) with 1 9K32 *Strela-2* (SA-N-5 *Grail*) SAM (manual aiming), 1 12-tube BM-24 MRL

**PBF 10:**

6 *Kaan* 20 (TUR MRTP 20)

4 *Osa* II (ex-FIN)

**PB 6:**

4 *Shanghai* II (PRC)

2 *Shershen* (FSU – 1+) with 4 single 533mm TT, 1 8-tube BM-21 MRL

**MINE WARFARE • MINE COUNTERMEASURES 14**

MHC 5: 2 *Al Siddiq* (ex-US *Osprey*); 3 *Dat Assawari* (US Swiftships)

MSI 2 *Safaga* (US Swiftships)

MSO 7: 3 *Assiout* (FSU T-43 class); 4 *Aswan* (FSU *Yurka*)

**AMPHIBIOUS 12**

LANDING SHIPS • LSM 3 *Polnochny* A (FSU) (capacity 6 MBT; 180 troops)

LANDING CRAFT • LCU 9 *Vydra* (FSU) (capacity either 3 AMX-30 MBT or 100 troops)

**LOGISTICS AND SUPPORT 32**

AOT 7 *Ayeda* (FSU *Toplivo* – 1 additional in reserve)

AE 1 *Halaib* (ex-GER *Westerwald*-class)

AKR 3 *Al Hurreya*

ARL 1 *Shaledin* (ex-GER *Luneberg*-class)

ARS 2 *Al Areesh*

ATA 5 *Al Maks*† (FSU *Okhtensky*)

AX 5: 1 *El Fateh*† (ex-UK 'Z' class); 1 *El Horriya* (also used as the presidential yacht); 1 *Al Kousser*; 1 *Intishat*; 1 other

YDT 2 *Nyryat* I (FSU Project 522)

YPT 2 *Poluchat* I (FSU)

YTL 4 *Galal Desouky* (Damen Stan 2208)

**Coastal Defence**

Army tps, Navy control

**EQUIPMENT BY TYPE**

ARTY • COASTAL 100mm; 130mm SM-4-1; 152mm

MSL • ASHm 4K87 (SS-C-2B *Samlet*); *Otomat* MkII

**Naval Aviation**

All aircraft operated by Air Force

AIRCRAFT • TPT • Light 4 *Beech* 1900C (maritime surveillance)

**HELICOPTERS**

ASW 10 SH-2G *Super Seasprite* with Mk 46 LWT

MRH 5 SA342L *Gazelle*

UAV • ISR • Light 2 *Camcopter* 5.1

**Coast Guard 2,000****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 79

PBF 14: 6 *Crestitalia*; 5 *Swift Protector*; 3 *Peterson*

PB 65: 5 *Nisr*; 12 *Sea Spectre MkIII*; 15 *Swiftships*; 21

*Timsah*; 3 *Type-83*; 9 *Peterson*

LOGISTICS AND SUPPORT • YTL 4 *Khoufou*

## Air Force 30,000 (incl 10,000 conscript)

### FORCES BY ROLE

#### FIGHTER

1 sqn with F-16A/B *Fighting Falcon*

8 sqn with F-16C/D *Fighting Falcon*

4 sqn with J-7/MiG-21 *Fishbed/MiG-21U Mongol A*

2 sqn with *Mirage 5D/E*

1 sqn with *Mirage 2000B/C*

#### FIGHTER/GROUND ATTACK

2 sqn with F-4E *Phantom II*

1 sqn with *Mirage 5E2*

1 sqn (forming) with *Rafale DM*

#### ANTI-SUBMARINE WARFARE

1 sqn with SH-2G *Super Seasprite*

#### MARITIME PATROL

1 sqn with Beech 1900C

#### ELECTRONIC WARFARE

1 sqn with Beech 1900 (ELINT); *Commando Mk2E (ECM)*

#### ELECTRONIC WARFARE/TRANSPORT

1 sqn with C-130H/VC-130H *Hercules*

#### AIRBORNE EARLY WARNING

1 sqn with E-2C *Hawkeye*

#### SEARCH & RESCUE

1 unit with AW139

#### TRANSPORT

1 sqn with An-74TK-200A

1 sqn with C-130H/C-130H-30 *Hercules*

1 sqn with C-295M

1 sqn with DHC-5D *Buffalo*

1 sqn with B-707-366C; B-737-100; Beech 200 *Super*

*King Air*; *Falcon 20*; *Gulfstream III*; *Gulfstream IV*;

*Gulfstream IV-SP*

#### TRAINING

1 sqn with *Alpha Jet\**

1 sqn with DHC-5 *Buffalo*

3 sqn with EMB-312 *Tucano*

1 sqn with Grob 115EG

ε6 sqn with K-8 *Karakorum\**

1 sqn with L-39 *Albatros*; L-59E *Albatros\**

#### ATTACK HELICOPTER

2 sqn with AH-64D *Apache*

2 sqn with SA-342K *Gazelle* (with HOT)

1 sqn with SA-342L *Gazelle*

#### TRANSPORT HELICOPTER

1 sqn with CH-47C/D *Chinook*

2 sqn with Mi-8 *Hip*

1 sqn with S-70 *Black Hawk*; UH-60A/L *Black Hawk*

#### UAV

Some sqn with R4E-50 *Skyeye*; Teledyne-Ryan 324 *Scarab*

### EQUIPMENT BY TYPE

#### AIRCRAFT 584 combat capable

FTR 62: 26 F-16A *Fighting Falcon*; 6 F-16B *Fighting Falcon*; ε30 J-7

FGA 325: 29 F-4E *Phantom II*; 139 F-16C *Fighting Falcon*;

38 F-16D *Fighting Falcon*; 3 *Mirage 2000B*; 15 *Mirage*

2000C; 36 *Mirage 5D/E*; 12 *Mirage 5E2*; ε50 MiG-21

*Fishbed/MiG-21U Mongol A*; 3 *Rafale DM*

ELINT 2 VC-130H *Hercules*

ISR 6 *Mirage 5R (5SDR)\**

AEW&C 7 E-2C *Hawkeye*

TPT 64: **Medium** 24: 21 C-130H *Hercules*; 3 C-130H-30

*Hercules*; **Light** 29: 3 An-74TK-200A; 1 Beech 200 *King*

*Air*; 4 Beech 1900 (ELINT); 4 Beech 1900C; 8 C-295M;

9 DHC-5D *Buffalo* PAX 11: 1 B-707-366C; 3 *Falcon 20*; 2

*Gulfstream III*; 1 *Gulfstream IV*; 4 *Gulfstream IV-SP*

TRG 329: 36 *Alpha Jet\**; 54 EMB-312 *Tucano*; 74 Grob 115EG;

120 K-8 *Karakorum\**; 10 L-39 *Albatros*; 35 L-59E *Albatros\**

#### HELICOPTERS

ATK 45 AH-64D *Apache*

ASW 10 SH-2G *Super Seasprite* (opcon Navy)

ELINT 4 *Commando Mk2E (ECM)*

MRH 72: 2 AW139 (SAR); 65 SA342K *Gazelle* (some with

HOT); 5 SA342L *Gazelle* (opcon Navy)

TPT 93: **Heavy** 19: 3 CH-47C *Chinook*; 16 CH-47D

*Chinook*; **Medium** 74: 2 AS-61; 24 *Commando* (of which

3 VIP); 40 Mi-8 *Hip*; 4 S-70 *Black Hawk* (VIP); 4 UH-60L

*Black Hawk* (VIP)

TRG 17 UH-12E

#### UAV • ISR • **Medium** R4E-50 *Skyeye*; Teledyne-Ryan 324

*Scarab*

#### MSL

ASM AGM-65A/D/F/G *Maverick*; AGM-114F/K *Hellfire*;

AS-30L; HOT

AShM AGM-84 *Harpoon*; AM-39 *Exocet*;

ARM *Armat*; Kh-25MP (AS-12 *Kegler*)

AAM • IR R-3 (AA-2 *Atoll*)†; AIM-9FL/P *Sidewinder*;

R-550 *Magic*; SARH AIM-7E/F/M *Sparrow*; R530

#### BOMBS

Laser-guided GBU-10/12 *Paveway II*

## Air Defence Command 80,000 conscript;

70,000 reservists (total 150,000)

### FORCES BY ROLE

#### AIR DEFENCE

5 AD div (geographically based) (total: 12 SAM bty with

M48 *Chaparral*, 12 radar bn, 12 ADA bde (total: 100

ADA bn), 12 SAM bty with MIM-23B I-HAWK, 14

SAM bty with *Crotale*, 18 SAM bn with *Skyguard*, 110

SAM bn with S-125 *Pechora-M* (SA-3A *Goa*); 2K12 *Kub*

(SA-6 *Gainful*); S-75M *Volkhov* (SA-2 *Guideline*))

#### EQUIPMENT BY TYPE

##### AD

SYSTEMS 72+: Some *Amoun* with RIM-7F *Sea Sparrow*

SAM, 36+ quad SAM, *Skyguard* towed SAM, 36+ twin

35mm guns

SAM 752+

SP 180+: 24+ *Crotale*; 50+ M48 *Chaparral*; 56+ SA-6

*Gainful*; 40+ 9K37 *Buk-M1* (SA-11 *Gadfly*); 10 9K331M

*Tor-M1* (SA-15 *Gauntlet*)

TOWED 572+: 78+ MIM-23B I-HAWK; S-75M *Volkhov*

(SA-2 *Guideline*) 282+ *Skyguard*; 212+ S-125 *Pechora-M*

(SA-3A *Goa*)

GUNS 1,566+

SP • 23mm 266+: 36+ *Sinai-23* (SPAAG) with *Ayn al-*

*Saqr* MANPAD, Dassault 6SD-20S land; 230 ZSU-23-4

TOWED 57mm 600 S-60; 85mm 400 M-1939 KS-12;

100mm 300 KS-19



**Paramilitary** €397,000 active**Central Security Forces** €325,000

Ministry of Interior; includes conscripts  
APC (W) 100+: 100 *Hussar; Walid*

**National Guard** €60,000

Lt wpns only

**FORCES BY ROLE****MANOEUVRE****Other**

8 paramilitary bde (cadre) (3 paramilitary bn)

**EQUIPMENT BY TYPE**

APC (W) 250 *Walid*

**Border Guard Forces** €12,000

Ministry of Interior; Lt wpns only

**FORCES BY ROLE****MANOEUVRE****Other**

18 Border Guard regt

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 265; 6 obs; 1 engr coy; 1 tpt coy

**CÔTE D'IVOIRE**

UN • UNOCI 176; 1 engr coy

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 153; 19 obs; 1 SF coy

**LIBERIA**

UN • UNMIL 8 obs

**MALI**

UN • MINUSMA 65; 1 MP coy

**SOUTH SUDAN**

UN • UNMISS 1; 3 obs

**SUDAN**

UN • UNAMID 865; 19 obs; 1 inf bn

**UNITED ARAB EMIRATES**

*Operation Restoring Hope* 6 F-16C *Fighting Falcon*

**WESTERN SAHARA**

UN • MINURSO 18 obs

**FOREIGN FORCES**

*Australia* MFO (*Operation Mazurka*) 25

*Canada* MFO 70

*Colombia* MFO 354; 1 inf bn

*Czech Republic* MFO 15; 1 C-295M

*Fiji* MFO 338; 1 inf bn

*France* MFO 2

*Italy* MFO 78; 3 coastal ptl unit

*New Zealand* MFO 27 1 trg unit; 1 tpt unit

*Norway* MFO 3

*United Kingdom* MFO 1

*United States* MFO 692; 1 ARNG recce bn; 1 ARNG spt bn  
(1 EOD coy, 1 medical coy, 1 hel coy)

*Uruguay* MFO 58 1 engr/tpt unit

**Iran IRN**

Iranian Rial r		2014	2015	2016
GDP	r	11,034tr	12,089tr	
	US\$	416bn	397bn	
<i>per capita</i>	US\$	5,353	5,048	
Growth	%	4.3	0.8	
Inflation	%	15.5	15.1	
Def exp	r	€420tr		
	US\$	€15.9bn		
US\$1=r		26,492.03	30,456.27	

**Population** 81,824,270

**Ethnic groups:** Persian 51%; Azeri 24%; Gilaki/Mazandarani 8%; Kurdish 7%; Arab 3%; Lur 2%; Baloch 2%; Turkman 2%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.1%	3.9%	5.2%	5.8%	21.3%	2.4%
Female	11.5%	3.7%	4.9%	5.5%	20.9%	2.8%

**Capabilities**

Iran continues to rely on a mix of ageing combat equipment, reasonably well-trained regular and Islamic Revolutionary Guard Corps (IRGC) forces, and its ballistic-missile inventory to underpin the security of the state. The IRGC, including senior military leaders, has been increasingly involved in the civil war in Syria, supporting President Bashar al-Assad's regular and irregular forces; it was first deployed to Syria in an 'advisory' role in 2012. The IRGC's Quds Force is a principal element of Iran's military power abroad, while elements of the Basij militia also play a foreign role (as well as operating domestically). The air force also carried out during 2015 strike missions within Iraq against ISIS, but limited these to the border region. The military continues to struggle with an ageing inventory of primary combat equipment that ingenuity and asymmetric warfare techniques can only partially offset. Sectors of its defence industry continue to develop, including those for missiles and guided weapons. In 2015 Iran unveiled the *Soumar*, a land-attack cruise missile based closely on the Russian Kh-55 (AS-15A *Kent*). *Soumar* may have a range in the order of 2,000km and, if it were to enter the inventory in reasonable numbers, would provide a valuable complement to the regime's medium-range ballistic missiles. The nuclear agreement with the P5+1 and the European Union also begins to open the way for Iran to revamp its equipment inventory, with China and Russia potentially major suppliers, though sales of conventional systems remain embargoed for five years. Following the nuclear agreement, Tehran and Moscow re-engaged on the sale of a version of the S-300 (SA-10 *Grumble*/SA-20 *Gargoyle*) medium-to-long-range surface-to-air missile system that Iran is believed to want delivered as early as possible. With the S-300 no longer in production, the most likely route is for Moscow to use ex-Russian stock as the basis for a modified version of the SAM system.

**ACTIVE 523,000 (Army 350,000 Islamic Revolutionary Guard Corps 125,000 Navy 18,000 Air 30,000) Paramilitary 40,000**

Armed Forces General Staff coordinates two parallel organisations: the regular armed forces and the Islamic Revolutionary Guard Corps

**RESERVE 350,000** (Army 350,000, ex-service volunteers)

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## ORGANISATIONS BY SERVICE

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**Army** 130,000; 220,000 conscript (total 350,000)

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### FORCES BY ROLE

5 corps-level regional HQ

#### COMMAND

- 1 cdo div HQ
- 4 armd div HQ
- 2 mech div HQ
- 4 inf div HQ

#### SPECIAL FORCES

- 1 cdo div (3 cdo bde)
- 6 cdo bde
- 1 SF bde

#### MANOEUVRE

- Armoured**
- 7 armd bde
- Mechanised**
- 16 mech bde
- Light**
- 12 inf bde
- Air Manoeuvr**
- 1 AB bde
- Aviation**
- Some avn gp

#### COMBAT SUPPORT

- 5 arty gp

#### EQUIPMENT BY TYPE

Totals incl those held by IRGC Ground Forces. Some equipment serviceability in doubt

**MBT** 1,663+:  $\epsilon$ 150 *Zulfiqar*; 480 T-72S; 150 M60A1; 75+ T-62; 100 *Chieftain* Mk3/Mk5; 540 T-54/T-55/Type-59/*Safir*-74; 168 M47/M48

**LT TK** 80+: 80 *Scorpion*; *Towsan*

**RECCE** 35 EE-9 *Cascavel*

**AIFV** 610: 210 BMP-1; 400 BMP-2 with 9K111 *Fagot* (AT-4 *Spigot*)

**APC** 640+

**APC (T)** 340+: 140 *Boragh* with 9K111 *Fagot* (AT-4 *Spigot*); 200 M113; BMT-2 *Cobra*

**APC (W)** 300+: 300 BTR-50/BTR-60; *Rakhsh*

**ARTY** 8,798+

**SP** 292+: **122mm** 60+: 60 2S1; *Raad*-1 (*Thunder* 1); **155mm** 150+: 150 M109; *Raad*-2 (*Thunder* 2); **170mm** 30 M-1978; **175mm** 22 M107; **203mm** 30 M110

**TOWED** 2,030+: **105mm** 150: 130 M101A1; 20 M-56; **122mm** 640: 540 D-30; 100 Type-54 (M-30); **130mm** 985 M-46; **152mm** 30 D-20; **155mm** 205: 120 GHN-45; 70 M114; 15 Type-88 WAC-21; **203mm** 20 M115

**MRL** 1,476+: **107mm** 1,300: 700 Type-63; 600 *HASEB Fadjr* 1; **122mm** 157: 7 BM-11; 100 BM-21; 50 *Arash/Hadid/Noor*; **240mm** 19:  $\epsilon$ 10 *Fadjr* 3; 9 M-1985; **330mm** *Fadjr* 5

**MOR** 5,000: **60mm**; **81mm**; **82mm**; **107mm** M30; **120mm** M-65

## AT

**MSL** • **MANPATS** 9K11 *Malyutka* (AT-3 *Sagger/I-Raad*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrell Towsan*-1); *Saeqhe* 1; *Saeqhe* 2; *Toophan*; *Toophan* 2

**RCL** 200+: **75mm** M20; **82mm** B-10; **106mm**  $\epsilon$ 200 M40; **107mm** B-11

**AIRCRAFT** • **TPT** 17 **Light** 16: 10 Cessna 185; 2 F-27 *Friendship*; 4 *Turbo Commander* 690; **PAX** 1 *Falcon* 20

## HELICOPTERS

**ATK** 50 AH-1J *Cobra*

**TPT** 173: **Heavy** 20 CH-47C *Chinook*; **Medium** 75: 50 Bell 214; 25 Mi-171; **Light** 78: 68 Bell 205A (AB-205A); 10 Bell 206 *Jet Ranger* (AB-206)

**UAV** • **ISR** • **Medium** *Mohajer* 3/4; *Shahed* 129; **Light** *Mohajer* 2; *Ababil*

## AD • SAM

**SP** HQ-7 (reported)

**MANPAD** 9K36 *Strela*-3 (SA-14 *Gremlin*); 9K32 *Strela*-2 (SA-7 *Grail*); *Misaq* 1 (QW-1 *Vanguard*); *Misaq* 2 (QW-18); 9K338 *Igla*-S (SA-24 *Grinch* – reported); HN-54

## GUNS 1,122

**SP** 180: **23mm** 100 ZSU-23-4; **57mm** 80 ZSU-57-2

**TOWED** 942 **14.5mm** ZPU-2; ZPU-4; **23mm** 300 ZU-23-2; **35mm** 92 *Skyguard*; **37mm** M-1939; **40mm** 50 L/70; **57mm** 200 S-60; **85mm** 300 M1939

**MSL** • **TACTICAL** • **SSM**  $\epsilon$ 30 CSS-8 (175 msl); *Shahin*-1/*Shahin*-2; *Nazeat*; *Oghab*

**ARV** 20+: BREM-1 reported; 20 *Chieftain* ARV; M578; T-54/55 ARV reported

**VLB** 15: 15 *Chieftain* AVLB

**MW** *Taftan* 1

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## Islamic Revolutionary Guard Corps 125,000+

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### Islamic Revolutionary Guard Corps Ground Forces 100,000+

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Controls Basij paramilitary forces. Lightly manned in peacetime. Primary role: internal security; secondary role: external defence, in conjunction with regular armed forces.

#### FORCES BY ROLE

##### COMMAND

31 provincial corps HQ (2 in Tehran)

##### SPECIAL FORCES

3 spec ops div

##### MANOEUVRE

**Armoured**

2 armd div

3 armd bde

**Light**

8+ inf div

5+ inf bde

**Air Manoeuvr**

1 AB bde

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### Islamic Revolutionary Guard Corps Naval Forces 20,000+ (incl 5,000 Marines)

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#### FORCES BY ROLE

##### COMBAT SUPPORT

Some arty bty

Some ASHM bty with HY-2 (CSS-C-3 *Seersucker*) ASHM

**EQUIPMENT BY TYPE**

In addition to the vessels listed, the IRGC operates a substantial number of patrol boats with a full-load displacement below 10 tonnes, including €40 *Boghammar*-class vessels and small *Bavar*-class wing-in-ground effect air vehicles.

**PATROL AND COASTAL COMBATANTS 113****PBFG 46:**

- 5 *China Cat* with 2 twin Inchr with C-701/*Kosar* ASHM
- 10 *Thondor* (PRC *Houdong*) with 2 twin Inchr with C-802 (CSS-N-4 *Sardine*) ASHM, 2 twin AK230 CIWS
- 25 *Peykaap* II (IPS-16 mod) with 2 single Inchr with C-701 (*Kosar*) ASHM, 2 single 324mm TT
- 6 *Zolfaghar* (*Peykaap* III/IPS-16 mod) with 2 single Inchr with C-701 (*Kosar*)/C-704 (*Nasr*) ASHM

**PBF 35:** 15 *Peykaap* I (IPS-16) with 2 single 324mm TT; 10 *Tir* (IPS-18); €10 *Pashe* (MIG-G-1900)

**PB** € 20 *Ghaem*

**PTG** 12

**AMPHIBIOUS****LANDING SHIPS • LST 4:**

- 2 *Hejaz* (mine-laying capacity)
- 2 MIG-S-5000 (*Hejaz* design for commercial use)

**LOGISTICS AND SUPPORT • AP 3 *Naser***

**MSL • TACTICAL • ASHM** C-701 (*Kosar*); C-704 (*Nasr*); C-802; HY-2 (CSS-C-3 *Seersucker*)

**Islamic Revolutionary Guard Corps Marines 5,000+****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 marine bde

**Islamic Revolutionary Guard Corps Air Force**

Controls Iran's strategic missile force.

**FORCES BY ROLE****MISSILE**

- €1 bde with *Shahab*-1/2
- €1 bn with *Shahab*-3; *Ghadr*-1; *Sajjil*-2 (in devt)

**EQUIPMENT BY TYPE****MISSILE • TACTICAL**

- MRBM** 22+: 12+ *Shahab*-3/*Ghadr*-1 (mobile); 10 *Shahab*-3/*Ghadr*-1 (silo); some *Sajjil*-2 (in devt)
- SRBM** 18+: some *Fateh* 110; 12-18 *Shahab*-1/2 (€200–300 msl)
- SSM** Some *Zelzal*

**Navy 18,000**

HQ at Bandar-e Abbas

**EQUIPMENT BY TYPE**

In addition to the vessels listed, the Iranian Navy operates a substantial number of patrol boats with a full-load displacement below 10 tonnes.

**SUBMARINES 29****TACTICAL 21**

- SSK** 3 *Taregh* (RUS *Paltus* Type 877EKM) with 6 single 533mm TT
- SSC** 1 *Fateh*

**SSW** 17: 16 *Qadir* with 2 single 533mm TT (additional vessels in build); 1 *Nahang*

**SDV** 8: 5 *Al Sabehat* (SF insertion and mine-laying capacity); 3 other

**PATROL AND COASTAL COMBATANTS** 69 (+€50 small craft under 10 tonnes)

**CORVETTES 7**

**FSGM** 2 *Jamaran* (UK Vosper Mk 5 – 1 more undergoing sea trials) with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 2 single Inchr with SM-1 SAM, 2 triple 324mm Mk32 ASTT, 1 76mm gun, 1 hel landing platform

**FSG 5:**

- 3 *Alvand* (UK Vosper Mk 5) with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 2 triple Mk32 324mm ASTT, 1 114mm gun
- 2 *Bayandor* (US PF-103) with 2 twin Inchr with C-802 (CSS-N-8 *Saccade*) ASHM, 2 triple 324mm Mk32 ASTT, 1 76mm gun

**PCFG** 14 *Kaman* (FRA *Combattante* II) with 1–2 twin Inchr with C-802 ASHM, 1 76mm gun

**PBFG 8:**

- €4 Mk13 with 2 single Inchr with C-704 (*Nasr*) ASHM, 2 single 324mm TT
- 4 *China Cat* with 2 single Inchr with C-701 (*Kosar*) ASHM

**PBF** 16: 15 *Kashdom* II; 1 MIL55

**PB** 22: 3 *Kayvan*; 6 MkII; 10 MkIII; 3 *Parvin* with 2 single Inchr with C-704 (*Nasr*) ASHM

**PTF** 3 *Kajami* (semi-submersible)

**MINE WARFARE • MINE COUNTERMEASURES 5**

- MSC** 3: 2 Type-292; 1 *Shahrokh* (in Caspian Sea as trg ship)
- MSI** 2 *Riazi* (US *Cape*)

**AMPHIBIOUS****LANDING SHIPS 13**

- LSM** 3 *Farsi* (ROK) (capacity 9 tanks; 140 troops)
- LST** 4 *Hengam* with 1 hel landing platform (capacity 9 tanks; 225 troops)
- LSL** 6 *Fouque*

**LANDING CRAFT 11**

- LCAC** 8: 6 *Wellington*; 2 *Tondar* (UK Winchester)
- LCT** 2
- LCU** 1 *Liyan* 110

**LOGISTICS AND SUPPORT 47**

**AB** 12 *Hendijan* (also used for coastal patrol) with 2 twin Inchr with C-802 (*Noor*) ASHM

**AE** 2 *Delvar*

**AFD** 2 *Dolphin*

**AG** 1 *Hamzah* with 2 single Inchr with C-802 (*Noor*) ASHM

**AK** 3 *Delvar*

**AORH** 3: 2 *Bandar Abbas*; 1 *Kharg* with 1 76mm gun

**AWT** 5: 4 *Kangan*; 1 *Delvar*

**AX** 2 *Kialas*

**YTB** 17

**MSL • ASHM** C-701 (*Kosar*); C-704 (*Nasr*); C-802 (*Noor*) C-802A (*Ghader*); *Ra'ad* (reported; coastal defence)

**Marines 2,600****FORCES BY ROLE****MANOEUVRE****Amphibious**

2 marine bde

**Naval Aviation 2,600****EQUIPMENT BY TYPE****AIRCRAFT** 3 combat capableASW 3 P-3F *Orion*TPT 16: **Light** 13: 5 Do-228; 4 F-27 *Friendship*; 4 *Turbo Commander* 680; **PAX** 3 *Falcon* 20 (ELINT)**HELICOPTERS**ASW ε10 SH-3D *Sea King*MCM 3 RH-53D *Sea Stallion*TPT • **Light** 17: 5 Bell 205A (AB-205A); 2 Bell 206 *Jet Ranger* (AB-206); 10 Bell 212 (AB-212)**Air Force 30,000 (incl 12,000 Air Defence)****FORCES BY ROLE**

Serviceability probably about 60% for US ac types and about 80% for PRC/Russian ac. Includes IRGC Air Force equipment.

**FIGHTER**1 sqn with F-7M *Airguard*; JJ-7\*2 sqn with F-14 *Tomcat*2 sqn with MiG-29A/UB *Fulcrum***FIGHTER/GROUND ATTACK**1 sqn with *Mirage* F-1E; F-5E/F *Tiger* II1 sqn with Su-24MK *Fencer* D5 sqn with F-4D/E *Phantom* II3 sqn with F-5E/F *Tiger* II**MARITIME PATROL**1 sqn with P-3MP *Orion*\***ISR**1 (det) sqn with RF-4E *Phantom* II\***SEARCH & RESCUE**

Some flt with Bell-214C (AB-214C)

**TANKER/TRANSPORT**

1 sqn with B-707; B-747; B-747F

**TRANSPORT**1 sqn with B-707; *Falcon* 50; L-1329 *Jetstar*; Bell 4122 sqn with C-130E/H *Hercules*1 sqn with F-27 *Friendship*; *Falcon* 201 sqn with Il-76 *Candid*; An-140 (Iran-140 *Faraz*)**TRAINING**1 sqn with Beech F33A/C *Bonanza*1 sqn with F-5B *Freedom Fighter*

1 sqn with PC-6

1 sqn with PC-7 *Turbo Trainer*Some units with EMB-312 *Tucano*; MFI-17 *Mushshak*; TB-21 *Trinidad*; TB-200 *Tobago***TRANSPORT HELICOPTER**1 sqn with CH-47 *Chinook*Some units with Bell 206A *Jet Ranger* (AB-206A);*Shabaviz* 2-75; *Shabaviz* 2061**AIR DEFENCE**16 bn with MIM-23B I-HAWK/*Shahin*5 sqn with FM-80 (*Crotale*); *Rapier*; *Tigercat*; S-75M *Volkhov* (SA-2 *Guideline*); S-200 *Angara* (SA-5 *Gammon*);FIM-92A *Stinger*; 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K331*Tor-M1* (SA-15 *Gauntlet*) (reported)**EQUIPMENT BY TYPE****AIRCRAFT** 334 combat capableFTR 184+: 20 F-5B *Freedom Fighter*; 55+ F-5E/F *Tiger* II  
24 F-7M *Airguard*; 43 F-14 *Tomcat*; 36 MiG-29A/U/UB  
*Fulcrum*; up to 6 *Azarakhsh* reportedFGA 110: 64 F-4D/E *Phantom* II; 10 *Mirage* F-1E; 30 Su-24MK *Fencer* D; up to 6 *Saegheh* reportedATK 10: 7 Su-25K *Frogfoot*; 3 Su-25UBK *Frogfoot* (incl 4+ Su-25K/UBK deployed in Iraq; status unclear)ASW 5 P-3MP *Orion*ISR: 6+ RF-4E *Phantom* II\*

TKR/TPT 3: ε1 B-707; ε2 B-747

TPT 117: **Heavy** 12 Il-76 *Candid*; **Medium** ε19 C-130E/H *Hercules*; **Light** 75: 11 An-74TK-200; 5 An-140 (Iran-140 *Faraz*) (45 projected); 10 F-27 *Friendship*; 1 L-1329 *Jetstar*; 10 PC-6B *Turbo Porter*; 8 TB-21 *Trinidad*; 4 TB-200 *Tobago*; 3 *Turbo Commander* 680; 14 Y-7; 9 Y-12; **PAX** 11: 2 B-707; 1 B-747; 4 B-747F; 1 *Falcon* 20; 3 *Falcon* 50TRG 151: 25 Beech F33A/C *Bonanza*; 15 EMB-312 *Tucano*; 15 JJ-7\*; 25 MFI-17 *Mushshak*; 12 *Parastu*; 15 PC-6; 35 PC-7 *Turbo Trainer*; 9 T-33**HELICOPTERS**

MRH 2 Bell 412

TPT 34+: **Heavy** 2+ CH-47 *Chinook*; **Medium** 30 Bell 214C (AB-214C); **Light** 2+: 2 Bell 206A *Jet Ranger* (AB-206A); some *Shabaviz* 2-75 (indigenous versions in production); some *Shabaviz* 2061AD • **SAM** 529+: 250 FM-80 (*Crotale*); 30 *Rapier*; 15 *Tigercat*; 150+ MIM-23B I-HAWK/*Shahin*; 45 S-75 *Dvina* (SA-2 *Guideline*); 10 S-200 *Angara* (SA-5 *Gammon*); 29 9K331 *Tor-M1* (SA-15 *Gauntlet*) (reported)MANPAD FIM-92A *Stinger*; 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS • TOWED 23mm ZU-23; 37mm Oerlikon

**MSL**ASM AGM-65A *Maverick*; Kh-25 (AS-10 *Karen*); Kh-29 (AS-14 *Kedge*); C-801K ASHMARM Kh-58 (AS-11 *Kilter*)AAM • IR PL-2A‡; PL-7; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); AIM-9 *Sidewinder*; IR/SARH R-27 (AA-10 *Alamo*) SARH AIM-54 *Phoenix*; AIM-7 *Sparrow***Air Defence Command**

Established to coordinate army, air-force and IRGC air-defence assets. Precise composition unclear.

**Paramilitary 40,000–60,000****Law-Enforcement Forces 40,000–60,000**  
(border and security troops); 450,000 on mobilisation (incl conscripts)

Part of armed forces in wartime

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS • PB** ε90**AIRCRAFT • TPT • Light** 2+: 2 An-140; some Cessna 185/Cessna 310**HELICOPTERS • TPT • Light** ε24 AB-205 (Bell 205)/AB-206 (Bell 206) *Jet Ranger***Basij Resistance Force up to ε1,000,000 on mobilisation**

Paramilitary militia, with claimed membership of 12.6 million; perhaps 1 million combat capable; in the process of closer integration with IRGC Ground Forces.

**FORCES BY ROLE****MANOEUVRE****Other**

2,500 militia bn (claimed, limited permanent membership)

## Cyber

Iran has a well-developed capacity for cyber operations. It has a well-educated and computer-literate young population. In September 2015, Ayatollah Ali Khamenei appointed members to a Supreme Council for Cyberspace, reportedly a policymaking and supervisory body. The Stuxnet incident in 2010 is reported to have been a turning point in Iran's approach to cyber capabilities. In 2011–12, Tehran established a Joint Chiefs of Staff Cyber Command with emphasis on thwarting attacks against Iranian nuclear facilities. The IRGC has its own Cyber Defence Command; IRGC civilian business interests will aid its activities in this area. The precise relationship of groups such as the 'Iranian Cyber Army' to regime and military organisations is opaque, but the former has launched hacking attacks against a number of foreign organisations. There are continued reports of increasing investment in cyber capabilities, used not only for propaganda and intelligence exploitation, but also as a means whereby Iran can attempt to offset its conventional military weakness vis-à-vis its neighbours and the US. But Iran also remains aware of its own potential vulnerabilities, not least in terms of infrastructure protection: it was reported in May that a senior official was advising that Iran should identify 'vital points' in infrastructure so as to boost passive defences, while another leader said in February that Iran should 'adopt a pre-emptive approach towards future cyber risks'.

## DEPLOYMENT

### GULF OF ADEN AND SOMALI BASIN

Navy: 1 FSG; 1 AORH

### SUDAN

UN • UNAMID 4 obs

### SYRIA

IRGC: up to 2,000

Iraq IRQ				
Iraqi Dinar D		2014	2015	2016
GDP	D	261tr	192tr	
	US\$	224bn	165bn	
<i>per capita</i>	US\$	6,520	4,694	
Growth	%	-2.1	0.0	
Inflation	%	2.2	1.9	
Def bdgt [a]	D	22tr	24.6tr	
	US\$	18.9bn	21.1bn	
US\$1=D		1,166.00	1,166.00	

[a] Defence and security budget

Population 37,056,169

**Ethnic and religious groups:** Arab 75–80% (of which Shia Muslim 55%, Sunni Muslim 45%); Kurdish 20–25%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	20.6%	5.3%	4.4%	4.1%	14.7%	1.5%
Female	19.7%	5.1%	4.3%	4.0%	14.7%	1.8%

## Capabilities

Since the collapse of a number of divisions in the face of attacks by ISIS in 2014, the Iraqi army has struggled to present significant military capability. Instead, the adoption and inclusion of numerous popular mobilisation forces (PMF) have, with Shia militia, bolstered the defence of key areas, even reversing some of the gains made by ISIS in 2014. An audit revealed that more than half of the army's forces were 'ghost soldiers', existing on paper only. However, Iraq's special forces performed creditably. The government has engaged in a process of institutional reform, and international training teams are again in country. The prime minister made a call for the PMF to participate alongside the Iraqi military in operations against ISIS; this resulted in an advance to retake the city of Ramadi in October 2015. There will be significant challenges ahead, not just in rebuilding an inclusive Iraqi army, but in decisions about demobilising or integrating the PMF into the wider force. Four new F-16s were delivered in 2015 as part of a 36-aircraft deal. The air force has become increasingly involved in operations against ISIS since the end of 2014, following the delivery of Su-25s from Russia and Iran, while domestic ISR capability has been boosted by acquisition of CH-4 UAVs from China.

**ACTIVE 64,000 (Army 54,000 Navy 3,000 Air 4,000 Air Defence 3,000) Paramilitary 145,000**

## ORGANISATIONS BY SERVICE

### Army 54,000

Due to ongoing conflict with ISIS insurgents, there have been significant personnel and equipment losses in the Iraqi Army. Many formations are now under-strength. Military capability has been bolstered by the activity of Shia militia and Kurdish Peshmerga forces.

### FORCES BY ROLE

#### SPECIAL FORCES

2 SF bde

#### MANOEUVRE

##### Armoured

1 armd div (2 armd bde, 2 mech bde, 1 engr bn, 1 sigs regt, 1 log bde)

##### Mechanised

2 mech div (4 mech inf bde, 1 engr bn, 1 sigs regt, 1 log bde)

1 mech div (3 mech inf bde, 1 engr bn, 1 sigs regt, 1 log bde)

1 mech div (2 mech inf bde, 1 inf bde, 1 engr bn, 1 sigs regt, 1 log bde)

##### Light

1 mot div (1 mech bde, 3 mot inf bde, 2 inf bde, 1 engr bn, 1 sigs regt, 1 log bde)

1 mot div (2 mot inf bde, 3 inf bde, 1 engr bn, 1 sigs regt, 1 log bde)

1 inf div (4 lt inf bde, 1 engr bn, 1 sigs regt, 1 log bde)

1 inf div (3 inf bde)

1 inf div (2 inf bde)

1 inf div (1 inf bde)



1 cdo div (5 lt inf bde, 1 engr bn, 1 sigs regt, 1 log bde)  
1 inf bde

**Aviation**

1 atk hel sqn (forming) with Mi-28NE *Havoc*  
1 atk hel sqn with Mi-35M *Hind*  
1 sqn with Bell 205 (UH-1H *Huey II*)  
3 atk hel sqn with Bell T407; H135M  
3 sqn with Mi-17 *Hip H*; Mi-171Sh  
1 ISR sqn with SA342M *Gazelle*  
2 trg sqn with Bell 206; OH-58C *Kiowa*

**EQUIPMENT BY TYPE**

**MBT** 270+: ε100 M1A1 *Abrams*; 120+ T-72; ε50 T-55;  
**RECCE** 73: 18 BRDM 2; 35 EE-9 *Cascavel*; 20 *Fuchs* NBC  
**AIFV** 240: ε80 BMP-1; ε60 BTR-4 (inc variants); 100 BTR-80A  
**APC** 2,502+

**APC (T)** 900: ε500 M113A2/*Talha*; ε400 MT-LB

**APC (W)** 410: ε400 *Akrep/Scorpion*; 10 *Cobra*

**PPV** 1,192+: 12 *Barracuda*; 250 *Caiman*; ε500 *Dzik-3*; ε400  
*ILAV Badger*; *Mamba*; 30 *Maxxpro*

**ARTY** 1,061+

**SP** 48+: **152mm** 18+ Type-83; **155mm** 30: 6 M109A1; 24 M109A5

**TOWED** 60+: **130mm** M-46/Type-59; **152mm** D-20; **155mm** ε60 M198

**MLRS** 3+: **122mm** some BM-21; **220mm** 3+ TOS-1A

**MOR** 950+: **81mm** ε500 M252; **120mm** ε450 M120; **240mm** M-240

**AT • MSL • MANPATS** 9K135 *Kornet* (AT-14 *Spriggan*) (reported)

**ARV** 215+: 180 *BREM*; 35+ M88A1/2; T-54/55 *ARV*; Type-653; VT-55A

**HELICOPTERS**

**ATK** 25: 9 Mi-28NE *Havoc*; 16 Mi-35M *Hind*

**MRH** 52+: 4+ SA342 *Gazelle*; 25 Bell IA407; 23 H135M

**MRH/TPT** ε20 Mi-17 *Hip H*/Mi-171Sh

**ISR** 10 OH-58C *Kiowa*

**TPT • Light** 45: 16 Bell 205 (UH-1H *Huey II*); 10 Bell 206B3 *Jet Ranger*; ε19 Bell T407

**UAV • CISR Heavy** CH-4

**MSL • ASM** 9K114 *Shturm* (AT-6 *Spiral*); AR-1; *Ingwe*

**Navy** 3,000**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** 32+

PCO 2 *Al Basra* (US *River Hawk*)

PCC 4 *Fateh* (ITA *Diciotti*)

**PB** 20: 12 *Swiftships* 35; 5 *Predator* (PRC-27m); 3 *Al Faw*

**PBR** 6: 2 Type-200; 4 Type-2010

**Marines** 1,000**FORCES BY ROLE****MANOEUVRE**

**Amphibious**

2 mne bn

**Air Force** ε4,000**FORCES BY ROLE****GROUND ATTACK**

1 sqn with Su-25/Su-25K/Su-25UBK *Frogfoot*

**ISR**

1 sqn with CH-2000 *Sama*; SB7L-360 *Seeker*

1 sqn with Cessna 208B *Grand Caravan*; Cessna AC-208B *Combat Caravan\**

1 sqn with Beech 350 *King Air*

**TRANSPORT**

1 sqn with An-32B *Cline*

1 sqn with C-130E/J-30 *Hercules*

**TRAINING**

1 sqn with Cessna 172, Cessna 208B

1 sqn with *Lasta-95*

1 sqn with T-6A

**EQUIPMENT BY TYPE**

**AIRCRAFT** 16 combat capable

**FGA** 4: 2 F-16C *Fighting Falcon*; 2 F-16D *Fighting Falcon*

**ATK** 9+: 2 L-159; 6+ Su-25/Su-25K *Frogfoot*; 1+ Su-25UBK *Frogfoot*

**ISR** 10: 3 Cessna AC-208B *Combat Caravan\**; 2 SB7L-360 *Seeker*; 5 Beech 350ER *King Air*

**TPT** 32: **Medium** 15: 3 C-130E *Hercules*; 6 C-130J-30 *Hercules*; 6 An-32B *Cline*; **Light** 17: 1 Beech 350 *King Air*; 8 Cessna 208B *Grand Caravan*; 8 Cessna 172

**TRG** 33+: 8 CH-2000 *Sama*; 10+ *Lasta-95*; 15 T-6A

**MSL • ASM** AGM-114 *Hellfire*

**BOMBS • Laser-Guided** GBU-12 *Paveway II* (reported)

**Air Defence Command** ε3,000**FORCES BY ROLE****AIR DEFENCE**

1 bn with 96K6 *Pantsir-S1* (SA-22 *Greyhound*)

1 bn with M1097 *Avenger*

1 bn with 9K338 *Igla-S* (SA-24 *Grinch*)

1 bn with ZU-23; S-60

**EQUIPMENT BY TYPE****AD****SAM**

**SP** 3+: 3+ 96K6 *Pantsir-S1* (SA-22 *Greyhound*); M1097 *Avenger*

**MANPAD** 9K338 *Igla-S* (SA-24 *Grinch*)

**GUNS • TOWED** 23mm ZU-23; 57mm S-60

**Paramilitary** ε145,000**Iraqi Federal Police** ε36,000**Border Enforcement** ε9,000**Militias** ε100,000

Popular Mobilisation Forces include: Kata'ib Sayyid al-Shuhada Brigade; Kata'ib Hizbullaha; Badr Organisation; Peace Companies and Imam Ali Battalions

**FOREIGN FORCES**

**Australia** *Operation Okra* 380

**Belgium** *Operation Inherent Resolve* 25

**Canada** *Operation Impact* 70

**Fiji** UNAMI 160; 2 sy unit

**Finland** *Operation Inherent Resolve* 49

**France** *Operation Chammal* 95

**Germany** *Operation Inherent Resolve* 100

**Hungary** *Operation Inherent Resolve* 116

**Italy** *Operation Inherent Resolve* 120

Nepal UNAMI 77; 1 sy unit

Netherlands *Operation Inherent Resolve* 130

New Zealand *Operation Inherent Resolve* 103

Norway *Operation Inherent Resolve* 50

Portugal *Operation Inherent Resolve* 30

Spain *Operation Inherent Resolve* 301

United Kingdom *Operation Shader* 275

United States *Operation Inherent Resolve* 3,500; 1 inf div HQ; 1 mne coy; 1 atk hel coy; MQ-1B Predator

## Israel ISR

New Israeli Shekel NS		2014	2015	2016
GDP	NS	1.09tr	1.15tr	
	US\$	306bn	299bn	
<i>per capita</i>	US\$	37,222	35,702	
Growth	%	2.6	2.5	
Inflation	%	0.5	-0.1	
Def bdgt [a]	NS	72.1bn	59.9bn	
	US\$	20.2bn	15.5bn	
FMA (US)	US\$	3.08bn	3.1bn	3.1bn
US\$1=NS		3.58	3.86	

[a] 2014 figure includes additional funds allocated to the MoD during the Gaza conflict

Population 8,049,314

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.9%	4.1%	3.9%	3.7%	19.8%	4.7%
Female	13.2%	4.0%	3.7%	3.6%	19.4%	6.0%

## Capabilities

The Israel Defense Forces (IDF) remain the most capable force in the region, with the motivation, equipment and training to considerably overmatch the conventional capability of other regional armed forces. Currently able to contain but not destroy the threats posed by Hamas and Hizbullah, the IDF continues to launch frequent operations in Syria, Gaza and Lebanon to weaken and degrade the capabilities of these two organisations. Despite the 2015 nuclear agreement, Israel remains deeply concerned about the Iranian threat and must be assumed to have the military capability for a unilateral attack on Iran. Senior Israeli personnel have declared training and readiness the IDF's foremost priority amid budget cuts. There is emphasis on maintaining Israel's technological superiority, especially in missile defence, intelligence gathering, precision weapons and cyber capabilities. Israel continues to improve its missile- and rocket-defence network. Modernisation of armoured vehicles is continuing, with engine upgrades on *Achzarit* heavy APCs and the renewed production of *Merkaava* MkIV MBTs and *Namer* APCs. The army is enhancing its C4ISTAR capabilities through the development of a new ground-combat network and the creation of UAV-fielding fire-control teams within artillery units, while the navy and air force are also due to receive significant capability upgrades, notably with the arrival of the F-35 for the latter.

**ACTIVE 176,500** (Army 133,000 Navy 9,500 Air 34,000) Paramilitary 8,000

*Conscript liability* officers 48 months, other ranks 36 months, women 24 months (Jews and Druze only; Christians, Circassians and Muslims may volunteer)

**RESERVE 465,000** (Army 400,000 Navy 10,000 Air 55,000)

Annual trg as cbt reservists to age 40 (some specialists to age 54) for male other ranks, 38 (or marriage/pregnancy) for women

## ORGANISATIONS BY SERVICE

### Strategic Forces

Israel is widely believed to have a nuclear capability – delivery means include F-15I and F-16I ac, *Jericho* 2 IRBM, and, reportedly, *Dolphin/Tanin*-class SSKs with LACM.

### FORCES BY ROLE

#### MISSILE

3 sqn with *Jericho* 2

### EQUIPMENT BY TYPE

MSL • STRATEGIC • IRBM: *ε*24 *Jericho* 2

## Strategic Defences

### FORCES BY ROLE

#### AIR DEFENCE

3 bty with *Arrow/Arrow* 2 ATBM with *Green Pine/Super Green Pine* radar and *Citrus Tree* command post.

9 bty with *Iron Dome*

17 bty with MIM-23B I-HAWK

6 bty with MIM-104 *Patriot*

## Space

### EQUIPMENT BY TYPE

#### SATELLITES 11

COMMUNICATIONS 4 *Amos*

ISR 7: 2 EROS; 4 *Ofeq* (5, 7, 9 & 10); 1 TecSAR-1 (*Polaris*)

**Army 26,000; 107,000 conscript; (total 133,000)**

Organisation and structure of formations may vary according to op situations. Equipment includes that required for reserve forces on mobilisation.

### FORCES BY ROLE

#### COMMAND

3 (regional comd) corps HQ

2 armd div HQ

4 (territorial) inf div HQ

#### SPECIAL FORCES

3 SF bn

1 spec ops bde (4 spec ops unit)

#### MANOEUVRE

##### Reconnaissance

1 indep recce bn

##### Armoured

3 armd bde (1 armd recce coy, 3 armd bn, 1 AT coy, 1 cbt engr bn)

##### Mechanised

3 mech inf bde (3 mech inf bn, 1 cbt spt bn, 1 sigs coy)

1 mech inf bde (6 mech inf bn)

1 indep mech inf bn

**Light**

1 indep inf bn

**Air Manoeuvre**

1 para bde (3 para bn, 1 cbt spt bn, 1 sigs coy)

**Other**

1 armd trg bde (3 armd bn)

**COMBAT SUPPORT**

3 arty bde

3 engr bn

1 EOD coy

1 CBRN bn

1 int bde (3 int bn)

2 MP bn

**Reserves 400,000+ on mobilisation**

**FORCES BY ROLE**

**COMMAND**

5 armd div HQ

1 AB div HQ

**MANOEUVRE**

**Armoured**

9 armd bde

**Mechanised**

8 mech inf bde

**Light**

14 (territorial/regional) inf bde

**Air Manoeuvre**

4 para bde

**Mountain**

1 mtn inf bn

**COMBAT SUPPORT**

4 arty bde

**COMBAT SERVICE SUPPORT**

6 log unit

**EQUIPMENT BY TYPE**

**MBT** 500: €120 *Merkava* MkII; €160 *Merkava* MkIII; €220 *Merkava* MkIV (€330 *Merkava* MkII; €270 *Merkava* MkIII; €160 *Merkava* MkIV all in store)

**RECCE** 308: €300 RBY-1 RAMTA; €8 TPz-1 *Fuchs* NBC

**APC** 1,300

**APC (T)** 1,200: €100 *Namer*; €200 *Achzarit* (modified T-55 chassis); 500 M113A2; €400 *Nagmachon* (*Centurion* chassis); *Nakpadon* (5,000 M113A1/A2 in store)

**APC (W)** 100 *Ze'ev*

**ARTY** 530

**SP** 250: 155mm 250 M109A5 (155mm 148 L-33; 30 M109A1; 50 M-50; 175mm 36 M107; 203mm 36 M110 all in store)

**TOWED** (122mm 5 D-30; 130mm 100 M-46; 155mm 171: 40 M-46; 50 M-68/M-71; 81 M-839P/M-845P all in store)

**MRL** 30: 227mm 30 M270 MLRS (122mm 58 BM-21; 160mm 50 LAR-160; 227mm 30 M270 MLRS; 240mm 36 BM-24; 290mm 20 LAR-290 all in store)

**MOR** 250: 81mm 250 (81mm 1,100; 120mm 650 160mm 18 Soltam M-66 all in store)

**AT • MSL**

**SP** M113 with *Spike*; *Tamuz* (*Spike* NLOS); *Magach* mod with *Spike*

**MANPATS** IMI MAPATS; *Spike* MR/LR/ER

**AD • SAM**

**SP** 20 *Machbet*

**MANPAD** FIM-92A *Stinger*

**RADAR • LAND** AN/PPS-15 (arty); AN/TPQ-37 *Firefinder* (arty); EL/M-2140 (veh)

**MSL** 100

**STRATEGIC** €100 *Jericho* 1 SRBM/*Jericho* 2 IRBM

**TACTICAL • SSM** (7 *Lance* in store)

**AEV** D9R; *Puma*

**ARV** *Centurion* Mk2; *Eyal*; *Merkava*; M88A1; M113 ARV

**VLB** *Alligator* MAB; M48/60; MTU

**Navy 7,000; 2,500 conscript (total 9,500)**

**EQUIPMENT BY TYPE**

**SUBMARINES • TACTICAL**

**SSK** 4:

3 *Dolphin* (GER HDW design) with 6 single 533mm TT with UGM-84C *Harpoon* ASHM/HWT, 4 single 650mm TT

1 *Tanin* (GER HDW design with AIP) with 6 single 533mm TT with UGM-84C *Harpoon* ASHM/HWT, 4 single 650mm TT

**SDV** 20 *Alligator* (semi-submersible)

**PATROL AND COASTAL COMBATANTS 55**

**CORVETTES • FSGHM** 3:

2 *Eilat* (*Sa'ar* 5) with 2 quad Mk140 Inchr with RGM-84C *Harpoon* ASHM, 2 32-cell VLS with *Barak*-1 SAM (being upgraded to *Barak*-8), 2 triple 324mm TT with Mk 46 LWT, 1 *Sea Vulcan* CIWS, 1 76mm gun (capacity 1 AS565SA *Panther* ASW hel)

1 *Eilat* (*Sa'ar* 5) with 2 quad Mk140 Inchr with RGM-84C *Harpoon* ASHM, 2 32-cell VLS with *Barak*-8 SAM, 2 triple 324mm TT with Mk 46 LWT, 1 *Sea Vulcan* CIWS, 1 76mm gun (capacity 1 AS565SA *Panther* ASW hel)

**PCGM** 8 *Hetz* (*Sa'ar* 4.5) with 6 single Inchr with *Gabriel* II ASHM, 2 twin Mk140 Inchr with RGM-84C *Harpoon* ASHM, 1 16-32-cell Mk56 VLS with *Barak*-1 SAM, 1 *Vulcan* CIWS, 1 *Typhoon* CIWS, 1 76mm gun

**PCG** 2 *Reshef* (*Sa'ar* 4) with 4–6 single Inchr with *Gabriel* II ASHM, 1 twin or quad Mk140 Inchr with RGM-84C *Harpoon* ASHM, 2 triple 324mm TT, 1 *Phalanx* CIWS

**PBF** 18: 5 *Shaldag* with 1 *Typhoon* CIWS; 3 *Stingray*; 10 *Super Dvora* MK III (AShM & TT may be fitted)

**PBFT** 13: 9 *Super Dvora* MkI with 2 single 324mm TT with Mk 46 LWT (AShM may also be fitted); 4 *Super Dvora* MkII with 2 single 324mm TT with Mk 46 LWT (AShM may also be fitted)

**PBT** 11 *Dabur* with 2 single 324mm TT with Mk 46 LWT

**AMPHIBIOUS • LANDING CRAFT • LCT** 3: 1 *Ashdod*; 2 others

**LOGISTICS AND SUPPORT** 3

**AG** 2 *Bat Yam* (ex German Type-745)

**AX** 1 *Queshet*

**YTB** 2

**Naval Commandos €300**

**Air Force 34,000**

Responsible for Air and Space Coordination

**FORCES BY ROLE**

**FIGHTER & FIGHTER/GROUND ATTACK**

1 sqn with F-15A/B/D *Eagle*

1 sqn with F-15B/C/D *Eagle*

1 sqn with F-15I *Ra'am*  
 6 sqn with F-16A/B/C/D *Fighting Falcon*  
 4 sqn with F-16I *Sufa*  
 (3 sqn with A-4N *Skyhawk*/F-4 *Phantom II*/Kfir C-7 in reserve)

#### ANTI-SUBMARINE WARFARE

1 sqn with AS565SA *Panther* (missions flown by IAF but with non-rated aircrew)

#### MARITIME PATROL/TANKER/TRANSPORT

1 sqn with IAI-1124 *Seascan*; KC-707

#### ELECTRONIC WARFARE

2 sqn with RC-12D *Guardrail*; Beech A36 *Bonanza (Hofit)*; Beech 200 *King Air*; Beech 200T *King Air*; Beech 200CT *King Air*

#### AIRBORNE EARLY WARNING & CONTROL

1 sqn with Gulfstream G550 *Eitam*; Gulfstream G550 *Shavit*

#### TANKER/TRANSPORT

1 sqn with C-130E/H *Hercules*; KC-130H *Hercules*

1 sqn (forming) with C-130J-30 *Hercules*

#### TRAINING

1 OPFOR sqn with F-16A/B *Fighting Falcon*

1 sqn with A-4N/TA-4H/TA-4J *Skyhawk*

#### ATTACK HELICOPTER

1 sqn with AH-64A *Apache*

1 sqn with AH-64D *Apache*

#### TRANSPORT HELICOPTER

2 sqn with CH-53D *Sea Stallion*

2 sqn with S-70A *Black Hawk*; UH-60A *Black Hawk*

1 medevac unit with CH-53D *Sea Stallion*

#### UAV

1 ISR sqn with *Hermes 450*

1 ISR sqn with *Searcher MkII*

1 ISR sqn with *Heron (Shoval)*; *Heron TP (Eitan)*

#### AIR DEFENCE

3 bty with *Arrow/Arrow 2*

6 bty with *Iron Dome*

17 bty with MIM-23 I-HAWK

6 bty with MIM-104 *Patriot*

#### EQUIPMENT BY TYPE

##### AIRCRAFT 440 combat capable

**FTR** 143: 16 F-15A *Eagle*; 6 F-15B *Eagle*; 17 F-15C *Eagle*; 11 F-15D *Eagle*; 77 F-16A *Fighting Falcon*; 16 F-16B *Fighting Falcon*

**FGA** 251: 25 F-15I *Ra'am*; 78 F-16C *Fighting Falcon*; 49 F-16D *Fighting Falcon*; 99 F-16I *Sufa*

**ATK** 46: 20 A-4N *Skyhawk*; 10 TA-4H *Skyhawk*; 16 TA-4J *Skyhawk*

**FTR/FGA/ATK** (200+ A-4N *Skyhawk*/F-4 *Phantom II*/F-15A *Eagle*/F-16A/B *Fighting Falcon*/Kfir C-7 in store)

**MP** 3 IAI-1124 *Seascan*

**ISR** 6 RC-12D *Guardrail*

**ELINT** 4: 1 EC-707; 3 Gulfstream G550 *Shavit*

**AEW** 4: 2 B-707 *Phalcon*; 2 Gulfstream G550 *Eitam* (1 more on order)

**TKR/TPT** 11: 4 KC-130H *Hercules*; 7 KC-707

**TPT** 61: **Medium** 14: 5 C-130E *Hercules*; 6 C-130H *Hercules*; 3 C-130J-30 *Hercules*; **Light** 47: 3 AT-802 *Air Tractor*; 9 Beech 200 *King Air*; 8 Beech 200T *King Air*; 5 Beech 200CT *King Air*; 22 Beech A36 *Bonanza (Hofit)*

**TRG** 57: 17 Grob G-120; 20 M-346 *Lavi*; 20 T-6A

#### HELICOPTERS

**ATK** 77: 33 AH-1E/F *Cobra*; 27 AH-64A *Apache*; 17 AH-64D *Apache (Sarat)*

**ASW** 7 AS565SA *Panther* (missions flown by IAF but with non-rated aircrew)

**ISR** 12 OH-58B *Kiowa*

**TPT** 81: **Heavy** 26 CH-53D *Sea Stallion*; **Medium** 49: 39 S-70A *Black Hawk*; 10 UH-60A *Black Hawk*; **Light** 6 Bell 206 *Jet Ranger*

**UAV** • **ISR** 25+: **Heavy** 3+: *Heron (Shoval)*; 3 *Heron TP (Eitan)*; RQ-5A *Hunter*; **Medium** 22+: *Hermes 450*; *Hermes 900*; 22 *Searcher MkII* (22+ in store); **Light** *Harpy*

#### AD

**SAM** 24+:

**TOWED** 24 *Arrow/Arrow 2*; some MIM-104 *Patriot*; some MIM-23 I-HAWK

**STATIC** some *Iron Dome*;

#### GUNS 920

**SP** 165: **20mm** 105 M163 *Machbet Vulcan*; **23mm** 60 ZSU-23-4

**TOWED** 755: **23mm** 150 ZU-23; **20mm/37mm** 455 M167 *Vulcan* towed 20mm/M-1939 towed 37mm/TCM-20 towed 20mm; **40mm** 150 L/70

#### MSL

**ASM** AGM-114 *Hellfire*; AGM-62B *Walleye*; AGM-65 *Maverick*; *Popeye I/Popeye II*; *Delilah AL*

**AAM** • **IR** AIM-9 *Sidewinder*; *Python 4*; **IIR** *Python 5*;

**ARH** AIM-120C *AMRAAM*; *Derby*

#### BOMBS

**IIR guided** *Opher*

**Laser-guided** *Griffin*; *Lizard*

**INS/GPS guided** GBU-31 *JDAM*; GBU-39 *Small Diameter Bomb (Barad Had)*; *Spice*

**Airfield Defence** 3,000 active (15,000 reservists)

#### Paramilitary €8,000

#### Border Police €8,000

#### Cyber

Israel has substantial capacity for cyber operations. In early 2012, the Israel National Cyber Bureau (INCB) was created in the prime minister's office, to develop technology, human resources and international collaboration. In late October 2012, the INCB and the defence ministry's Directorate for Research and Development announced a dual cyber-security programme, called MASAD, 'to promote R&D projects that serve both civilian and defense goals at the national level'. It is reported that the IDF's 'Unit 8200' is responsible for ELINT and some cyber operations. In 2012, according to the IDF, the C4I Directorate and Unit 8200 were combined into a new task force 'tasked with developing offensive capabilities and operations'. Specialist training courses exist, including the four-month 'Cyber Shield' activity. The IDF has, it says, 'been engaged in cyber activity consistently and relentlessly, gathering intelligence and defending its own cyber space. Additionally if necessary the cyber space will be used to execute attacks and intelligence

operations.' In June 2015, the IDF announced plans to consolidate all of its cyber-warfare capabilities under a unified Cyber Command, to be launched by 2017.

## FOREIGN FORCES

UNTSO unless specified. UNTSO figures represent total numbers for mission in Israel, Syria and Lebanon

**Argentina** 3 obs  
**Australia** 12 obs  
**Austria** 5 obs  
**Belgium** 2 obs  
**Bhutan** 2 obs • UNDOF 2  
**Canada** 4 obs  
**Chile** 3 obs  
**China** 3 obs  
**Czech Republic** UNDOF 3  
**Denmark** 11 obs  
**Estonia** 4 obs Fiji 2 obs • UNDOF 300 1 inf coy; elm 1 log bn  
**Finland** 17 obs  
**France** 1 obs  
**India** UNDOF 189; 1 log bn(-)  
**Ireland** 13 obs • UNDOF 156; 1 inf coy  
**Nepal** UNDOF 156; 1 inf coy  
**Netherlands** 12 obs • UNDOF 2  
**New Zealand** 8 obs  
**Norway** 12 obs  
**Russia** 4 obs  
**Serbia** 1 obs  
**Slovakia** 2 obs  
**Slovenia** 3 obs  
**Sweden** 6 obs  
**Switzerland** 15 obs United States 2 obs • US Strategic Command; 1 AN/TPY-2 X-band radar at Mount Keren

## Jordan JOR

Jordanian Dinar D		2014	2015	2016
GDP	D	25.4bn	27.1bn	
	US\$	35.9bn	38.2bn	
<i>per capita</i>	US\$	5,375	5,600	
Growth	%	3.1	2.9	
Inflation	%	2.9	0.2	
Def bdtg [a]	D	899m	924m	
	US\$	1.27bn	1.3bn	
FMA (US)	US\$	300m	300m	300m
US\$1=D		0.71	0.71	

[a] Excludes expenditure on public order and safety

**Population** 8,117,564

**Ethnic groups:** Palestinian ε50–60%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	18.2%	5.4%	5.0%	4.4%	15.8%	1.8%
Female	17.3%	5.1%	4.8%	4.3%	15.9%	2.1%

## Capabilities

Jordan's armed forces benefit from a high level of defence spending relative to GDP, and strong defence relationships with the US and the UK that have facilitated training. The main roles of Jordan's fully professional armed forces are border and internal security, and the services are combat capable and contribute to international expeditionary operations. Jordan's main security preoccupations are the threat from ISIS, the complex conflicts in Syria and Iraq, and the resulting flow of refugees. It has boosted its rapid-reaction capabilities as a result. However, the size of the population and the lack of conventional threats mean the armed forces are relatively small in size. Personnel are well trained, particularly aircrew and special forces, who are highly regarded and have served alongside ISAF forces in Afghanistan and participated in various UN missions. The country has developed a bespoke special-forces training centre, and regularly plays host to various special-forces contingents. It joined the US-led airstrikes against ISIS, and stepped up its efforts after the group's murder of a captured Jordanian pilot.

**ACTIVE 100,500 (Army 74,000 Navy 500 Air 12,000 Special Operations 14,000) Paramilitary 15,000**

**RESERVE 65,000 (Army 60,000 Joint 5,000)**

## ORGANISATIONS BY SERVICE

### Army 74,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

1 (strategic reserve) armd div (3 armd bde, 1 arty bde, 1 AD bde)

1 armd bde

###### Mechanised

5 mech bde

###### Light

3 lt inf bde

#### COMBAT SUPPORT

3 arty bde

3 AD bde

1 MRL bn

#### EQUIPMENT BY TYPE

**MBT** 752: 390 CR1 *Challenger 1 (Al Hussein)*; 274 FV4030/2 *Khalid*; 88 M60 *Phoenix*; (292 *Tariq Centurion*); 115 M60A1A3; 23 M47/M48A5 in store)

**LT TK** (19 *Scorpion*; in store)

**RECCE** 153: 103 *Scimitar*; 50 *Ferret*

**AIFV** 566: 31 BMP-2; 321 *Ratel-20*; 214 YPR-765 25mm

**APC** 1,014+

**APC (T)** 829+: 370 M113A1/A2 Mk1J; 200 M577A2 (CP); some *Temsah*; 259 YPR-765

**PPV** 185: 35 *Cougar*; 25 *Marauder*; 25 *Matador*; 100 *MaxxPro*

**ARTY** 1,429+

**SP** 556: **105mm** 30 M52; **155mm** 390: 358 M109A1/A2; 20

M44; **203mm** 148 M110A2

**TOWED** 100: **105mm** 72: 54 M102; 18 MOBAT; **155mm** 28: 10 M1/M59; 18 M114; **203mm** (4 M115 in store)



**MRL** 14+: 227mm 12 M142 HIMARS; 273mm 2+ WM-80  
**MOR** 759:  
**SP** 81mm 50  
**TOWED** 709: 81mm 359; 107mm 50 M30; 120mm 300  
 Brandt

**AT** • **MSL** 975

**SP** 115: 70 M901; 45 YPR-765 with *Milan*  
**MANPATS** *Javelin*; M47 *Dragon*; TOW/TOW-2A; 9K135  
*Kornet* (AT-14 *Spriggan*)

**AD**

**SAM** 930+  
**SP** 140: 92 9K35 *Strela-10* (SA-13 *Gopher*); 48 9K33  
*Osa-M* (SA-8 *Gecko*)  
**MANPAD** FIM-43 *Redeye*; 9K32M *Strela-2M*  
 (SA-7B *Grail*); 9K36 *Strela-3* (SA-14 *Gremlin*);  
 240 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*)  
**GUNS** • **SP** 356: 20mm 100 M163 *Vulcan*; 23mm 40 ZSU-  
 23-4; 40mm 216 M-42 (not all op)

**RADAR** • **LAND** 7 AN/TPQ-36 *Firefinder*/AN/TPQ-37  
*Firefinder* (arty, mor)

**ARV** 137+: *Al Monjed*; 55 *Chieftain* ARV; *Centurion* Mk2; 20  
 M47; 32 M88A1; 30 M578; YPR-806

**MW** 12 *Aardvark* Mk2

## Navy €500

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 7

**PB** 7: 3 *Al Hussein* (UK *Vosper* 30m); 4 *Abdullah* (US  
*Dauntless*)

## Air Force 12,000

Flying hours 180 hrs/year

### FORCES BY ROLE

**FIGHTER/GROUND ATTACK**

2 sqn with F-16AM/BM *Fighting Falcon*

**FIGHTER/GROUND ATTACK/ISR**

1 sqn with F-5E/F *Tiger II*

**TRANSPORT**

1 sqn with C-130E/H *Hercules*; CN-235; C-295M

1 sqn with Cessna 208B; H135M

1 unit with Il-76MF *Candid*

**TRAINING**

1 OCU with F-5E/F *Tiger II*

1 sqn with C-101 *Aviojet*

1 sqn with T-67M *Firefly*

1 hel sqn with AS350B3; Hughes 500

**ATTACK HELICOPTER**

2 sqn with AH-1F/S *Cobra* (with TOW)

**TRANSPORT HELICOPTER**

1 sqn with AS332M *Super Puma*

1 sqn with Bell 205 (UH-1H *Iroquois*)

1 (Royal) flt with S-70A *Black Hawk*; UH-60L/M *Black Hawk*

**AIR DEFENCE**

2 bde with MIM-104C *Patriot* PAC-2; MIM-23B Phase III  
 I-HAWK

### EQUIPMENT BY TYPE

**AIRCRAFT** 75 combat capable

**FTR** 29 F-5E/F *Tiger II*

**FGA** 44: 30 F-16AM *Fighting Falcon*; 14 F-16BM *Fighting Falcon*

**ATK** 2 AC-235

**TPT** 21: **Heavy** 2 Il-76MF *Candid*; **Medium** 7: 3 C-130E  
*Hercules*; 4 C-130H *Hercules*; **Light** 12: 6 AT802 *Air Tractor*\*; 5 Cessna 208B; 1 M-28 *Skytruck* (2 C-295M in  
 store being converted into gunships)

**TRG** 24: 14 T-67M *Firefly*; 10 C-101 *Aviojet*

**HELICOPTERS**

**ATK** 29: 12 AH-1F *Cobra*; 17 AH-1S *Cobra*

**MRH** 13 H135M (Tpt/SAR)

**TPT** 70: **Medium** 20: 12 AS332M *Super Puma*; 3 S-70A  
*Black Hawk*; 3 UH-60L *Black Hawk*; 2 UH-60M *Black Hawk*;

**Light** 50: 36 Bell 205 (UH-1H *Iroquois*); 6 AS350B3; 8 R-44

**AD** • **SAM** 64: 24 MIM-23B Phase III I-HAWK; 40 MIM-  
 104C *Patriot* PAC-2

**MSL**

**ASM** AGM-65D/G *Maverick*; BGM-71 TOW

**AAM** • **IR** AIM-9J/N/P *Sidewinder*; R-550 *Magic*; **SARH**  
 AIM-7 *Sparrow*; R-530; **ARH** AIM-120C AMRAAM

**BOMBS**

**Laser-guided** GBU-10/12 *Paveway II*

## Joint Special Operations Command 14,000

### FORCES BY ROLE

**SPECIAL FORCES**

1 spec ops bde (2 SF bn, 2 AB bn, 1 AB arty bn, 1 psyops  
 unit)

1 ranger bde (1 SF bn, 3 ranger bn)

**MANOEUVRE**

**Other**

1 (Royal Guard) sy bde (1 SF regt, 3 sy bn)

**TRANSPORT**

1 sqn with An-32B

**TRANSPORT HELICOPTER**

1 sqn with MD-530F

1 sqn with UH-60L *Black Hawk*

**EQUIPMENT BY TYPE**

**AIRCRAFT**

**TPT** **Light** 3 An-32B

**HELICOPTERS**

**MRH** 6 MD-530F

**TPT** • **Medium** 8 UH-60L *Black Hawk*

## Paramilitary €15,000 active

### Gendarmerie €15,000 active

3 regional comd

**FORCES BY ROLE**

**SPECIAL FORCES**

2 SF unit

**MANOEUVRE**

**Other**

10 sy bn

**EQUIPMENT BY TYPE**

**APC**

**APC (W)** 25+: AT105 *Saxon* (reported); 25+ EE-11 *Urutu*

PPV AB-2 *Jawad*

## Reserve Organisations €35,000 reservists

**Civil Militia 'People's Army'** €35,000 reservists

Men 16–65, women 16–45

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 3; 3 obs

### CÔTE D'IVOIRE

UN • UNOCI 10; 8 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 10; 13 obs

### HAITI

UN • MINUSTAH 3

### MALI

UN • MINUSMA 1

### SOUTH SUDAN

UN • UNMISS 4; 3 obs

### SUDAN

UN • UNAMID 15; 4 obs

### UNITED ARAB EMIRATES

*Operation Restoring Hope* 6 F-16C *Fighting Falcon*

## FOREIGN FORCES

**France** *Operation Chammal* 3 *Mirage* 2000D; 3 *Mirage* 2000N

**Netherlands** *Operation Inherent Resolve* 4 F-16AM *Fighting Falcon*

**United States** Central Command: *Operation Inherent Resolve* 1 FGA sqn with 12 F-16C *Fighting Falcon*; 1 AD bty with MIM-104E/F *Patriot* PAC-2/3

## Kuwait KWT

Kuwaiti Dinar D		2014	2015	2016
GDP	D	49.1bn	36.1bn	
	US\$	173bn	123bn	
<i>per capita</i>	US\$	43,168	29,983	
Growth	%	0.1	1.2	
Inflation	%	2.9	3.3	
Def bdgt	D	1.37bn	1.3bn	
	US\$	4.8bn	4.43bn	
US\$1=D		0.28	0.29	

Population 2,788,534

**Ethnic groups:** Nationals 35%; other Arab 35%; South Asian 9%; Iranian 4%; other 17%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.2%	3.3%	5.1%	7.4%	28.5%	1.1%
Female	12.2%	3.0%	3.8%	4.4%	16.8%	1.2%

## Capabilities

The armed forces' primary role is ensuring the territorial integrity of the state, though their small size means they would struggle to defeat a committed attack from a larger neighbouring state. Kuwait's membership of the GCC and its relationship with Washington are intended to guaran-

tee its security. Internal security was a growing concern in the latter half of 2015 following the June suicide bombing of a Shia mosque that killed 27 people. Meanwhile, the National Guard launched a 2015–20 strategic plan that will, it was reported, review its structure and procedures so as to increase readiness. The armed forces and the National Guard exercise regularly, including with US forces deployed in the country. Kuwait continues to revamp core elements of its equipment inventory. Notable planned procurements in 2015 included the September agreement of a government-to-government memorandum with Italy covering the acquisition of the Eurofighter *Typhoon*, and an order for the Airbus Helicopters H225M *Caracal*, both for the air force. The air force also took delivery of the last of three KC-130J tanker/transport aircraft it had on order. Kuwait has also contributed to the Saudi-led operation in Yemen, with air force F/A-18s taking part.

**ACTIVE 15,500 (Army 11,000 Navy 2,000 Air 2,500)**  
**Paramilitary 7,100**

**RESERVE 23,700 (Joint 23,700)**

Reserve obligation to age 40; 1 month annual trg

## ORGANISATIONS BY SERVICE

### Army 11,000

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF unit (forming)

##### MANOEUVRE

**Reconnaissance**

1 mech/recce bde

**Armoured**

3 armd bde

**Mechanised**

2 mech inf bde

**Light**

1 cdo bn

**Other**

1 (Amiri) gd bde

#### COMBAT SUPPORT

1 arty bde

1 engr bde

1 MP bn

#### COMBAT SERVICE SUPPORT

1 log gp

1 fd hospital

### Reserve

#### FORCES BY ROLE

##### MANOEUVRE

**Mechanised**

1 bde

#### EQUIPMENT BY TYPE

**MBT** 293: 218 M1A2 *Abrams*; 75 M-84 (75 more in store)

**RECCE** 11 TPz-1 *Fuchs* NBC

**AIFV** 432: 76 BMP-2; 120 BMP-3; 236 *Desert Warrior*† (incl variants)

**APC** 260

**APC (T)** 260: 230 M113A2; 30 M577

APC (W) (40 TH 390 *Fahd* in store)

#### ARTY 221

SP 155mm 106: 37 M109A3; 18 Mk F3; 51 PLZ-45; (18 AU-F-1 in store)

MRL 300mm 27 9A52 *Smerch*

MOR 78: 81mm 60; 107mm 6 M30; 120mm ε12 RT-F1

#### AT • MSL 118+

SP 74: 66 HMMWV TOW; 8 M901

MANPATS TOW-2; M47 *Dragon*

RCL 84mm ε200 *Carl Gustav*

#### AD • SAM 60+

STATIC/SHELTER 12 *Aspide*

MANPAD *Starburst; Stinger*

GUNS • TOWED 35mm 12+ Oerlikon

ARV 24+: 24 M88A1/2; Type-653A; *Warrior*

MW *Aardvark* Mk2

### Navy ε2,000 (incl 500 Coast Guard)

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 20

###### PCFG 2:

1 *Al Sanbouk* (GER Lurssen TNC-45) with 2 twin Inchr with MM-40 *Exocet* AShM, 1 76mm gun

1 *Istiqlal* (GER Lurssen FPB-57) with 2 twin Inchr with MM-40 *Exocet* AShM, 1 76mm gun

PBF 10 *Al Nokatha* (US Mk V *Pegasus*)

PBG 8 *Um Almaradim* (FRA P-37 BRL) with 2 twin Inchr with *Sea Skua* AShM, 1 sextuple Inchr (Inchr only)

LOGISTICS AND SUPPORT • AG 1 *Sawahil* with 1 hel landing platform

### Air Force 2,500

Flying hours 210 hrs/year

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

2 sqn with F/A-18C/D *Hornet*

##### TRANSPORT

1 sqn with C-17A *Globemaster*; KC-130J *Hercules*; L-100-30

##### TRAINING

1 unit with EMB-312 *Tucano*\*; *Hawk* Mk64\*

##### ATTACK HELICOPTER

1 sqn with AH-64D *Apache*

1 atk/trg sqn with SA342 *Gazelle* with HOT

##### TRANSPORT HELICOPTER

1 sqn with AS532 *Cougar*; SA330 *Puma*; S-92

#### EQUIPMENT BY TYPE

AIRCRAFT 66 combat capable

FGA 39: 31 F/A-18C *Hornet*; 8 F/A-18D *Hornet*

TKR 3 KC-130J *Hercules*

TPT 5: Heavy 2 C-17A *Globemaster*; Medium 3 L-100-30

TRG 27: 11 *Hawk* Mk64\*; 16 EMB-312 *Tucano*\*

#### HELICOPTERS

ATK 16 AH-64D *Apache*

MRH 13 SA342 *Gazelle* with HOT

TPT • Medium 13: 3 AS532 *Cougar*; 7 SA330 *Puma*; 3 S-92

#### MSL

ASM AGM-65G *Maverick*; AGM-114K *Hellfire*

AShM AGM-84A *Harpoon*

AAM • IR AIM-9L *Sidewinder*; R-550 *Magic*; SARH

AIM-7F *Sparrow*; ARH AIM-120C7 AMRAAM

### Air Defence Command

#### FORCES BY ROLE

##### AIR DEFENCE

1 SAM bde with (7 SAM bty with MIM-104D *Patriot* PAC-2 GEM)

1 SAM bde with (6 SAM bty with *Skyguard/Aspide*)

#### EQUIPMENT BY TYPE

AD • SAM • TOWED 52: 40 MIM-104D *Patriot* PAC-2 GEM; 12 *Skyguard/Aspide*

### Paramilitary ε7,100 active

#### National Guard ε6,600 active

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bn

##### MANOEUVRE

Reconnaissance

1 armd car bn

##### Other

3 security bn

##### COMBAT SUPPORT

1 MP bn

#### EQUIPMENT BY TYPE

RECCE 20 VBL

APC (W) 97+: 5+ *Desert Chameleon*; 70 *Pandur*; 22 S600 (incl variants)

ARV *Pandur*

### Coast Guard 500

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 32

PBF 12 *Manta*

PB 20: 3 *Al Shaheed*; 4 *Inttisar* (Austal 31.5m); 3 *Kassir* (Austal 22m); 10 *Subahi*

AMPHIBIOUS • LANDING CRAFT • LCU 4: 2 *Al*

*Tahaddy*; 1 *Saffar*; 1 other

LOGISTICS AND SUPPORT • AG 1 *Sawahil*

### DEPLOYMENT

#### SAUDI ARABIA

*Operation Restoring Hope* 4 F/A-18A *Hornet*

### FOREIGN FORCES

Canada *Operation Impact* 530: 6 F/A-18A *Hornet* (CF-18AM); 2 P-3 *Orion* (CP-140); 1 A310 MRTT (C-150T)

Italy *Operation Inherent Resolve* 4 *Tornado*; 1 KC-767A

United Kingdom 40 • *Operation Shader* MQ-9A *Reaper*

United States Central Command: 13,000; 1 armd bde; 1

ARNG cbt avn bde; 1 spt bde; 1 atk sqn with 12 A-10C

*Thunderbolt II*; 4 AD bty with MIM-104E/F *Patriot* PAC-2/3;

1 (APS) armd bde eqpt set; 1 (APS) inf bde eqpt set

Lebanon LBN				
Lebanese Pound LP		2014	2015	2016
GDP	LP	75.4tr	82tr	
	US\$	50bn	54.4bn	
<i>per capita</i>	US\$	11,092	11,945	
Growth	%	2.0	2.0	
Inflation	%	1.9	0.1	
Def exp [a]	LP	€1.91tr		
	US\$	€1.27bn		
FMA (US)	US\$	75m	80m	80m
US\$1=LP		1,507.50	1,507.49	

[a] Excludes GCC state foreign military assistance

Population 6,184,701

Ethnic and religious groups: Christian 30%; Druze 6%; Armenian 4%, excl €300,000 Syrians and €350,000 Palestinian refugees

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.8%	4.3%	4.4%	4.5%	21.1%	2.9%
Female	12.2%	4.1%	4.2%	4.4%	21.3%	3.7%

## Capabilities

The destabilising effects of the complex war in Syria have seen the Lebanese armed forces increasingly tested in their principal roles of internal and border security. Despite some Western military assistance, they are reliant on outdated equipment. Modernisation efforts are under way, involving significant military assistance from France and the US; much of the assistance from France has been financed by Saudi Arabia. These programmes are aimed at boosting the armed forces' firepower and counter-insurgency capabilities to take on jihadist militants. They involve the delivery of Cessna 208B aircraft armed with *Hellfire* missiles and anti-tank missiles. Expected future deliveries include utility helicopters and *Super Tucano* ground-attack aircraft. France will deliver materiel including utility helicopters, offshore-patrol vessels, and surveillance and border-security assistance; a first tranche arrived in April. These new capabilities, combined with institutional reform, will allow the armed forces to increase its operational capability and tempo of activity. Hizbullah plays a key role in Lebanese politics and controls much of south Lebanon; the group has been increasingly involved in pro-regime military operations in Syria since 2013.

**ACTIVE 60,000** (Army 56,600 Navy 1,800 Air 1,600)  
Paramilitary 20,000

## ORGANISATIONS BY SERVICE

**Army 56,600**

### FORCES BY ROLE

5 regional comd (Beirut, Bekaa Valley, Mount Lebanon, North, South)

### SPECIAL FORCES

1 cdo regt

### MANOEUVRE

**Armoured**

2 armd regt

### Mechanised

11 mech inf bde

### Air Manoeuvre

1 AB regt

### Amphibious

1 mne cdo regt

### Other

1 Presidential Guard bde

5 intervention regt

2 border sy regt

## COMBAT SUPPORT

2 arty regt

1 cbt spt bde (1 engr rgt, 1 AT regt, 1 sigs regt)

1 MP bde

## COMBAT SERVICE SUPPORT

1 log bde

1 med regt

1 construction regt

## EQUIPMENT BY TYPE

**MBT** 324: 92 M48A1/A5; 185 T-54; 47 T-55

**RECCE** 55 AML

**AIFV** 16 AIFV-B-C25

**APC** 1,360

**APC (T)** 1,274 M113A1/A2 (incl variants)

**APC (W)** 86 VAB VCT

**ARTY** 571

**SP 155mm** 12 M109

**TOWED** 273: **105mm** 13 M101A1; **122mm** 35: 9 D-30;

26 M-30; **130mm** 15 M-46; **155mm** 210: 18 M114A1; 178 M198; 14 Model-50

**MRL 122mm** 11 BM-21

**MOR** 275: **81mm** 134; **82mm** 112; **120mm** 29 Brandt

## AT

**MSL • MANPATS** *Milan*; TOW

**RCL 106mm** 113 M40A1

**RL 73mm** 11 M-50; **90mm** 8 M-69 **AD**

**SAM • MANPAD** 9K32 *Strela-2/2M* (SA-7A *Grail*/SA-7B *Grail*) †

**GUNS • TOWED** 77: **20mm** 20; **23mm** 57 ZU-23

**ARV** M113 ARV; T-54/55 ARV reported **VLB** MTU-72 reported

**MW** Bozena

**UAV • ISR • Medium** 8 *Mohajer* 4

## Navy 1,800

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 13

**PCC** 1 *Trablous*

**PB** 11: 1 *Aamchit* (ex-GER *Bremen*); 1 *Al Kalamoun* (ex-FRA *Avel Gwarlarn*); 7 *Tripoli* (ex-UK *Attacker/Tracker* Mk 2); 1 *Naquora* (ex-GER *Bremen*); 1 *Tabarja* (ex-GER *Bergen*)

**PBF** 1

**AMPHIBIOUS • LANDING CRAFT • LCT** 2 *Sour* (ex-FRA *Edic* – capacity 8 APC; 96 troops)

## Air Force 1,600

4 air bases

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with *Hunter* Mk6/Mk9/T66†; Cessna AC-208

*Combat Caravan*\*

**ATTACK HELICOPTER**1 sqn with SA342L *Gazelle***TRANSPORT HELICOPTER**

4 sqn with Bell 205 (UH-1H)

1 sqn with AS330/IAR330SM *Puma*1 trg sqn with R-44 *Raven II***EQUIPMENT BY TYPE****AIRCRAFT** 9 combat capable**FGA** 4: 3 *Hunter Mk6/Mk9+*; 1 *Hunter T66+***ISR** 3 Cessna AC-208 *Combat Caravan\****TRG** 3 *Bulldog***HELICOPTERS****MRH** 9: 1 AW139; 8 SA342L *Gazelle* (5 SA342L *Gazelle*; 5 SA316 *Alouette III*; 1 SA318 *Alouette II* all non-operational)**TPT** 35: **Medium** 13: 3 S-61N (fire fighting); 10 AS330/IAR330 *Puma*; **Light** 22: 18 Bell 205 (UH-1H *Huey*) 4 R-44 *Raven II* (basic trg); (11 Bell 205; 7 Bell 212 all non-operational)**Paramilitary** €20,000 active**Internal Security Force** €20,000

Ministry of Interior

**FORCES BY ROLE****Other Combat Forces**

1 (police) judicial unit

1 regional sy coy

1 (Beirut Gendarmerie) sy coy

**EQUIPMENT BY TYPE****APC (W)** 60 V-200 *Chaimite***Customs****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 7**PB** 7: 5 *Aztec*; 2 *Tracker***FOREIGN FORCES**

Unless specified, figures refer to UNTSO and represent total numbers for the mission in Israel, Syria and Lebanon.

**Argentina** 3 obs**Armenia** UNIFIL 33**Australia** 12 obs**Austria** 5 obs • UNIFIL 180: 1 log coy**Bangladesh** UNIFIL 286: 1 FFG; 1 FSG**Belarus** UNIFIL 5**Belgium** 2 obs • UNIFIL 1**Bhutan** 2 obs**Brazil** UNIFIL 201: 1 FFGH**Brunei** UNIFIL 29**Cambodia** UNIFIL 184: 1 engr coy**Canada** 4 obs (*Operation Jade*)**Chile** 3 obs**China, People's Republic of** 3 obs • UNIFIL 418: 1 engr coy; 1 fd hospital**Croatia** UNIFIL 1**Cyprus** UNIFIL 2**Denmark** 11 obs**El Salvador** UNIFIL 52: 1 inf pl**Estonia** 4 obs • UNIFIL 37**Fiji** 2 obs • UNIFIL 144; 1 inf coy**Finland** 17 obs • UNIFIL 308; elm 1 mech inf bn**France** 1 obs • UNIFIL 825: 1 inf BG; *Leclerc*; AMX-10P; VAB; CAESAR; AU-F1; *Mistral***Germany** UNIFIL 117: 1 FFGM**Ghana** UNIFIL 871: 1 mech inf bn**Greece** UNIFIL 51: 1 PCFG**Guatemala** UNIFIL 2**Hungary** UNIFIL 4**India** UNIFIL 897: 1 inf bn; 1 fd hospital**Indonesia** UNIFIL 1,289: 1 mech inf bn; 1 log bn(-); 1 FFGM**Ireland** 13 obs • UNIFIL 196: elm 1 mech inf bn**Italy** UNIFIL 1,188: 1 mtn inf bde HQ; 1 mech inf bn; 1 engr coy; 1 sigs coy; 1 hel bn**Kenya** UNIFIL 1**Korea, Republic of** UNIFIL 320: 1 mech inf bn**Macedonia (FYROM)** UNIFIL 1**Malaysia** UNIFIL 830: 1 mech inf bn; 1 mech inf coy**Nepal** UNIFIL 870: 1 inf bn**Netherlands** 12 obs**New Zealand** 8 obs**Nigeria** UNIFIL 1**Norway** 12 obs**Qatar** UNIFIL 3**Russia** 4 obs**Serbia** 1 obs • UNIFIL 177; 1 mech inf coy**Sierra Leone** UNIFIL 3**Slovakia** 2 obs**Slovenia** 3 obs • UNIFIL 14**Spain** UNIFIL 613: 1 armd inf bde HQ; 1 mech inf BG**Sri Lanka** UNIFIL 151: 1 inf coy**Sweden** 6 obs**Switzerland** 15 obs**Tanzania** UNIFIL 158; 2 MP coy**Turkey** UNIFIL 49: 1 PCFG**United States** 2 obs**Libya** LBY

Libyan Dinar D		2014	2015	2016
GDP	D	52.3bn	40.7bn	
	US\$	41.1bn	29.7bn	
<i>per capita</i>	US\$	6,671	4,754	
Growth	%	-24.0	-6.1	
Inflation	%	2.8	8.0	
Def exp	D	n.k.	n.k.	
	US\$	n.k.	n.k.	
US\$1=D		1.27	1.37	

**Population** 6,411,776

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	13.6%	4.5%	4.6%	5.1%	21.9%	2.1%
Female	13.0%	4.3%	4.3%	4.5%	20.0%	2.1%



## Capabilities

Civil war continues in Libya following the 2014 breakdown of the central government despite ongoing international efforts to negotiate a political resolution. The formal Libyan forces loyal to the internationally recognised House of Representatives (HoR) have made limited gains against the Libya Dawn coalition supporting the Tripoli-based General National Council. General Khalifa Haftar, who led the independent *Operation Dignity* campaign against the Libya Dawn militia, was appointed in June 2015 head of the armed forces, as a consequence realigning additional forces to the HoR, including limited air power. Both sides have tried to reactivate aircraft. Most of the observed weaponry on the ground originates from the stockpiles of the Gadhafi regime but precise ownership and serviceability remains in doubt with continued evidence of improvisation and innovation using limited supplies on both sides. Libya's continued instability has helped fuel the Mediterranean migration crisis, while the presence of Islamist groups, particularly an ISIS affiliate, was of concern to local and external actors. In 2015, both the US and Egypt conducted airstrikes targeting Islamist extremists in Libya. (See pp. 313–14.)

**House of Representatives** (The Tobruk-based internationally recognised authority)

**ACTIVE** n.k.

## ORGANISATIONS BY SERVICE

**Army** n.k.

### EQUIPMENT BY TYPE

Most of the equipment that survived the 2011 conflict in a salvageable condition is still awaiting reactivation.

**MBT** T-55; T-72

**RECCE** BRDM-2; EE-9 *Cascavel*

**AIFV** BMP-1

**APC**

APC (T) M113

APC (W) BTR-60PB; *Ratel*; *Puma*; *Streit Typhoon*; *Panthera T6*

**ARTY**

TOWED 122mm D-30

MRL 107mm Type-63; 122mm BM-21 *Grad*

MOR M106

**AT • MSL**

SP 10 9P157-2 *Khryzantema-S* (status unknown)

MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); *Milan*

**RCL** some: 106mm M40A1; 84mm *Carl Gustav*

**AD**

**SAM • MANPAD:** 9K338 *Igla-S* (SA-24 *Grinch*)

**GUNS**

SP 23mm ZSU-23-4 *Shilka*

**Navy** n.k.

The operational and maintenance status of these naval forces is questionable, with the vessels listed representing those potentially available.

## EQUIPMENT BY TYPE

### PRINCIPAL SURFACE COMBATANTS 1

**FRIGATES • FFGM** 1 *Al Hani* (FSU *Koni*) (in Italy for refit since 2013) with 2 twin Inchr (with P-15 *Termit-M* (SS-N-2C *Styx*) AShM, 1 twin Inchr with 9K33 *Osa-M* (SA-N-4 *Gecko*) SAM, 2 twin 406mm ASTT with USET-95 Type-40 LWT, 1 RBU 6000 *Smerch 2 A/S* mor, 2 twin 76mm gun

### PATROL AND COASTAL COMBATANTS 5+

**PB:** 5+: 3 *Burdi* (Damen Stan 1605); 2 *Ikrimah* (FRA RPB20); 1 *Hamelin*; 1+ PV30

### LOGISTICS AND SUPPORT 1

AFD 1

## Air Force n.k.

### EQUIPMENT BY TYPE

A small number of aircraft inherited from the previous regime continue to be operated. Maintenance and serviceability levels are unclear.

### AIRCRAFT

FTR MiG-23MLD *Flogger*

FGA 6+: 1+ MiG-21bis *Fishbed*; 5+ MiG-21MF *Fishbed*; (some *Mirage F-1E(ED)* in store)

### HELICOPTERS

ATK 3+ Mi-24/35 *Hind*

TPT 5+: **Medium** 5+ Mi-8T/Mi-17 *Hip*

**MSL • AAM • IR** R-3 (AA-2 *Atoll*)‡; R-60 (AA-8 *Aphid*)

## TERRITORY WHERE THE RECOGNISED AUTHORITY DOES NOT EXERCISE EFFECTIVE CONTROL

Data here represents the de facto situation. This does not imply international recognition.

## General National Congress (Tripoli-based)

**ACTIVE** n.k.

## ORGANISATIONS BY SERVICE

**Libya Dawn** n.k.

**Army** n.k.

### EQUIPMENT BY TYPE

Maintenance and serviceability levels are unclear.

**MBT** T-55; T-72

**APC • APC (W)** *Puma*; IAG *Guardian*

**ARTY**

TOWED 130mm M-46

SP 155mm *Palmaria*

MRL 122MM RM-70 (status unknown); BM-21 *Grad*

MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); *Milan*

MOR 120mm 2B11

## Navy n.k.

Libya Dawn forces captured a number of intact naval vessels in Tripoli, though the operational status of these naval forces is questionable, as is maintenance status.

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 4+

**PBFG** 1 *Sharaba* (FRA *Combattante II*) with 4 single Inchr with *Otomat* Mk2 ASHM, 1 76mm gunt

**PB** 1 *Hamelin*; 2+ PV30

#### AMPHIBIOUS 2

**LANDING SHIPS** 2: **LST** 1 *Ibn Harissa* (capacity 1 hel; 11 MBT; 240 troops) (one with 3 twin 40mm DARDO CIWS)

#### LOGISTICS AND SUPPORT 2

**AFD** 1

**ARS** 1 *Al Munjed* (YUG *Spasilac*)†

## Air Force n.k.

### EQUIPMENT BY TYPE

A small number of aircraft inherited from the previous regime continue to be operated. Maintenance and serviceability levels are unclear.

#### AIRCRAFT

**FTR** 1 MiG-25P/PU (status unknown)

**FGA** MiG-23ML

**TRG** 4+ G-2 *Galeb*\*; L-39ZO *Albatros*\*

**TPT** **Medium** 1+ An-72 *Coaler*

#### HELICOPTERS

**TPT** **Heavy** 2 CH-47C *Chinook*; **Medium** Mi-17 *Hip*

**ASW** 1+ Mi-14 *Haze* (used as TPT)

**MSL** • **AAM** • **IR** R-3 (AA-2 *Atoll*)‡; R-60 (AA-8 *Aphid*)

## Coast Guard n.k.

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** • **PB** 1+ PV30; various other

**LOGISTICS AND SUPPORT** • **YTB** (some with 14.5mm ZPU-2 AD Guns)

## Mauritania MRT

Mauritanian Ouguiya OM		2014	2015	2016
GDP	OM	1.53tr	1.52tr	
	US\$	5.08bn	4.68bn	
<i>per capita</i>	US\$	1,403	1,262	
Growth	%	6.9	4.1	
Inflation	%	3.5	3.6	
Def exp	US\$	€153m	0m	
US\$1=OM		301.66	324.65	

Population 3,596,702

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	19.7%	5.2%	4.5%	3.8%	13.4%	1.5%
Female	19.5%	5.4%	4.8%	4.3%	15.8%	2.1%

## Capabilities

Force readiness appears low and there is little combat experience. Patrol craft donated by the EU have enhanced

the navy's littoral capabilities. Limited airlift hinders mobility. ISR capability was enhanced in late 2014 by the delivery of a sensor-equipped aircraft. Mauritania's limited capability to secure borders, territory and resources, combined with the perceived regional threat from Islamist groups, has encouraged the US to provide training through the multilateral *Flintlock* training programme. In response to Mauritania's request for NATO assistance, the US-led 'Partnership for Peace Trust Fund', when implemented, is intended to enhance army efficiency through improved physical security and stockpile management; destruction and demilitarisation of old ammunition and equipment; and broader defence-reform initiatives. Mauritania is also a partner nation in the French-led *Operation Barkhane* in the Sahel. In January 2015, a NATO/Canadian-funded national crisis-management and disaster-monitoring centre was established in Nouakchott, intended to strengthen security and fight terrorism.

**ACTIVE 15,850** (Army 15,000 Navy 600 Air 250)

**Paramilitary 5,000**

*Conscript liability* 24 months authorised

## ORGANISATIONS BY SERVICE

### Army 15,000

#### FORCES BY ROLE

6 mil regions

#### MANOEUVRE

**Reconnaissance**

1 armd recce sqn

**Armoured**

1 armd bn

**Light**

7 mot inf bn

8 (garrison) inf bn

**Air Manoeuvre**

1 cdo/para bn

**Other**

2 (camel corps) bn

1 gd bn

#### COMBAT SUPPORT

3 arty bn

4 ADA bty

1 engr coy

#### EQUIPMENT BY TYPE

**MBT** 35 T-54/T-55

**RECCE** 70: 20 AML-60; 40 AML-90; 10 *Saladin*

**APC**

**APC (W)** 25: 5 FV603 *Saracen*; €20 M3 Panhard

**ARTY** 178

**TOWED** 80: **105mm** 36 HM-2/M101A1; **122mm** 44: 20 D-30; 24 D-74

**MRL** 8: **107mm** 4 Type-63; **122mm** 4 Type-81

**MOR** 90: **81mm** 60; **120mm** 30 Brandt

**AT** • **MSL** • **MANPATS** *Milan*

**RCL** 114: **75mm** €24 M20; **106mm** €90 M40A1

**AD** • **SAM**

**SP** €4 SA-9 *Gaskin* (reported)

**MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡

**GUNS • TOWED** 82: **14.5mm** 28: 16 ZPU-2; 12 ZPU-4; **23mm** 20 ZU-23-2; **37mm** 10 M-1939; **57mm** 12 S-60; **100mm** 12 KS-19

ARV T-54/55 ARV reported

## Navy €600

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 17

PCO 1 *Voum-Legleita*

PCC 5: 1 *Abourbekr Ben Amer* (FRA OPV 54); 1 *Arguin*; 2 *Conejera*; 1 *Limam El Hidran* (PRC Huangpu)

PB 11: 1 *El Nasr+* (FRA *Patra*); 4 *Mandovi*; 2 Rodman 55M; 2 *Saeta-12*; 2 *Megsem Bakkar* (FRA RPB20 – for SAR duties)

## Air Force 250

### EQUIPMENT BY TYPE

#### AIRCRAFT 4 combat capable

ISR 2 Cessna 208B *Grand Caravan*

TPT 8: **Light** 7: 2 BN-2 *Defender*; 1 C-212; 2 PA-31T

*Cheyenne* II; 2 Y-12(II); **PAX** 1 Basler BT-67 (with sensor turret)

TRG 11: 3 EMB-312 *Tucano*; 4 EMB-314 *Super Tucano\**; 4 SF-260E

#### HELICOPTERS

MRH 3: 1 SA313B *Alouette* II; 2 Z-9

## Paramilitary €5,000 active

### Gendarmerie €3,000

Ministry of Interior

### FORCES BY ROLE

#### MANOEUVRE

##### Other

6 regional sy coy

### National Guard 2,000

Ministry of Interior

### Customs

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS • PB** 2: 1 *Dah Ould Bah* (FRA *Amgram* 14); 1 *Yaboub Ould Rajel* (FRA RPB18)

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 1; 2 obs

### MALI

UN • MINUSMA 6

## Morocco MOR

Moroccan Dirham D		2014	2015	2016
GDP	D	925bn	999bn	
	US\$	110bn	103bn	
<i>per capita</i>	US\$	3,316	3,077	
Growth	%	2.4	4.9	
Inflation	%	0.4	1.5	
Def bdgt	D	31.5bn	31.9bn	
	US\$	3.75bn	3.29bn	
FMA (US)	US\$	7m	5m	
US\$1=D		8.41	9.69	

Population 33,322,699

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.4%	4.4%	4.3%	4.4%	19.8%	2.9%
Female	13.0%	4.4%	4.4%	4.5%	21.1%	3.5%

## Capabilities

The armed forces are well trained and relatively mobile. They have gained extensive experience in counter-insurgency operations in Western Sahara – where a large number of troops are based – which have given them expertise in desert warfare and combined air-land operations. The defence budget has recently increased in order to modernise and re-equip the services, partly in response to regional security contingencies; a large order for US M1A1 *Abrams* MBTs was placed in 2015. Air-force equipment is ageing overall, barring the delivery of 24 F-16s in 2012. Significant investment in the navy is now taking place. In February, the latest iteration of the *African Lion* exercise series took place, with Moroccan troops training with US, European and select regional forces; the US Air Force also conducted air training with Morocco's F-16 squadrons. While Moroccan forces have taken part in peacekeeping operations, there is little experience in state-on-state warfare, though in 2015 Morocco took part in the Saudi-led coalition operation in Yemen, deploying its F-16s in combat for the first time.

**ACTIVE 195,800** (Army 175,000 Navy 7,800 Air 13,000) **Paramilitary 50,000**

*Conscript liability* 18 months authorised; most enlisted personnel are volunteers

**RESERVE 150,000** (Army 150,000)

Reserve obligation to age 50

## ORGANISATIONS BY SERVICE

**Army** €75,000; 100,000 conscript (total 175,000)

### FORCES BY ROLE

2 comd (Northern Zone, Southern Zone)

### MANOEUVRE

**Armoured**

12 armd bn

**Mechanised**

3 mech inf bde

**Mechanised/Light**

8 mech/mot inf regt (2–3 bn)

**Light**

1 lt sy bde

3 (camel corps) mot inf bn

35 lt inf bn

4 cdo unit

**Air Manoeuvre**

2 para bde

2 AB bn

**Mountain**

1 mtn inf bn

**COMBAT SUPPORT**

11 arty bn

7 engr bn

1 AD bn

**Royal Guard 1,500****FORCES BY ROLE****MANOEUVRE****Other**

1 gd bn

1 cav sqn

**EQUIPMENT BY TYPE****MBT** 434: 40 T-72, 220 M60A1; 120 M60A3; 54 Type-90-II (MBT-2000) (reported); (€200 M48A5 in store)**LT TK** 116: 5 AMX-13; 111 SK-105 *Kuerassier***RECCE** 384: 38 AML-60-7; 190 AML-90; 80 AMX-10RC; 40 EBR-75; 16 *Eland*; 20 M1114 HMMWV**AIFV** 70: 10 AMX-10P; 30 *Ratel* Mk3-20; 30 *Ratel* Mk3-90**APC** 851**APC (T)** 486: 400 M113A1/A2; 86 M577A2**APC (W)** 365: 45 VAB VCI; 320 VAB VTT**ARTY** 2,141**SP** 282: **105mm** 5 Mk 61; **155mm** 217: 84 M109A1/A1B; 43 M109A2; 90 Mk F3; **203mm** 60 M110**TOWED** 118: **105mm** 50: 30 L118 Light Gun; 20 M101; **130mm** 18 M-46; **155mm** 50: 30 FH-70; 20 M114**MRL** **122mm** 35 BM-21**MOR** 1,706**SP** 56: **106mm** 32–36 M106A2; **120mm** 20 (VAB APC)**TOWED** 1,650: **81mm** 1,100 Expal model LN;**120mm** 550 Brandt**AT • MSL****SP** 80 M901**MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); M47 *Dragon*; *Milan*; **TOW****RCL** **106mm** 350 M40A1**RL** **89mm** 200 M20**GUNS** 36**SP** **100mm** 8 SU-100**TOWED** **90mm** 28 M-56**UAV • Heavy** R4E-50 *Skyeye***AD • SAM****SP** 49: 12 2K22M *Tunguska-M* (SA-19 *Grison*)**SPAAGM**; 37 M48 *Chaparral***MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡**GUNS** 407**SP** **20mm** 60 M163 *Vulcan***TOWED** 347: **14.5mm** 200: 150–180 ZPU-2; 20 ZPU-4; **20mm** 40 M167 *Vulcan*; **23mm** 75–90 ZU-23-2; **100mm** 17 KS-19**RADAR • LAND**: RASIT (veh, arty)**ARV** 48+: 10 *Greif*; 18 M88A1; M578; 20 VAB-ECH**Navy 7,800 (incl 1,500 Marines)****EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS 6****DESTROYERS 1****DDGHM** 1 *Mohammed VI*-class (FRA FREMM) with 2 quad Inchr with MM40 *Exocet* Block III ASHM, 2 octuple A43 VLS with *Aster* 15 SAM, 2 triple B515 324mm ASTT with Mu-90 LWT, 1 76mm gun (capacity 1 AS565SA *Panther*)**FRIGATES 5****FFGHM** 3 *Tarik ben Ziyad* (NLD SIGMA 9813/10513) with 4 single Inchr with MM-40 *Exocet* Block II/III ASHM, 2 sextuple Inchr with *Mica* SAM, 2 triple 324mm ASTT with Mu-90 LWT, 1 76mm gun (capacity 1 AS565SA *Panther*)**FFGH** 2 *Mohammed V* (FRA *Floreal*) with 2 single Inchr with MM-38 *Exocet* ASHM, 1 76mm gun (can be fitted with *Simbad* SAM) (capacity 1 AS565SA *Panther*)**PATROL AND COASTAL COMBATANTS 50****CORVETTES • FSGM 1**1 *Li Col Errhamani* (ESP *Descubierto*) with 2 twin Inchr with MM-38 *Exocet* ASHM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun**PSO** 1 *Bin an Zaran* (OPV 70) with 1 76mm gun**PCG** 4 *Cdt El Khattabi* (ESP *Lazaga* 58m) with 4 single Inchr with MM-38 *Exocet* ASHM, 1 76mm gun**PCO** 5 *Rais Bargach* (under control of fisheries dept)**PCC** 12:4 *El Hahiq* (DNK *Osprey* 55, incl 2 with customs)6 *LV Rabhi* (ESP 58m B-200D)2 *Okba* (FRA PR-72) each with 1 76mm gun**PB** 27: 6 *El Wacil* (FRA P-32); 10 VCSM (RPB 20); 10 *Rodman* 101; 1 other (UK *Bird*)**AMPHIBIOUS 5****LANDING SHIPS 4:****LSM** 3 *Ben Aicha* (FRA *Champlain* BATRAL) (capacity 7 tanks; 140 troops)**LST** 1 *Sidi Mohammed Ben Abdallah* (US *Newport*) (capacity 3 LCVP; 400 troops)**LANDING CRAFT • LCM** 1 CTM (FRA CTM-5)**LOGISTICS AND SUPPORT 9****AGOR** 1 *Abou Barakat Albarbarit* (ex-US *Robert D. Conrad*)**AGS** 1 Stan 1504**AK** 2**AX** 1 *Essaouira***AXS** 2**YDT** 1**YTB** 1**Marines 1,500****FORCES BY ROLE****MANOEUVRE****Amphibious**

2 naval inf bn

**Naval Aviation**

**EQUIPMENT BY TYPE**

**HELICOPTERS** • ASW/ASUW 3 AS565A *Panther*

**Air Force 13,000**

Flying hours 100 hrs/year on *Mirage F-1/F-5E/F Tiger II/F-16C/D Fighting Falcon*

**FORCES BY ROLE**

**FIGHTER/GROUND ATTACK**

2 sqn with F-5E/F-5F *Tiger II*  
 3 sqn with F-16C/D *Fighting Falcon*  
 1 sqn with *Mirage F-1C (F-1CH)*  
 1 sqn with *Mirage F-1E (F-1EH)*

**ELECTRONIC WARFARE**

1 sqn with EC-130H *Hercules; Falcon 20 (ELINT)*

**MARITIME PATROL**

1 flt with Do-28

**TANKER/TRANSPORT**

1 sqn with C-130/KC-130H *Hercules*

**TRANSPORT**

1 sqn with CN-235  
 1 VIP sqn with B-737BBJ; Beech 200/300 *King Air; Falcon 50; Gulfstream II/III/V-SP*

**TRAINING**

1 sqn with *Alpha Jet\**  
 1 sqn T-6C

**ATTACK HELICOPTER**

1 sqn with SA342L *Gazelle (Some with HOT)*

**TRANSPORT HELICOPTER**

1 sqn with Bell 205A (AB-205A); Bell 206 *Jet Ranger (AB-206); Bell 212 (AB-212)*  
 1 sqn with CH-47D *Chinook*  
 1 sqn with SA330 *Puma*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 90 combat capable

**FTR** 22: 19 F-5E *Tiger II*; 3 F-5F *Tiger II*  
**FGA** 49: 15 F-16C *Fighting Falcon*; 8 F-16D *Fighting Falcon*; 15 *Mirage F-1C (F-1CH)*; 11 *Mirage F-1E (F-1EH)*  
**ELINT** 1 EC-130H *Hercules*  
**TKR/TPT** 2 KC-130H *Hercules*  
**TPT** 47: **Medium** 17: 4 C-27J *Spartan*; 13 C-130H *Hercules*; **Light** 21: 4 Beech 100 *King Air*; 2 Beech 200 *King Air*; 1 Beech 200C *King Air*; 2 Beech 300 *King Air*; 3 Beech 350 *King Air*; 7 CN-235; 2 Do-28; **PAX** 9: 1 B-737BBJ; 2 *Falcon 20*; 2 *Falcon 20 (ELINT)*; 1 *Falcon 50 (VIP)*; 1 Gulfstream II (VIP); 1 Gulfstream III; 1 Gulfstream V-SP  
**TRG** 80: 12 AS-202 *Bravo*; 19 *Alpha Jet\**; 2 CAP-10; 24 T-6C *Texan*; 9 T-34C *Turbo Mentor*; 14 T-37B *Tweet*  
**FF** 4 CL-415

**HELICOPTERS**

**MRH** 19 SA342L *Gazelle (7 with HOT, 12 with cannon)*  
**TPT** 73: **Heavy** 10 CH-47D *Chinook*; **Medium** 24 SA330 *Puma*; **Light** 39: 25 Bell 205A (AB-205A); 11 Bell 206 *Jet Ranger (AB-206)*; 3 Bell 212 (AB-212)

**MSL**

**AAM** • IR AIM-9J *Sidewinder*; R-550 *Magic*; **IIR** AIM-9X *Sidewinder II*; **SARH** R-530; **ARH** AIM-120 AMRAAM C7 **ASM** AASM; AGM-62B *Walleye (for F-5E)*; **HOT**

**Paramilitary 50,000 active**

**Gendarmerie Royale 20,000**

**FORCES BY ROLE**

**MANOEUVRE**

**Air Manoeuvre**  
 1 para sqn  
**Other**

1 paramilitary bde  
 4 (mobile) paramilitary gp  
 1 coast guard unit

**TRANSPORT HELICOPTER**

1 sqn

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** • **PB** 15 *Arcor 53*

**AIRCRAFT** • **TRG** 2 R-235 *Guerrier*

**HELICOPTERS**

**MRH** 14: 3 SA315B *Lama*; 2 S316 *Alouette III*; 3 SA318 *Alouette II*; 6 SA342K *Gazelle*

**TPT** 8: **Medium** 6 SA330 *Puma*; **Light** 2 SA360 *Dauphin*

**Force Auxiliaire 30,000 (incl 5,000 Mobile Intervention Corps)**

**Customs/Coast Guard**

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** • **PB** 36: 4 *Erraid*; 18 *Arcor 46*; 14 (other SAR craft)

**DEPLOYMENT**

**CENTRAL AFRICAN REPUBLIC**

**UN** • MINUSCA 754; 2 obs; 1 inf bn

**CÔTE D'IVOIRE**

**UN** • UNOCI 718; 1 mech inf bn

**DEMOCRATIC REPUBLIC OF THE CONGO**

**UN** • MONUSCO 840; 3 obs; 1 mech inf bn; 1 fd hospital

**UNITED ARAB EMIRATES**

*Operation Restoring Hope* 5 F-16C *Fighting Falcon*

**Oman OMN**

Omani Rial R		2014	2015	2016
<b>GDP</b>	R	29.9bn	23.1bn	
	US\$	77.8bn	60.2bn	
<b>per capita</b>	US\$	20,927	15,672	
<b>Growth</b>	%	2.9	4.4	
<b>Inflation</b>	%	1.0	0.4	
<b>Def bdgt</b>	R	3.7bn	3.8bn	
	US\$	9.62bn	9.88bn	
<b>FMA (US)</b>	US\$	8m	4m	2m
<b>US\$1=R</b>		0.38	0.38	

**Population** 3,286,936

**Expatriates:** 27%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	15.5%	4.9%	5.4%	6.0%	21.1%	1.7%
<b>Female</b>	14.7%	4.6%	4.7%	4.7%	15.1%	1.7%

The Military Balance 2016.116:307-364.



## Capabilities

Oman supports small but well-trained and -equipped armed forces whose principal task is ensuring the territorial integrity of the state. Membership of the GCC and ties with the UK and the US are also intended to act as security guarantors. The forces are in the process of recapitalising core inventory elements with air- and naval-systems purchases. The air force has taken delivery of the last of a batch of a further 12 F-16 Block 40s that have replaced the *Jaguar*, while it also has 12 Eurofighter *Typhoon* multi-role combat aircraft on order. Fielding of the navy's first *Al-Ofouq* patrol vessels, in March 2015, provided the navy with a replacement for the *Seeb*-class patrol vessels. The country's maritime-patrol capacity is being bolstered by new C-295MPAs. Though a GCC member, Oman has not contributed any forces to the Saudi-led military intervention in Yemen.

**ACTIVE 42,600 (Army 25,000 Navy 4,200 Air 5,000 Foreign Forces 2,000 Royal Household 6,400 Paramilitary 4,400)**

## ORGANISATIONS BY SERVICE

### Army 25,000

#### FORCES BY ROLE

(Regt are bn size)

#### MANOEUVRE

##### Armoured

1 armd bde (2 armd regt, 1 recce regt)

##### Light

1 inf bde (5 inf regt, 1 arty regt, 1 fd engr regt, 1 engr regt, 1 sigs regt)

1 inf bde (3 inf regt, 2 arty regt)

1 indep inf coy (Musandam Security Force)

#### Air Manoeuvr

1 AB regt

#### COMBAT SUPPORT

1 ADA regt (2 ADA bty)

#### COMBAT SERVICE SUPPORT

1 tpt regt

#### EQUIPMENT BY TYPE

**MBT** 117: 38 CR2 *Challenger 2*; 6 M60A1; 73 M60A3

**LT TK** 37 *Scorpion*

**RECCE** 137: 13 *Sultan*; 124 VBL

**APC** 206

**APC (T)** 16: 6 FV 103 *Spartan*; 10 FV4333 *Stormer*

**APC (W)** 190: 175 *Piranha* (incl variants); 15 AT-105 *Saxon*

**ARTY** 233

**SP 155mm** 24 G-6

**TOWED** 108: **105mm** 42 ROF lt; **122mm** 30 D-30; **130mm** 24: 12 M-46; 12 Type-59-I; **155mm** 12 FH-70

**MOR** 101: **81mm** 69; **107mm** 20 M30; **120mm** 12 Brandt

**AT • MSL** 88

**SP 8 VBL (TOW)**

**MANPATS** 80: 30 *Javelin*; 32 *Milan*; 18 TOW/TOW-2A

**AD • SAM**

**SP 8 Mistral** 2

**MANPAD** *Javelin*; 9K32 *Strela-2 (SA-7 Grail)* †  
**GUNS** 26: **23mm** 4 ZU-23-2; **35mm** 10 GDF-005 (with *Skyguard*); **40mm** 12 L/60 (Towed)  
**ARV** 11: 4 *Challenger*; 2 M88A1; 2 *Piranha*; 3 *Samson*

### Navy 4,200

#### EQUIPMENT BY TYPE

**SUBMARINES • SDV** 2 Mk 8

**PRIMARY SURFACE COMBATANTS** 3

**FFGHM** 3 *Al-Shamikh* with 2 twin Inchr with MM-40 *Exocet* Block III AShM, 2 sextuple Inchr with VL MICA SAM, 2 DS 30M CIWS, 1 76mm gun

**PATROL AND COASTAL COMBATANTS** 13

**CORVETTES • FSGM** 2:

2 *Qahir Al Amwaj* with 2 quad Inchr with MM-40 *Exocet* AShM, 1 octuple Inchr with *Crotale* SAM, 1 76mm gun, 1 hel landing platform

**PCFG** 4 *Dhofar* with 2 quad Inchr with MM-40 *Exocet* AShM, 1 76mm gun

**PCO** 2 *Al Ofouq* with 1 76mm gun

**PCC** 3 *Al Bushra* (FRA P-400) with 1 76mm gun

**PB** 4 *Seeb* (UK Vosper 25m, under 100 tonnes)

**AMPHIBIOUS** 6

**LANDING SHIPS • LST** 1 *Nasr el Bahr* (with hel deck) (capacity 7 tanks; 240 troops)

**LANDING CRAFT** 5: 1 LCU; 3 LCM; 1 LCT

**LOGISTICS AND SUPPORT** 6

**AGS** 1 *Al Makhirah*

**AK** 1 *Al Sultana*

**AP** 2 *Shinas* (commercial tpt – auxiliary military role only) (capacity 56 veh; 200 tps)

**AX** 1 *Al Mabrukah* (with hel deck, also used in OPV role)

**AXS** 1 *Shabab Oman II*

### Air Force 5,000

#### FORCES BY ROLE

**FIGHTER/GROUND ATTACK**

2 sqn with F-16C/D Block 50 *Fighting Falcon*

1 sqn with *Hawk* Mk103; *Hawk* Mk203

**MARITIME PATROL**

1 sqn with C-295MPA; SC.7 3M *Skyvan*

**TRANSPORT**

1 sqn with C-130H/J/J-30 *Hercules*

1 sqn with C-295M

**TRAINING**

1 sqn with MFI-17B *Mushshak*; PC-9\*; Bell 206 (AB-206) *Jet Ranger*

**TRANSPORT HELICOPTER**

4 (med) sqn; Bell 212 (AB-212); NH-90; *Super Lynx* Mk300 (maritime/SAR)

**AIR DEFENCE**

2 sqn with *Rapier*; *Blindfire*; S713 *Martello*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 53 combat capable

**FGA** 24: 18 F-16C Block 50 *Fighting Falcon*; 6 F-16D Block 50 *Fighting Falcon*

**MP** 2 C-295MPA

**TPT** 17: **Medium** 6: 3 C-130H *Hercules*; 2 C-130J *Hercules*; 1 C-130J-30 *Hercules* (VIP); **Light** 9: 5 C-295M; 7 SC.7 3M *Skyvan* (radar-equipped, for MP); **PAX** 2 A320-300

**TRG** 36: 4 *Hawk* Mk103\*; 12 *Hawk* Mk203\*; 8 MFI-17B *Mushshak*; 12 PC-9\*

#### HELICOPTERS

**MRH** 15 *Super Lynx* Mk300 (maritime/SAR)  
**TPT** 36+ **Medium** 20 NH90 TTH; **Light** 6: 3 Bell 206 (AB-206) *Jet Ranger*; 3 Bell 212 (AB-212)

**AD** • **SAM** 40 *Rapier*

**RADAR** • **LAND** 6+: 6 *Blindfire*; S713 *Martello*

#### MSL

**AAM** • **IR** AIM-9N/M/P *Sidewinder*; **ARH** AIM-120C7 *AMRAAM*

**ASM** AGM-65D/G *Maverick*

**AShM** AGM-84D *Harpoon*

#### BOMBS

**Laser-guided** EGBU-10 *Paveway II*; EGBU-12 *Paveway II*  
**INS/GPS guided** GBU-31 *JDAM*

### Royal Household 6,400

(incl HQ staff)

#### FORCES BY ROLE

##### SPECIAL FORCES

2 SF regt

### Royal Guard bde 5,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 gd bde (2 gd regt, 1 armd sqn, 1 cbt spt bn)

#### EQUIPMENT BY TYPE

**LT TK** (9 VBC-90 in store)

**RECCE** 9 *Centauro* MGS

**APC (W)** 73: ε50 *Type-92*; 14 *VAB VCI*; 9 *VAB VDAA*

**ARTY** • **MRL** 122mm 6 *Type-90A*

**AT** • **MSL** • **MANPATS** *Milan*

**AD** • **SAM** • **MANPAD** 14 *Javelin*

**GUNS** • **SP** 9: 20mm 9 *VAB VDAA*

### Royal Yacht Squadron 150

#### EQUIPMENT BY TYPE

##### LOGISTICS AND SUPPORT 3

**AP** 1 *Fulk Al Salamah* (also veh tpt) with up to 2 AS332 *Super Puma* hel

**YAC** 2: 1 *Al Said*; 1 *Zinat Al Bihaar* (Royal Dhow)

### Royal Flight 250

#### EQUIPMENT BY TYPE

**AIRCRAFT** • **TPT** • **PAX** 5: 2 B-747SP; 1 DC-8-73CF; 2 Gulfstream IV

**HELICOPTERS** • **TPT** • **Medium** 6: 3 SA330 (AS330) *Puma*; 2 AS332F *Super Puma*; 1 AS332L *Super Puma*

### Paramilitary 4,400 active

#### Tribal Home Guard 4,000

org in teams of ε100

#### Police Coast Guard 400

#### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 33 (+20 *Cougar Enforcer* 33 PBF under 10 tonnes)

**PCO** 2 *Haras*

**PBF** 3 *Haras* (US Mk V *Pegasus*)

**PB** 27: 3 *Rodman* 101; 1 *Haras* (SWE CG27); 3 *Haras* (SWE CG29); 14 *Rodman* 58; 1 D59116; 5 *Zahra*

### Police Air Wing

#### EQUIPMENT BY TYPE

**AIRCRAFT** • **TPT** • **Light** 4: 1 BN-2T *Turbine Islander*; 2 CN-235M; 1 Do-228

**HELICOPTERS** • **TPT** • **Light** 5: 2 Bell 205A; 3 Bell 214ST (AB-214ST)

## FOREIGN FORCES

United Kingdom 70

### Palestinian Territories PT

New Israeli Shekel NS	2014	2015	2016
<b>GDP</b>	US\$		
<i>per capita</i>	US\$		
<b>Growth</b>	%		
<b>Inflation</b>	%		

\*definitive economic data unavailable

US\$1=NS

**Population** 4,654,421

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	19.0%	5.5%	5.2%	4.5%	15.3%	1.4%
<b>Female</b>	18.0%	5.3%	5.0%	4.3%	14.6%	2.0%

### Capabilities

The Palestinian Authority's National Security Force (NSF) is a paramilitary organisation intended to provide internal-security support within Gaza and the West Bank. The NSF only has real authority within the West Bank, where it has generally proved capable of maintaining internal security. Since 2007, Gaza has been run by Hamas. Its military wing has a strong, well-developed rocket-artillery capability – which includes manufacturing, development and testing – but this is increasingly countered by Israel's *Iron Dome* missile-defence system. The brigades also engage in innovative asymmetric attacks. Israel's military actions in recent years, including *Operation Protective Edge* in 2014, periodically degrade the command-and-control, as well as physical infrastructure, of Hamas forces and tunnels, but seemingly have little effect on the long-term ability of the brigades to produce, import, store and launch rockets.

#### ACTIVE 0 Paramilitary n.k.

Precise personnel-strength figures for the various Palestinian groups are not known.

### ORGANISATIONS BY SERVICE

There is little data available on the status of the organisations mentioned below. Following internal fighting in June 2007, Gaza is under the de facto control of Hamas, while the West Bank is controlled by the Palestinian Authority; both participate in a unity government.

## Paramilitary

### Palestinian Authority n.k.

**Presidential Security** €3,000

**Special Forces** €1,200

**Police** €9,000

**Preventative Security** n.k.

**Civil Defence** €1,000

**The al-Aqsa Brigades** n.k.

Profess loyalty to the Fatah group that dominates the Palestinian Authority.

### Hamas n.k.

**Izz al-Din al-Qassam Brigades** €15,000-20,000

#### FORCES BY ROLE

##### COMMAND

6 bde HQ (regional)

##### MANOEUVRE

###### Light

1 cdo unit (Nukhba)

27 bn

100 cbt coy

##### COMBAT SUPPORT

Some engr units

##### COMBAT SERVICE SUPPORT

Some log units

##### EQUIPMENT BY TYPE

###### ARTY

MRL • *Qassam* rockets (multiple calibres); **122mm**

*Grad*

MOR some (multiple calibres)

AT • MSL • MANPATS 9K11 *Malyutka* (AT-3 *Sagger*) (reported)

## Qatar QTR

Qatari Riyal R		2014	2015	2016
GDP	R	765bn	699bn	
	US\$	210bn	192bn	
<i>per capita</i>	US\$	93,990	78,829	
Growth	%	4.0	4.7	
Inflation	%	3.0	1.6	
Def exp	R	€18.5bn		
	US\$	€5.09bn		
US\$1=R		3.64	3.64	

Population 2,194,817

Ethnic groups: Nationals 25%; Expatriates 75% of which Indian 18%; Iranian 10%; Pakistani 18%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	6.3%	2.5%	6.9%	12.0%	48.9%	0.6%
Female	6.2%	1.5%	2.0%	2.9%	9.8%	0.3%

## Capabilities

Qatar continues with an ambitious re-equipment and expansion programme for elements of its armed forces. When delivery of a further four C-17 heavy airlifters is complete, only the UAE will have a larger strategic-transport fleet in the GCC. In 2015 Qatar also ordered 24 *Rafale* multi-role combat aircraft, which may be operated alongside rather than instead of the air force's *Mirage* 2000s. The air force also harbours ambitions for a further fighter purchase of notionally around the same number again. This would in effect triple the size of the air force, and would require an investment in infrastructure, maintenance and personnel. The armed forces are intended to assure the sovereignty of the state, although, given the small number of uniformed personnel, its membership of the GCC and the relationship with the US also serve to underwrite security. It supported the Saudi-led combat operation in Yemen, initially with *Mirage* 2000 fighter aircraft, and from September 2015 with the reported commitment of around 1,000 ground troops.

**ACTIVE 11,800 (Army 8,500 Navy 1,800 Air 1,500)**

*Conscript liability* 4 months national service for those aged 18-35; reduced to 3 months for graduates. Reserve commitment for 10 years or to age 40.

## ORGANISATIONS BY SERVICE

### Army 8,500

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF coy

##### MANOEUVRE

###### Armoured

1 armd bde (1 tk bn, 1 mech inf bn, 1 AT bn, 1 mor sqn)

###### Mechanised

3 mech inf bn

###### Light

1 (Royal Guard) bde (3 inf regt)

##### COMBAT SUPPORT

1 fd arty bn

##### EQUIPMENT BY TYPE

MBT 30 AMX-30

RECCE 92: 12 AMX-10RC; 20 EE-9 *Cascavel*; 36 *Piranha* II 90mm; 8 V-150 *Chaimite*; 16 VBL

AIFV 40 AMX-10P

APC 190

APC (T) 30 AMX-VCI

APC (W) 160 VAB

ARTY 91+

SP 155mm 28 Mk F3

TOWED 155mm 12 G-5

MRL 6+: 122mm 2+ (30-tube); 127mm 4 ASTROS II Mk3

MOR 45

SP • 81mm 4 VAB VPM 81

81mm 26 L16

120mm 15 Brandt

AT • MSL 148

SP 24 VAB VCAC HOT

**MANPATS Milan**

RCL 84mm €40 *Carl Gustav*  
ARV 3: 1 AMX-30D; 2 *Piranha*

**Navy 1,800 (incl Coast Guard)**

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS 11**

PCFG 7:

- 4 *Barzan* (UK *Vita*) with 2 quad Inchr with MM-40 *Exocet* Block III AShM, 1 sextuple Inchr with *Mistral* SAM, 1 *Goalkeeper* CIWS 1 76mm gun
- 3 *Damsah* (FRA *Combattante* III) with 2 quad Inchr with MM-40 *Exocet* AShM, 1 76mm gun

PBF 3 MRTP 16

PB 1 MRTP 34

**AMPHIBIOUS • LANDING CRAFT • LCT 1 *Rabha***  
(capacity 3 MBT; 110 troops)

**LOGISTICS AND SUPPORT • YTB 2 *Al Jarroof*** (Damen Stan 1907)

**Coast Guard**

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS 12**

PBF 4 DV 15

PB 8: 4 *Crestitalia* MV-45; 3 *Halmatic* M160; 1 other

**Coastal Defence**

**FORCES BY ROLE**

**MISSILE**

1 bty with 3 quad Inchr with MM-40 *Exocet* AShM

**EQUIPMENT BY TYPE**

MSL • AShM 12 MM-40 *Exocet* AShM

**Air Force 1,500**

**FORCES BY ROLE**

**FIGHTER/GROUND ATTACK**

1 sqn with *Alpha Jet*\*

1 sqn with *Mirage* 2000ED; *Mirage* 2000D

**TRANSPORT**

1 sqn with C-17A *Globemaster*; C-130J-30 *Hercules*

1 sqn with A340; B-707; B-727; *Falcon* 900

**ATTACK HELICOPTER**

1 ASuW sqn with *Commando* Mk3 with *Exocet*

1 sqn with SA341 *Gazelle*; SA342L *Gazelle* with HOT

**TRANSPORT HELICOPTER**

1 sqn with *Commando* Mk2A; *Commando* Mk2C

1 sqn with AW139

**EQUIPMENT BY TYPE**

**AIRCRAFT 18 combat capable**

FGA 12: 9 *Mirage* 2000ED; 3 *Mirage* 2000D

TPT 14: **Heavy** 4 C-17A *Globemaster*; **Medium** 4 C-130J-30 *Hercules*; **PAX** 6: 1 A340; 2 B-707; 1 B-727; 2 *Falcon* 900

TRG 12+: 6 *Alpha Jet*\*; 6+ PC-21

**HELICOPTERS**

ASuW 8 *Commando* Mk3

MRH 34: 21 AW139 (incl 3 for medevac); 2 SA341 *Gazelle*; 11 SA342L *Gazelle*

TPT • **Medium** 4: 3 *Commando* Mk2A; 1 *Commando* Mk2C

**AD • SAM 24 *Mistral***

SP 9 *Roland* II

**MANPAD** *Blowpipe*; FIM-92A *Stinger*; 9K32 *Strela-2* (SA-7 *Grail*)‡

**MSL**

ASM AM-39 *Exocet*; *Apache*; HOT

AAM • IR R-550 *Magic* 2; ARH *Mica*

**DEPLOYMENT**

**LEBANON**

UN • UNIFIL 3

**SAUDI ARABIA**

*Operation Restoring Hope* 4 *Mirage* 2000ED

**YEMEN**

*Operation Restoring Hope* 1,000; *Piranha* II 90mm; VAB; VAB VCAC HOT

**FOREIGN FORCES**

**United Kingdom** *Operation Shader* 1 RC-135W *Rivet Joint*

**United States** US Central Command: 8,000; USAF CAOC;

1 bbr sqn with 6 B-1B *Lancer*; 1 ISR sqn with 4 RC-135

*Rivet Joint*; 1 ISR sqn with 4 E-8C JSTARS; 1 tkr sqn with 24

KC-135R/T *Straotanker*; 1 tpt sqn with 4 C-17A *Globemaster*;

4 C-130H/J-30 *Hercules*; 2 AD bty with MIM-104E/F *Patriot*

PAC-2/3 • US Strategic Command: 1 AN/TPY-2 X-band

radar

**Saudi Arabia SAU**

Saudi Riyal R	2014	2015	2016
GDP	R 2.8tr	2.37tr	
	US\$ 746bn	632bn	
<i>per capita</i>	US\$ 24,252	20,139	
Growth	% 3.5	3.4	
Inflation	% 2.7	2.1	
Def exp	R 303bn	307bn	
	US\$ 80.8bn	81.9bn	
US\$1=R	3.75	3.75	

**Population** 27,752,316

**Ethnic groups:** Nationals 73% of which Bedouin up to 10%, Shi'a 6%, Expatriates 27% of which Asians 20%, Arabs 6%, Africans 1%, Europeans <1%

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	13.9%	4.7%	5.5%	6.0%	22.6%	1.7%
Female	13.2%	4.4%	4.5%	4.7%	17.3%	1.6%

**Capabilities**

Saudi Arabia's armed forces remain the best equipped of all states in the region except Israel. The role of the military is to protect the territorial integrity of the state and to ensure internal security. Operations against the Houthis in Yemen in 2015 showed improvements in command-and-control and operational planning. As of the fourth quarter

of 2015 Saudi Arabia was leading a nine-nation coalition under what is now known as *Operation Restoring Hope*. Saudi air, land and naval forces have been committed to the campaign, with coalition operations coordinated by Riyadh. Washington has been providing intelligence and planning support to Saudi Arabia with the deployment, for instance, of a number of ISR platforms in the theatre of operations. Saudi *Patriot* PAC-2 units have also engaged successfully a handful of *Scud*-B missiles fired individually by Houthi forces. The US announced in July 2015 that it had cleared the sale of up to a further 600 PAC-3 missiles for the Saudi Air Defence Forces, while the National Guard reportedly began to take delivery of the AH-64E *Apache Guardian* attack helicopter during 2015, as part of its ongoing modernisation programme. While the US and UK are principal suppliers, the armed forces have historically sourced equipment from more countries, leading to cases – for instance in artillery – where there is a wide range of types in single calibre groups.

**ACTIVE 227,000 (Army 75,000 Navy 13,500 Air 20,000 Air Defence 16,000 Strategic Missile Forces 2,500 National Guard 100,000) Paramilitary 24,500**

## ORGANISATIONS BY SERVICE

### Army 75,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

4 armd bde (1 recce coy, 3 tk bn, 1 mech bn, 1 fd arty bn, 1 AD bn, 1 AT bn, 1 engr coy, 1 log bn, 1 maint coy, 1 med coy)

###### Mechanised

5 mech bde (1 recce coy, 1 tk bn, 3 mech bn, 1 fd arty bn, 1 AD bn, 1 AT bn, 1 engr coy, 1 log bn, 1 maint coy, 1 med coy)

###### Light

1 (Royal Guard) regt (3 lt inf bn)

###### Air Manoeuvre

1 AB bde (2 AB bn, 3 SF coy)

###### Aviation

1 comd (1 atk hel bde, 1 tpt hel bde)

#### COMBAT SUPPORT

1 arty bde (5 fd arty bn, 2 MRL bn, 1 msl bn)

#### EQUIPMENT BY TYPE

**MBT** 730: 140 AMX-30; 200 M1A2/A2S *Abrams* (170 more in store); 390 M60A3

**RECCE** 310: 300 AML-60/AML-90; 10 TPz-1 *Fuchs* NBC

**AIFV** 765: 380 AMX-10P; 385 M2A2 *Bradley*

**APC** 1,573

**APC (T)** 1,190 M113A1/A2/A3 (incl variants)

**APC (W)** 150 M3 Panhard; (ε40 AF-40-8-1 *Al-Fahd* in store)

**PPV** 233: 73 *Aravis*; 160 M-ATV

**ARTY** 831

**SP 155mm** 224: 60 AU-F-1; 110 M109A1B/A2; 54 PLZ-45

**TOWED** 110: **105mm** (100 M101/M102 in store); **155mm** 110: 50 M114; 60 M198; **203mm** (8 M115 in store)

**MRL 127mm** 60 ASTROS II Mk3

**MOR** 437

**SP 220: 81mm** 70; **107mm** 150 M30

**TOWED 217: 81mm/107mm** 70 incl M30 **120mm** 147: 110 Brandt; 37 M12-1535

#### AT

##### MSL

**SP 290+**: 90+ AMX-10P (HOT); 200 VCC-1 ITOW

**MANPATS** M47 *Dragon*; TOW-2A

**RCL 84mm** *Carl Gustav*; **106mm** M40A1; **90mm** M67

**RL 112mm** APILAS

#### AD • SAM

**SP** *Crotale*

**MANPAD** FIM-92A *Stinger*

**RADAR • LAND** AN/TPQ-36 *Firefinder*/AN/TPQ-37 *Firefinder* (arty, mor)

**AEV** 15 M728

**ARV 278+**: 8 ACV ARV; AMX-10EHC; 55 AMX-30D; *Leclerc* ARV; 125 M88A1; 90 M578

**VLB** 10 AMX-30

**MW** *Aardvark* Mk2

#### HELICOPTERS

**ATK 35:** 11 AH-64D *Apache*; 24 AH-64E *Apache*

**MRH 21:** 6 AS365N *Dauphin* 2 (medevac); 15 Bell 406CS *Combat Scout*

**TPT • Medium 58:** 12 S-70A1 *Desert Hawk*; 22 UH-60A *Black Hawk* (4 medevac); 24 UH-60L *Black Hawk*

### Navy 13,500

Navy HQ at Riyadh; Eastern Fleet HQ at Jubail; Western Fleet HQ at Jeddah

#### EQUIPMENT BY TYPE

##### PRINCIPAL SURFACE COMBATANTS 7

**DESTROYERS • DDGHM** 3 *Al Riyadh* (FRA *La Fayette* mod) with 2 quad Inchr with MM-40 *Exocet* Block II AshM, 2 8-cell A43 VLS with *Aster* 15 SAM, 4 single 533mm TT with F17P HWT, 1 76mm gun (capacity 1 AS365N *Dauphin* 2 hel)

**FRIGATES • FFGHM** 4 *Madina* (FRA F-2000) with 2 quad Inchr with *Otomat* Mk2 AshM, 1 octuple Inchr with *Crotale* SAM, 4 single 533mm TT with F17P HWT, 1 100mm gun (capacity 1 AS365N *Dauphin* 2 hel)

##### PATROL AND COASTAL COMBATANTS 69

**CORVETTES • FSG** 4 *Badr* (US *Tacoma*) with 2 quad Mk140 Inchr with RGM-84C *Harpoon* AshM, 2 triple 324mm ASTT with Mk 46 LWT, 1 *Phalanx* CIWS, 1 76mm gun

**PCFG** 9 *Al Siddiq* (US 58m) with 2 twin Mk140 Inchr with RGM-84C *Harpoon* AshM, 1 *Phalanx* CIWS, 1 76mm gun

**PB** 56: 17 (US *Halter Marine*); 39 *Simmoneau* 51

##### MINE WARFARE • MINE COUNTERMEASURES 7

**MCC** 4 *Addriyah* (US MSC-322)

**MHC** 3 *Al Jawf* (UK *Sandown*)

##### AMPHIBIOUS • LANDING CRAFT 8

**LCU** 4 *Al Qiaq* (US LCU 1610) (capacity 120 troops)

**LCM** 4 LCM 6 (capacity 80 troops)

##### LOGISTICS AND SUPPORT 17

**AORH** 2 *Boraida* (mod FRA *Durance*) (capacity either 2 AS365F *Dauphin* 2 hel or 1 AS332C *Super Puma*)

**YAC** 2

**YTB** 2

**YTM** 11 *Radhwa*



**Naval Aviation****EQUIPMENT BY TYPE****HELICOPTERS**

MRH 34: 6 AS365N *Dauphin* 2; 15 AS565 with AS-15TT ASHM; 13 Bell 406CS *Combat Scout*

TPT • **Medium** 12 AS332B/F *Super Puma* with AM-39 *Exocet* ASHM

**Marines 3,000****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 inf regt with (2 inf bn)

**EQUIPMENT BY TYPE**

APC (W) 140 BMR-600P

**Air Force 20,000****FORCES BY ROLE****FIGHTER**

1 sqn with F-15S *Eagle*

4 sqn with F-15C/D *Eagle*

**FIGHTER/GROUND ATTACK**

2 sqn with F-15S *Eagle*

3 sqn with *Tornado* IDS; *Tornado* GR1A

2 sqn with *Typhoon*

**AIRBORNE EARLY WARNING & CONTROL**

1 sqn with E-3A *Sentry*; 2 Saab 2000 *Erieye*

**ELINT**

1 sqn with RE-3A/B; Beech 350ER *King Air*

**TANKER**

1 sqn with KE-3A

**TANKER/TRANSPORT**

1 sqn with KC-130H *Hercules*

1 sqn with A330 MRTT

**TRANSPORT**

3 sqn with C-130H *Hercules*; C-130H-30 *Hercules*; CN-235; L-100-30HS (hospital ac)

2 sqn with Beech 350 *King Air* (forming)

**TRAINING**

3 sqn with *Hawk* Mk65\*; *Hawk* Mk65A\*

1 sqn with *Jetstream* Mk31

1 sqn with MFI-17 *Mushshak*; SR22T

2 sqn with PC-9; PC-21

**TRANSPORT HELICOPTER**

4 sqn with AS532 *Cougar* (CSAR); Bell 212 (AB-212); Bell 412 (AB-412) *Twin Huey* (SAR)

**EQUIPMENT BY TYPE**

AIRCRAFT 325 combat capable

FTR 81: 56 F-15C *Eagle*; 25 F-15D *Eagle*

FGA 192: 70 F-15S *Eagle*; 69 *Tornado* IDS; 53 *Typhoon*

ISR 14+: 12 *Tornado* GR1A\*; 2+ Beech 350ER *King Air*

AEW&C 7: 5 E-3A *Sentry*; 2 Saab 2000 *Erieye*

ELINT 2: 1 RE-3A; 1 RE-3B

TKR/TPT 13: 6 A330 MRTT; 7 KC-130H *Hercules*

TKR 7 KE-3A

TPT 51+: **Medium** 36: 30 C-130H *Hercules*; 3 C-130H-30 *Hercules*; 3 L-100-30; **Light** 15+: 10+ Beech 350 *King Air*; 4 CN-235; 1 *Jetstream* Mk31

TRG 128+: 24 *Hawk* Mk65\* (incl aerobatic team); 16 *Hawk* Mk65A\*; 20 MFI-17 *Mushshak*; 20 PC-9; 24+ PC-21; 24 SR22T

**HELICOPTERS**

MRH 15 Bell 412 (AB-412) *Twin Huey* (SAR)

TPT 30: **Medium** 10 AS532 *Cougar* (CSAR); **Light** 20 Bell 212 (AB-212)

UAV • CISR **Heavy** some *Gongji-1* (reported)

**MSL**

ASM AGM-65 *Maverick*

AShM *Sea Eagle*

LACM *Storm Shadow*

ARM ALARM

AAM • IR AIM-9P/L *Sidewinder*; IIR AIM-9X *Sidewinder*;

IRIS-T; SARH AIM-7 *Sparrow*; AIM-7M *Sparrow*; ARH

AIM-120C AMRAAM

**BOMBS**

Laser-guided GBU-10/12 *Paveway* II; *Paveway* IV

INS/GPS-guided GBU-31 JDAM

**Royal Flt****EQUIPMENT BY TYPE**

AIRCRAFT • TPT 24: **Medium** 8: 5 C-130H *Hercules*; 3

L-100-30; **Light** 3: 1 Cessna 310; 2 Learjet 35; PAX 13: 1

A340; 1 B-737-200; 2 B-737BBJ; 2 B-747SP; 4 BAe-125-800;

2 Gulfstream III; 1 Gulfstream IV

HELICOPTERS • TPT 3+: **Medium** 3: 2 AS-61; 1 S-70

*Black Hawk*; **Light** some Bell 212 (AB-212)

**Air Defence Forces 16,000****FORCES BY ROLE****AIR DEFENCE**

6 bn with MIM-104D/F *Patriot* PAC-2 GEM/PAC-3

17 bty with *Shahine*/AMX-30SA

16 bty with MIM-23B I-HAWK

73 units (static defence) with *Crotale*/*Shahine*

**EQUIPMENT BY TYPE**

AD • SAM 1,317

SP 581: 40 *Crotale*; 400 M1097 *Avenger*; 73 *Shahine*; 68 *Crotale*/*Shahine*

TOWED 236: 128 MIM-23B I-HAWK; 108 MIM-140D/F *Patriot* PAC-2 GEM/PAC-3

NAVAL 500 *Mistral*

**GUNS 1,070**

SP 942: 20mm 92 M163 *Vulcan*; 30mm 850 AMX-30SA

TOWED 128: 35mm 128 GDF *Oerlikon*; 40mm (150 L/70 in store)

RADARS • AD RADAR 80: 17 AN/FPS-117; 28 AN/TPS-43; AN/TPS-59; 35 AN/TPS-63; AN/TPS-70

**Strategic Missile Forces 2,500****EQUIPMENT BY TYPE****MSL • TACTICAL**

IRBM 10+ DF-3 (CSS-2) (service status unclear)

MRBM Some DF-21 (CSS-5 – variant unclear) (reported)

**National Guard 75,000 active; 25,000 (tribal levies) (total 100,000)****FORCES BY ROLE****MANOEUVRE****Mechanised**

4 mech bde (1 recce coy, 3 mech inf bn, 1 SP arty bn, 1 cbt engr coy, 1 sigs coy, 1 log bn)

**Light**

5 inf bde (3 combined arms bn, 1 arty bn, 1 log bn)

**Other**

2–3 (Special Security) sy bde (3 sy bn)

1 (ceremonial) cav sqn

**COMBAT SUPPORT**

1 MP bn

**EQUIPMENT BY TYPE**

RECCE 214 LAV-AG (90mm)

AIFV 647 LAV-25

APC • APC (W) 808: 119 LAV-A; 30 LAV-AC; 296 LAV-CC;

73 LAV-PC; 290 V-150 *Commando* (810 in store)

ARTY 359+

SP 155mm 132 CAESAR

TOWED 108: 105mm 50 M102; 155mm 58 M198

MOR 119+ 81mm some; 120mm 119 LAV-M

**AT****MSL**

SP 183 LAV-AT

MANPATS TOW-2A; M47 *Dragon*

RCL • 106mm M40A1

AD • GUNS • TOWED 160: 20mm 30 M167 *Vulcan*; 90mm 130 M2

AEV 58 LAV-E

ARV 111 LAV-R; V-150 ARV

**HELICOPTERS**ATK €4 AH-64E *Apache***Paramilitary 24,500+ active****Border Guard 10,500****FORCES BY ROLE**

Subordinate to Ministry of Interior. HQ in Riyadh. 9 subordinate regional commands

**MANOEUVRE****Other**

Some mobile def (long-range patrol/spt) units

2 border def (patrol) units

12 infrastructure def units

18 harbour def units

Some coastal def units

**COMBAT SUPPORT**

Some MP units

**Coast Guard 4,500****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 14 (100+ small patrol boats are also in service)

PBF 6: 4 *Al Jouf*; 2 *Sea Guard*PB 8: 6 *StanPatrol 2606*; 2 *Al Jubatel*AMPHIBIOUS • LANDING CRAFT 8: 3 UCAC; 5 LCAC *Griffin 8000*

LOGISTICS AND SUPPORT 4: 1 AXL; 3 AO

**Facilities Security Force 9,000+**

Subordinate to Ministry of Interior

**General Civil Defence Administration Units****EQUIPMENT BY TYPE**

HELICOPTERS • TPT • Medium 10 Boeing Vertol 107

**Special Security Force 500****EQUIPMENT BY TYPE**

APC (W): UR-416

**DEPLOYMENT****BAHRAIN**GCC • *Peninsula Shield* €1,500 (National Guard)**YEMEN***Operation Restoring Hope 750*; M-ATV; 2+ MIM-104D/F*Patriot PAC-2/3***FOREIGN FORCES**Bahrain *Operation Restoring Hope 6 F-16C Fighting Falcon*Kuwait *Operation Restoring Hope 4 F/A-18A Hornet*Qatar *Operation Restoring Hope 4 Mirage 2000ED*Sudan *Operation Restoring Hope 3 Su-24 Fencer*United Arab Emirates *Operation Restoring Hope 12 F-16E Fighting Falcon*

United States US Central Command: 350

**Syria SYR**

Syrian Pound S£	2014	2015	2016
GDP	S£		
	US\$		
<i>per capita</i>	US\$		
Growth	%		
Inflation	%		
Def exp	S£		
	US\$		

US\$1=S£ n/a n/a

\*definitive economic data unavailable

Population 17,064,854

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	16.7%	5.3%	4.7%	4.6%	17.1%	1.8%
Female	15.8%	5.1%	4.7%	4.7%	17.2%	2.2%

**Capabilities**

Critical shortages of personnel and materiel continue to hamper the Syrian Arab Army and the air force in the country's civil war, as highlighted by the government's loss of several key positions across the country in 2015. Regular forces, with the exception of some elite formations, have largely been reduced to providing armoured and fire support to operations, while entrusting close-quarters combat to a variety of affiliated militia and territorial-defence groups. Hizbullah, backed by army support-weapons, is still capable of successfully conducting limited offensive operations, such as those around Qalamoun and Zabadani in 2015. The arrival of a sizeable Russian Air Force deployment in September has provided a substantial boost to the Syrian Air Force's flagging capability. This reinforcement has played a key role in enabling a combination of regular and militia forces, spearheaded by elements of the Repub-

lican Guard, to conduct simultaneous offensives around Hama and Damascus in late 2015. (See pp. 311–13.)

**ACTIVE 130,500 (Army 90,000 Navy 4,000 Air 16,500 Air Defence 20,000) Paramilitary 150,000**

*Conscript liability* 30 months (avoidance of this service has become widespread in Syria)

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## ORGANISATIONS BY SERVICE

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### Army €90,000

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#### FORCES BY ROLE

With the exception of the Republican Guard and the 4th Armoured Division, remaining formations have abandoned pre-war doctrinal structures in all but name.

#### COMMAND

4 corps HQ

#### SPECIAL FORCES

2 SF div (total: 11 SF regt; 1 tk regt)

#### MANOEUVRE

##### Armoured

1 (4th) armd div (1 SF regt, 2 armd bde, 2 mech bde, 1 arty regt, 1 SSM bde (3 SSM bn with *Scud-B/C*))  
4 armd div (3 armd bde, 1 mech bde, 1 arty regt)  
1 armd div (3 armd bde, 1 arty regt)  
2 armd bde

##### Mechanised

1 (Republican Guard) mech div (3 mech bde, 2 sy regt, 1 arty regt)  
1 mech div (1 armd bde, 3 mech bde, 1 arty regt)  
1 mech div (1 armd bde, 3 mech bde)  
1 mech div (1 armd bde, 2 mech bde, 1 arty regt)

##### Light

1 indep inf bde

#### COMBAT SUPPORT

3 arty regt

2 SSM bde

#### EQUIPMENT BY TYPE

Ongoing attrition during the civil war has severely reduced equipment numbers for almost all types. It is unclear how much remains available for operations.

**MBT** T-55A; T-55AM; T-55AMV; T-62; T-72; T-72AV; T-72B; T-72M1

**RECCE BRDM-2**

**AIFV** BMP-1; BMP-2; BTR-82A

#### APC

**APC (T)** BTR-50

**APC (W)** BTR-152; BTR-60; BTR-70; BTR-80

#### ARTY

**SP 122mm** 2S1; D-30 (mounted on T34/85 chassis);

**130mm** M-46 (truck-mounted); **152mm** 2S3

**TOWED 122mm** D-30; M-30 (M1938); **130mm** M-46;

**152mm** D-20; ML-20 (M1937); **180mm** S-23

**MRL 107mm** Type-63; **122mm** BM-21 (*Grad*); **140mm**

BM-14; **220mm** 9P140 *Uragan*; **300mm** 9A52 *Smerch*;

**330mm** some

**MOR 82mm** some; **120mm** M-1943; **160mm** M-160;

**240mm** M-240

#### AT • MSL

**SP** 9P133 (BRDM-2 with AT-3 *Sagger*); 9P148 (BRDM-2 with AT-5 *Spandrel*)

**MANPATS** 9K111 *Fagot* (AT-4 *Spigot*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K115 *Metis* (AT-7 *Saxhorn*); 9K115-2 *Metis-M* (AT-13 *Saxhorn* 2); 9K116-1 *Bastion* (AT-10 *Stabber*); 9K135 *Kornet* (AT-14 *Spriggan*); *Milan*

**RL 105mm** RPG-29

#### AD

#### SAM

**SP** 9K33 *Osa* (SA-8 *Gecko*); 9K31 *Strela-1* (SA-9 *Gaskin*); 9K37 *Buk* (SA-11 *Gadfly*); 9K35 *Strela-10* (SA-13 *Gopher*); 96K6 *Pantsir-S1* (SA-22 *Greyhound*); 9K317 *Buk-M2* (SA-17 *Grizzly*)

**MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K38 *Igla* (SA-18 *Grouse*); 9K36 *Strela-3* (SA-14 *Gremlin*); 9K338 *Igla-S* (SA-24 *Grinch*)

#### GUNS

**SP 23mm** ZSU-23-4; **57mm** ZSU-57; S-60 (on 2K12 chassis)

**TOWED 23mm** ZU-23; **37mm** M-1939; **57mm** S-60; **100mm** KS-19

**MSL • TACTICAL • SRBM** *Scud-B/C/D*; *Scud* look-a-like; 9K79 *Tochka* (SS-21 *Scarab*); *Fateh-110/M-600*

**ARV** BREM-1 reported; T-54/55

**MW** UR-77

**VLB** MTU; MTU-20

**UAV • ISR • Medium** *Mohajer 3/4*; **Light** *Ababil*

### Navy €4,000

Some personnel are likely to have been drafted into other services.

#### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 32:

**CORVETTES • FS** 2 *Petya* III (1+) with 1 triple 533mm ASTT with SAET-60 HWT, 4 RBU 2500 *Smerch* 1+ A/S mor, 2 twin 76mm gun

**PBFG** 22:

16 *Osa* I/II with 4 single Inchr with P-15M *Termit-M* (SS-N-2C *Styx*) AShM

6 *Tir* with 2 single Inchr with C-802 (CSS-N-8 *Saccade*) AShM

**PB** 8 *Zhuk*†

**MINE WARFARE • MINE COUNTERMEASURES** 7

**MHC** 1 *Sonya* with 2 quad Inchr with 9K32 *Strela-2* (SA-N-5 *Grail*)‡ SAM, 2 AK630 CIWS

**MSO** 1 *Natya* with 2 quad Inchr with 9K32 *Strela-2* (SA-N-5 *Grail*)‡ SAM

**MSI** 5 *Yevgenya*

**AMPHIBIOUS • LANDING SHIPS • LSM** 3 *Polnochny B* (capacity 6 MBT; 180 troops)

**LOGISTICS AND SUPPORT** 2

**AX** 1 *Al Assad*

**YDT** 1 *Palmyra*

### Coastal Defence

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#### FORCES BY ROLE

#### COASTAL DEFENCE

1 AShM bde with P-35 (SS-C-1B *Sepal*); P-15M *Termit-R* (SS-C-3 *Styx*); C-802; K-300P *Bastion* (SS-C-5 *Stooge*)

#### EQUIPMENT BY TYPE

**MSL • AShM** P-35 (SS-C-1B *Sepal*); P-15M *Termit-R* (SS-C-3 *Styx*); C-802; K-300P *Bastion* (SS-C-5 *Stooge*)

## Naval Aviation

All possibly non-operational after vacating base for Russian deployment

### EQUIPMENT BY TYPE

#### HELICOPTER

ASW 10: 4 Ka-28 *Helix A*; 6 Mi-14 *Haze*

## Air Force €16,500

### FORCES BY ROLE

#### FIGHTER

2 sqn with MiG-23 MF/ML/UM *Flogger*

2 sqn with MiG-29A/U *Fulcrum*

#### FIGHTER/GROUND ATTACK

4 sqn with MiG-21MF/bis *Fishbed*; MiG-21U *Mongol A*

2 sqn with MiG-23BN/UB *Flogger*

4 sqn with Su-22 *Fitter D*

1 sqn with Su-24 *Fencer*

#### GROUND ATTACK

1 sqn with L-39 *Albatros\**

#### TRANSPORT

1 sqn with An-24 *Coke*; An-26 *Curl*; Il-76 *Candid*

1 sqn with *Falcon 20*; *Falcon 900*

1 sqn with Tu-134B-3

1 sqn with Yak-40 *Codling*

#### ATTACK HELICOPTER

3 sqn with Mi-25 *Hind D*

2 sqn with SA342L *Gazelle*

#### TRANSPORT HELICOPTER

6 sqn with Mi-8 *Hip*/Mi-17 *Hip H*

### EQUIPMENT BY TYPE

Heavy usage of both fixed- and rotary-wing assets during the civil war has likely reduced the readiness and availability of these types to very low levels.

#### AIRCRAFT 269 combat capable

FTR 75: 39 MiG-23MF/ML/UM *Flogger*; 30 MiG-29A/SM/UB *Fulcrum*

FGA 177: 70 MiG-21MF/bis *Fishbed*; 9 MiG-21U *Mongol A*; 41 MiG-23BN/UB *Flogger*; 36 Su-22 *Fitter D*; 11 Su-24 *Fencer*

TPT 23: **Heavy** 3 Il-76 *Candid*; **Light** 13: 1 An-24 *Coke*; 6 An-26 *Curl*; 2 PA-31 *Navajo*; 4 Yak-40 *Codling*; **PAX** 7: 2 *Falcon 20*; 1 *Falcon 900*; 4 Tu-134B-3

TRG 58: 17 L-39 *Albatros\**

#### HELICOPTERS

ATK 24 Mi-25 *Hind D*

MRH 57: 27 Mi-17 *Hip H*; 30 SA342L *Gazelle*

TPT • **Medium** 27 Mi-8 *Hip*

#### MSL

AAM • IR R-3 (AA-2 *Atoll*)‡; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); IR/SARH; R-23/24 (AA-7 *Apex*); R-27 (AA-10 *Alamo*)

ASM Kh-25 (AS-7 *Kerry*); HOT

ARM Kh-31P (AS-17A *Krypton*)

## Air Defence Command €20,000

### FORCES BY ROLE

#### AIR DEFENCE

4 AD div with S-125 *Pechora* (SA-3 *Goa*); 2K12 *Kub* (SA-6 *Gainful*); S-75 *Dvina* (SA-2 *Guideline*)

3 AD regt with S-200 *Angara* (SA-5 *Gammon*)

### EQUIPMENT BY TYPE

#### AD • SAM

SP 2K12 *Kub* (SA-6 *Gainful*)

TOWED S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)

STATIC/SHELTER S-200 *Angara* (SA-5 *Gammon*)

MANPAD 9K32 *Strela-2/2M* (SA-7A/B *Grail*)‡

## Paramilitary €150,000

### National Defence Force €100,000

Have received training from Hizbullah and the Islamic Revolutionary Guard Corps.

### Other Militias €50,000

In addition to the regular forces and the National Defence Force, there are a number of other, smaller military organisations fighting for the Assad regime, including sectarian, Iraqi and Afghan organisations.

### Coast Guard

#### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 6

PBF 2 *Mawani*

PB 4

## FOREIGN FORCES

Hizbullah 4,000–8,000

Iran IRGC up to 2,000

Russia 4,000: 1 naval inf BG; 7 T-90; €20 BTR-82A; 12 2A65; 4 9A52 *Smerch*; TOS-1A; 12 Su-24M *Fencer*; 12 Su-25SM/UBM *Frogfoot*; 4 Su-30SM; 4 Su-34; 1 Il-20M; 12 Mi-24P *Hind*; 4 Mi-8AMTSh *Hip*; 3 *Pantsir-S1*; air base at Latakia; naval facility at Tartus

## Tunisia TUN

Tunisian Dinar D		2014	2015	2016
GDP	D	82.6bn	87.4bn	
	US\$	48.6bn	44.3bn	
<i>per capita</i>	US\$	4,422	3,985	
Growth	%	2.3	1.0	
Inflation	%	4.9	5.0	
Def bgt	D	1.54bn		
	US\$	906m		
FMA (US)	US\$	20m	25m	63m
	US\$1=D	1.70	1.97	

Population 11,037,225

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	11.9%	3.7%	4.1%	4.0%	22.1%	3.9%
Female	11.2%	3.6%	4.2%	4.3%	23.0%	4.1%

## Capabilities

Tunisia's armed forces rely on conscripts for personnel strength, and much equipment is ageing. The National

Guard takes the lead on domestic stability and internal security, although in the wake of the March 2015 terrorist attack on the Bardo Museum the army deployed to major cities. The armed forces are suited to such constabulary roles, but more traditional military roles, such as high-tempo war fighting, would likely prove a challenge. The armed forces have struggled with the Islamist spillover through the porous borders with Algeria and Libya, and have carried out operations against insurgents in remote areas. In response to this, the armed forces are creating their own intelligence and security service. Tunisia is also erecting a fortified security fence that will cover almost half of its border with Libya, and will include observation towers and an electronic-sensor system. US-Tunisia relations have strengthened recently, and the armed forces have received counter-terrorism equipment as well as aircraft and night-vision equipment. Patrol-boat donations have strengthened maritime security and aided in policing Tunisia's EEZ. In 2015 the US said Tunisia was a major non-NATO ally, enabling access to increased defence cooperation. Washington announced it would increase military aid threefold to US\$60m (increasing in 2016 to US\$138m), and would provide technical support and border-management training. Coordination with Algeria has also increased on common security threats.

**ACTIVE 35,800 (Army 27,000 Navy 4,800 Air 4,000)**

**Paramilitary 12,000**

*Conscript liability 12 months selective*

## ORGANISATIONS BY SERVICE

**Army 5,000; 22,000 conscript (total 27,000)**

### FORCES BY ROLE

#### SPECIAL FORCES

- 1 SF bde
- 1 (Sahara) SF bde

#### MANOEUVRE

##### Reconnaissance

1 *recece* regt

##### Mechanised

- 3 mech bde (1 armd regt, 2 mech inf regt, 1 arty regt, 1 AD regt, 1 engr regt, 1 sigs regt, 1 log gp)

#### COMBAT SUPPORT

1 engr regt

### EQUIPMENT BY TYPE

**MBT** 84: 30 M60A1; 54 M60A3

**LT TK** 48 SK-105 *Kuerassier*

**RECCE** 60: 40 AML-90; 20 *Saladin*

**APC** 280

**APC (T)** 140 M113A1/A2

**APC (W)** 110 Fiat 6614

**PPV** 30 *Kirpi*

**ARTY** 276

**TOWED** 115: **105mm** 48 M101A1/A2; **155mm** 67: 12 M114A1; 55 M198

**MOR** 161: **81mm** 95; **107mm** 48 (some SP); **120mm** 18 Brandt

**AT • MSL** 590

**SP 35 M901** *ITV TOW*

**MANPATS** *Milan*; **TOW**

**RL 89mm** 600: 300 *LRAC*; 300 *M20*

### AD • SAM

**SP 26 M48** *Chaparral*

**MANPAD** *RBS-70*

### GUNS 127

**SP 40mm** 12 M-42

**TOWED** 115: **20mm** 100 M-55; **37mm** 15 Type-55 (M-1939)/Type-65

### RADAR • LAND RASIT (veh, arty)

**AEV** 2 *Greif*

**ARV** 3 *Greif*; 6 M88A1

## Navy €4,800

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 29

**PCFG** 3 *La Galite* (FRA *Combattante* III) with 2 quad

Mk140 *Inchr* with MM-40 *Exocet* ASHM, 1 76mm gun

**PCG** 3 *Bizerte* (FRA P-48) with 8 SS 12M ASHM

**PCF** 6 *Albatros* (GER Type-143B) with 2 single 533mm TT, 2 76mm guns

**PBF** 2 20m Fast Patrol Boat

**PB** 15: 1 *Istiklal*; 3 *Utique* (mod PRC *Haizhui* II); 5 *Jounhouria*; 6 V Series

#### LOGISTICS AND SUPPORT 10:

**ABU** 3: 2 *Tabarka* (ex-US *White Sumac*); 1 *Sisi Bou Said*

**AGE** 1 *Hannibal*

**AGS** 1 *Khaireddine* (ex-US *Wilkes*)

**AWT** 1 *Ain Zaghuan* (ex-ITA *Simeto*)

**AX** 1 *Salambo* (ex-US *Conrad*, survey)

**YDT** 2

**YTB** 1 *Sidi Daoud* (ex-ITA *Porto d'Ischia*)

## Air Force 4,000

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with F-5E/F-5F *Tiger* II

#### TRANSPORT

1 sqn with C-130B/H/J-30 *Hercules*; G-222; L-410 *Turbolet*

1 liaison unit with S-208A

#### TRAINING

2 sqn with L-59 *Albatros*\*; MB-326B; SF-260

1 sqn with MB-326K; MB-326L

#### TRANSPORT HELICOPTER

2 sqn with AS350B *Ecureuil*; AS365 *Dauphin* 2; AB-205 (Bell 205); SA313; SA316 *Alouette* III; UH-1H *Iroquois*;

UH-1N *Iroquois*

1 sqn with HH-3E

### EQUIPMENT BY TYPE

**AIRCRAFT** 24 combat capable

**FTR** 12: 10 F-5E *Tiger* II; 2 F-5F *Tiger* II

**ATK** 3 MB-326K

**TPT** 18: **Medium** 13: 5 C-130B *Hercules*; 1 C-130H *Hercules*; 2 C-130J-30 *Hercules*; 5 G-222; **Light** 5: 3 L-410 *Turbolet*; 2 S-208A

**TRG** 30: 9 L-59 *Albatros*\*; 4 MB-326B; 3 MB-326L; 14 SF-260



**HELICOPTERS**

**MRH** 10: 1 AS365 *Dauphin* 2; 6 SA313; 3 SA316 *Alouette* III  
**SAR** 11 HH-3E  
**TPT • Light** 33: 6 AS350B *Ecureuil*; 15 Bell 205 (AB-205);  
 10 Bell 205 (UH-1H *Iroquois*); 2 Bell 212 (UH-1N *Iroquois*)  
**MSL • AAM • IR** AIM-9P *Sidewinder*

**Paramilitary 12,000****National Guard 12,000**

Ministry of Interior

**EQUIPMENT BY TYPE**

**RECCE** 2 EE-11 *Urutu* FSV

**APC • APC (W)** 16 EE-11 *Urutu* (anti-riot)

**PATROL AND COASTAL COMBATANTS 24**

**PCC** 6 *Rais el Blais* (ex-GDR *Kondor* I)

**PBF** 7: 4 *Gabes*; 3 *Patrouiller*

**PB** 11: 5 *Breitla* (ex-GDR *Bremse*); 4 *Rodman* 38; 2 *Socomena*

**HELICOPTERS • MRH** 8 SA318 *Alouette* II/SA319 *Alouette* III

**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 3; 7 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 29 obs

**United Arab Emirates UAE**

Emirati Dirham D		2014	2015	2016
<b>GDP</b>	D	1.47tr	1.25tr	
	US\$	399bn	339bn	
<i>per capita</i>	US\$	42,944	35,392	
<b>Growth</b>	%	4.6	3.0	
<b>Inflation</b>	%	2.3	3.7	
<b>Def exp</b>	D	€53bn		
	US\$	€14.4bn		
<b>US\$1=D</b>		3.67	3.67	

**Population** 5,779,760

**Ethnic groups:** Nationals 24%; Expatriates 76% of which Indian 30%, Pakistani 20%; other Arab 12%; other Asian 10%; UK 2%; other European 1%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	10.7%	2.8%	5.3%	10.6%	38.5%	0.6%
<b>Female</b>	10.2%	2.3%	3.2%	4.0%	11.4%	0.4%

**Capabilities**

The United Arab Emirates' military is arguably the best-trained and most capable in the GCC states. In recent years, the UAE has shown a growing willingness to take part in operations, including supporting an F-16 detachment to Afghanistan, participating in the air campaign in Libya, the counter-ISIS air campaign and the Saudi-led ef-

fort to defeat the Houthi rebels in Yemen. In the last case, it has committed air and ground forces, particularly but not exclusively the Presidential Guard, and has incurred significant casualties. It has also deployed armour and demonstrated the use of a range of air munitions, including the Denel *Umbani* precision-guidance kit. In early 2015, it moved to further build its airlift capability with an order for an additional two C-17s, which when delivered will bring its fleet size to eight aircraft. Efforts, however, to identify and purchase a successor to its *Mirage* 2000-9 fleet had as of the fourth quarter of 2015 proved unsuccessful. In late 2015, it fulfilled a long-standing requirement for an AEW capability, contracting for Saab's *Erieye* capability on Bombardier Global 600 airframes.

**ACTIVE 63,000 (Army 44,000 Navy 2,500 Air 4,500 Presidential Guard 12,000)**

*Conscript liability* 2 years National Service for men aged 18–30; reduced to 9 months for those completing secondary school. Voluntary 9 months service for women.

**ORGANISATIONS BY SERVICE****Space****EQUIPMENT BY TYPE**

**SATELLITES • COMMUNICATIONS** 2 *Yahsat*

**Army 44,000****FORCES BY ROLE**  
**MANOEUVRE**

**Armoured**

2 armd bde

**Mechanised**

2 mech bde

**Light**

1 inf bde

**COMBAT SUPPORT**

1 arty bde (3 SP arty regt)

1 engr gp

**EQUIPMENT BY TYPE**

**MBT** 421: 340 *Leclerc*; 36 OF-40 Mk2 (*Lion*); 45 AMX-30

**LT TK** 76 *Scorpion*

**RECCE** 105: 49 AML-90; 24 VBL; 32 TPz-1 *Fuchs* NBC; (20 *Ferret* in store); (20 *Saladin* in store)

**AIFV** 405: 15 AMX-10P; 390 BMP-3

**APC** 1,552

**APC (T)** 136 AAPC (incl 53 engr plus other variants)

**APC (W)** 590: 120 EE-11 *Urutu*; 370 M3 Panhard; 80 VCR (incl variants); 20 VAB

**PPV** 826: 750 M-ATV; 76 RG-31 *Nyala*

**ARTY** 575+

**SP 155mm** 181: 78 G-6; 85 M109A3; 18 Mk F3

**TOWED** 93: **105mm** 73 ROF lt; **130mm** 20 Type-59-I

**MRL** 74+: **122mm** 48+: 48 Firos-25 (est 24 op); Type-90 (reported); **227mm** 20 HIMARS; **300mm** 6 9A52 *Smerch*

**MOR** 227: **81mm** 134: 20 Brandt; 114 L16; **120mm** 93: 72 *Agrab* Mk2; 21 Brandt

**AT**

**MSL**

SP 20 HOT

MANPATS *Milan*; TOW; (*Vigilant* in store)

RCL 262: 84mm 250 *Carl Gustav*; 106mm 12 M40

#### AD

SAM • MANPAD *Blowpipe*; *Mistral*

GUNS 62

SP 20mm 42 M3 VDAA

TOWED 30mm 20 GCF-BM2

MSL • TACTICAL • SSM 6 *Scud-B* (up to 20 msl)

AEV 53 ACV-AESV

ARV 143: 8 ACV-AESV Recovery; 4 AMX-30D; 85 BREM-L; 46 *Leclerc* ARV

UAV • ISR • Medium *Seeker II*

### Navy 2,500

#### EQUIPMENT BY TYPE

SUBMARINES • SDV  10

PATROL AND COASTAL COMBATANTS 35

CORVETTES 9

FSGHM 5:

4 *Baynunah* with 2 quad Inchr with MM-40 *Exocet* Block III ASHM, 1 8-cell Mk56 VLS with RIM-162 ESSM SAM, 1 21-cell Mk49 GMLS with RIM-116B SAM, 1 76mm gun (two additional vessels awaiting commissioning)

1 *Abu Dhabi* with 2 twin Inchr with MM-40 *Exocet* Block III ASHM, 1 76mm gun

FSGM 4:

2 *Murray Jib* (GER Lurssen 62m) with 2 quad Inchr with MM-40 *Exocet* Block II ASHM, 1 octuple Inchr with *Crotale* SAM, 1 *Goalkeeper* CIWS, 1 76mm gun, 1 hel landing platform

2 *Ganthoot* with 2 twin Inchr with MM-40 *Exocet* Block III ASHM, 2 triple Inchr with VL *Mica* SAM, 1 76mm gun, 1 hel landing platform

PCFGM 2 *Mubarraz* (GER Lurssen 45m) with 2 twin Inchr with MM-40 *Exocet* ASHM, 1 sextuple Inchr with *Mistral* SAM, 1 76mm gun

PCFG 6 *Ban Yas* (GER Lurssen TNC-45) with 2 twin Inchr with MM-40 *Exocet* Block III ASHM, 1 76mm gun

PBFG 12 *Al Bazam* (*Ghannatha* mod) with 4 single Inchr with *Marte* Mk2/N ASHM

PB 6 *Ardhana* (UK Vosper 33m)

MINE WARFARE • MINE COUNTERMEASURES 2

MHO 2 *Al Murjan* (ex-GER *Frankenthal*-class Type-332)

AMPHIBIOUS 29

LANDING SHIPS • LS 1 *Sir Bunuer*

LANDING CRAFT 28

LCP 16: 6 *Ghannatha* with 120mm mor (capacity 40 troops); 6 *Ghannatha* (capacity 40 troops); 4 Fast Supply Vessel (multi-purpose)

LCU 5: 3 *Al Feyi* (capacity 56 troops); 2 (capacity 40 troops and additional vehicles)

LCT 7

LOGISTICS AND SUPPORT 5:

AFS 2 *Rmah* with 4 single 533mm TT

AKL 1

YDT 1

YTB 1

YTM 2

### Air Force 4,500

Flying hours 110 hrs/year

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

3 sqn with F-16E/F Block 60 *Fighting Falcon*

3 sqn with *Mirage* 2000-9DAD/EAD/RAD

##### AIRBORNE EARLY WARNING AND CONTROL

1 flt with Saab 340 *Erieye*

##### SEARCH & RESCUE

2 flt with AW109K2; AW139

##### TANKER

1 flt with A330 MRTT

##### TRANSPORT

1 sqn with C-17A *Globemaster*

1 sqn with C-130H/H-30 *Hercules*; L-100-30

1 sqn with CN-235M-100

##### TRAINING

1 sqn with Grob 115TA

1 sqn with *Hawk* Mk102\*

1 sqn with PC-7 *Turbo Trainer*

1 sqn with PC-21

##### TRANSPORT HELICOPTER

1 sqn with Bell 412 *Twin Huey*

#### EQUIPMENT BY TYPE

AIRCRAFT 157 combat capable

FGA 138: 54 F-16E Block 60 *Fighting Falcon* (*Desert Eagle*); 24 F-16F Block 60 *Fighting Falcon* (13 to remain in US for trg); 16 *Mirage* 2000-9DAD; 44 *Mirage* 2000-9EAD

ISR 7 *Mirage* 2000 RAD\*

AEW&C 2 Saab 340 *Erieye*

TPT/TKR 3 A330 MRTT

TPT 16; Heavy 6 C-17 *Globemaster*; Medium 6: 3 C-130H *Hercules*; 1 C-130H-30 *Hercules*; 2 L-100-30; Light 4

DHC-8 *Dash* 8 (MP)

TRG 79: 12 Grob 115TA; 12 *Hawk* Mk102\*; 30 PC-7 *Turbo Trainer*; 25 PC-21

#### HELICOPTERS

MRH 21: 12 AW139; 9 Bell 412 *Twin Huey*

TPT • Light 4: 3 AW109K2; 1 Bell 407

UAV • ISR Heavy some *Gongji-1* (reported)

#### MSL

AAAM • IR AIM-9L *Sidewinder*; R-550 *Magic*; IIR/ARH

*Mica*; ARH AIM-120C AMRAAM

ASM AGM-65G *Maverick*; *Hakeem* 1/2/3 (A/B)

ARM AGM-88C HARM

LACM *Black Shaheen* (*Storm Shadow*/SCALP EG variant)

#### BOMBS

Laser-guided GBU-12/58 *Paveway II*

### Air Defence

#### FORCES BY ROLE

##### AIR DEFENCE

2 AD bde (3 bn with MIM-23B I-HAWK; *Patriot* PAC-3)

3 (short range) AD bn with *Crotale*; *Mistral*; *Rapier*; RB-70; *Javelin*; 9K38 *Igla* (SA-18 *Grouse*); 96K6 *Pantsir-S1*

#### EQUIPMENT BY TYPE

##### AD • SAM

SP 50+: *Crotale*; RB-70; 50 96K6 *Pantsir-S1*

TOWED MIM-23B I-HAWK; *Patriot* PAC-3; *Rapier*

MANPAD *Javelin*; 9K38 *Igla* (SA-18 *Grouse*)  
NAVAL *Mistral*

## Presidential Guard Command 12,000

### FORCES BY ROLE

#### MANOEUVRE

**Reconnaissance**

1 recce sqn

**Mechanised**

1 mech bde (1 tk bn, 4 mech inf bn, 1 AT coy, 1 cbt engr coy, 1 CSS bn

**Amphibious**

1 mne bn

### EQUIPMENT BY TYPE

**MBT** 50 *Leclerc*

**AIFV** 200 BMP-3

**APC • APC (W)** 90 BTR-3U *Guardian*

**AT • MSL • SP** HMMWV with 9M133 *Kornet*

## Joint Aviation Command

### FORCES BY ROLE

#### GROUND ATTACK

1 sqn with *Archangel*; AT802 *Air Tractor*

#### ANTI-SURFACE/ANTI-SUBMARINE WARFARE

1 sqn with AS332F *Super Puma*; AS565 *Panther*

#### TRANSPORT

1 (Spec Ops) gp with AS365F *Dauphin 2*; H125M *Fennec*; AW139; Bell 407MRH; Cessna 208B *Grand Caravan*; CH-47C/F *Chinook*; DHC-6-300/400 *Twin Otter*; UH-60L/M *Black Hawk*

#### ATTACK HELICOPTER

1 gp with AH-64D *Apache*

### EQUIPMENT BY TYPE

**AIRCRAFT** 23 combat capable

**ATK** 3 *Archangel*

**TPT • Light** 27: 2 Beech 350 *King Air*; 8 Cessna 208B *Grand Caravan*\*; 1 DHC-6-300 *Twin Otter*; 4 DHC-6-400 *Twin Otter*; 12 AT802 *Air Tractor*\*

#### HELICOPTERS

**ATK** 30 AH-64D *Apache*

**ASW** 7 AS332F *Super Puma* (5 in ASuW role)

**MRH** 44: 4 AS365F *Dauphin 2* (VIP); 18 H125M *Fennec*; 7 AS565 *Panther*; 3 AW139 (VIP); 8 Bell 407MRH; 4 SA316 *Alouette III*

**TPT** 63+: **Heavy** 22 CH-47F *Chinook*; **Medium** 41+: 11 UH-60L *Black Hawk*; 30+ UH-60M *Black Hawk*

#### MSL

**ASM** AGM-114 *Hellfire*; *Cirit* (reported); *Hydra-70*; **HOT** ASHM AS-15TT; AM-39 *Exocet*

## Paramilitary

### Coast Guard

Ministry of Interior

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 112

**PSO** 1 *Al Watid*

**PBF** 58: 6 *Baglietto* GC23; 3 *Baglietto* 59; 15 DV-15; 34 MRTTP 16

**PB** 53: 2 *Protector*; 16 (US Camcraft 65); 5 (US Camcraft 77); 6 *Watercraft* 45; 12 *Halmatic Work*; 12 *Al Saber*

## DEPLOYMENT

### SAUDI ARABIA

*Operation Restoring Hope* 12 F-16E *Fighting Falcon*

### YEMEN

*Operation Restoring Hope* 4,000 1 bde HQ; 2-3 armd BG; *Leclerc*; BMP-3; M-ATV; G-6; M109A3; *Agrab Mk2*; 4 AH-64D *Apache*; 2 CH-47F *Chinook*; 4 UH-60M *Black Hawk*; 96K6 *Pantsir-S1*; 4 MIM-104F *Patriot* PAC-3

## FOREIGN FORCES

**Australia** 800; 1 FGA det with 6 F/A-18A *Hornet*; 1 B-737-700 *Wedgetail* (E-7A); 1 A330 MRTT (KC-30A); 1 tpt det with 2 C-130J-30 *Hercules*

**Egypt** *Operation Restoring Hope* 6 F-16C *Fighting Falcon*

**France** 750: 1 (Foreign Legion) BG (2 recce sqn, 2 inf sqn, 1 aty bty, 1 engr coy); 6 *Rafale*, 1 *Atlantique 2*; 1 KC-135F

**Jordan** *Operation Restoring Hope* 6 F-16C *Fighting Falcon*

**Korea, Republic of:** 128 (trg activities at UAE Spec Ops School)

**Morocco** *Operation Restoring Hope* 5 F-16C *Fighting Falcon*

**United Kingdom** 1 tkr/tpt flt with C-17A *Globemaster*; C-130J *Hercules*; A330 MRTT *Voyager*

**United States:** 5,000; 1 ftr sqn with 6 F-22A *Raptor*; 1 FGA sqn with 12 F-15E *Strike Eagle*; 1 ISR sqn with 4 U-2; 1 AEW&C sqn with 4 E-3 *Sentry*; 1 tkr sqn with 12 KC-10A; 1 ISR UAV sqn with RQ-4 *Global Hawk*; 2 AD bty with MIM-104E/F *Patriot* PAC-2/3

## Yemen, Republic of YEM

Yemeni Rial R		2014	2015	2016
<b>GDP</b>	R	9.29tr	7.96tr	
	US\$	43.2bn	34.9bn	
<b>per capita</b>	US\$	1,574	1,235	
<b>Growth</b>	%	-0.2	-28.1	
<b>Inflation</b>	%	8.2	30.0	
<b>Def bdgt</b>	R	405bn		
	US\$	1.89bn		
<b>FMA (US)</b>	US\$	20m		
<b>US\$1=R</b>		214.89	227.81	

**Population** 26,052,966

**Ethnic groups:** Majority Arab, some African and South Asian

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	20.9%	5.7%	5.0%	4.4%	13.4%	1.2%
<b>Female</b>	20.2%	5.6%	4.8%	4.3%	13.1%	1.4%

## Capabilities

Yemen continued to be wracked by civil war during 2015, with forces loyal to the former president, Ali Abdullah Saleh, joining Houthi rebels in attempting to overthrow the government of President Hadi. A large element of the Republican Guard, loyal to Saleh, had sided with the Houthis, taking with it considerable amounts of its heavy

equipment, including armour. An agreement with the Houthis militia, following its entry into Sana'a in late 2014, had collapsed by January 2015, and widespread fighting ensued. A Saudi-led air campaign, with considerable support from the UAE, began in March, and was aimed at bolstering the Hadi government. The Hadi government's forces are numerically inferior to the Houthis and the Republican Guard, with both sides operating at up to 'brigade'-strength size units. The insurgents appear to have the bulk of the more capable heavy armour and armoured fighting vehicles, with government forces relying on the older equipment that was not in the Republican Guard inventory. The air force has effectively ceased to function, with airfields and aircraft attacked in the airstrikes, resulting in considerable losses though there have been reports that the coalition is training Yemeni aircrew on the AT-802. (Substantial attrition has made it difficult to ascribe numerical equipment holdings.) (See pp. 314–16.)

**ACTIVE 10,000–20,000 (Army 10,000-20,000 Navy n.k. Air Force n.k., Air Defence n.k.) Paramilitary n.k.**

## ORGANISATIONS BY SERVICE

### Army 10,000–20,000 (incl militia)

#### FORCES BY ROLE

##### MANOEUVRE

**Mechanised**  
up to 10 bde(-)

#### EQUIPMENT BY TYPE

**MBT** Some M60A1; T-34+; T-54/55; T-62; T-72

**RECCE** some BRDM-2

**APC • APC (W)** BTR-60

**ARTY • SP 122mm** 2S1

**AT**

**MSL • MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); M47 *Dragon*; TOW

**GUNS • SP 100mm** SU-100+

**AD • SAM** systems heavily degraded during coalition air attacks

### Navy n.k.

Yemen's naval forces have ceased to have any operational capability, in the wake of coalition military activity.

### Air Force n.k.

The air force has ceased to have operational military capacity, though some of the below may remain serviceable, and there are reports of training restarting with coalition assistance.

#### EQUIPMENT BY TYPE

##### AIRCRAFT

**FTR/FGA** F-5E *Tiger II*; MiG-21 *Fishbed*; MiG-29SM *Fulcrum*; Su-22 *Fitter*

**MP** DHC-8 MPA

**TPT Heavy** Il-76 *Candid*; **Medium** An-12 *Cub*; C-130H *Hercules*; **Light** An-26 *Curl*; 6 AT-802 *Air Tractor*\*

**TRG** L-39C; Z-242

##### HELICOPTERS

**ATK** Mi-35 *Hind*

**ASW** Ka-27 (tpt role)

**MRH** Mi-17 *Hip H*

**TPT Medium** Mi-8 *Hip*; **Light** Bell 212; Bell 205 (UH-1H)

## TERRITORY WHERE THE GOVERNMENT DOES NOT EXERCISE EFFECTIVE CONTROL

**Insurgent forces 20,000–30,000 (incl Republican Guard, Houthi and tribes)**

#### FORCES BY ROLE

##### MANOEUVRE

**Mechanised**  
up to 20 bde(-)

#### EQUIPMENT BY TYPE

**MBT** Some T-72; T-55; T-80

**RECCE** *Ratel*

**AIFV** BTR-80A

**APC • APC (W)** Some BTR-40; BTR-60

**AT • MSL • MANPATS** some M47 *Dragon*, 9K13M *Konkurs*

(AT-5B *Spandrel/Towsan-1*); 9K115 *Metis* (AT-7 *Saxhorn*)

**MSL • TACTICAL • SRBM** SS-21 *Scarab* (*Tochka*); *Scud-B* (all possibly fired or destroyed)

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 6 obs

### CÔTE D'IVOIRE

UN • UNOCI 9 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 6 obs

### LIBERIA

UN • UNMIL 1

### MALI

UN • MINUSMA 7

### SOUTH SUDAN

UN • UNMISS 6; 9 obs

### SUDAN

UN • UNAMID 20; 23 obs

UN • UNISFA 2; 4 obs

### WESTERN SAHARA

UN • MINURSO 9 obs

## FOREIGN FORCES

All Operation Restoring Hope unless stated

**Bahrain** 250; *Arma* 6x6

**Qatar** 1,000; *Piranha II* 90mm; VAB; VAB VCAC HOT

**Saudi Arabia** 750; M-ATV; AH-64 *Apache*; 2+ MIM-104D/F *Patriot* PAC-2/3

**Sudan** 950; 1 mech BG; BTR-70M *Kobra* 2

**United Arab Emirates** 4,000 1 bde HQ; 2-3 armd BG; *Leclerc*; BMP-3; M-ATV; G-6; M109A3; *Agrab* Mk2; 4 AH-64D *Apache*; 2 CH-47F *Chinook*; 4 UH-60M *Black Hawk*; 96K6 *Pantsir-S1*; 4 MIM-104F *Patriot* PAC-3

Table 13 Selected Arms Procurements and Deliveries, Middle East and North Africa

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Algeria (ALG)</b>								
T-90S	MBT	200	n.k.	RUS/ALG	UKBTM	2014	n.k.	Licence production in ALG
<i>Fuchs 2</i>	APC (W)	€980	€2.7bn (US\$4bn)	GER/ALG	Rheinmetall (Rheinmetall-Algerie-SPA)	2014	2015	Licence production in ALG
<i>Varshavyanka-class (Kilo)</i>	SSK	2	US\$1.2bn	RUS	Admiralty Shipyards	2014	2018	-
MEKO A200	FFGHM	2	See notes	GER	TKMS	2012	2016	Part of €2.5bn (US\$3.3bn) deal including six <i>Super Lynx</i> 300 hel. First of class in trials as of late 2015
<i>Adhafer-class (C28A)</i>	FFGHM	3	n.k.	PRC	Hudong-Zhonghua Shipbuilding	2012	2015	First of class delivered to ALG in late 2015
Su-30MKA	FGA ac	14	n.k.	RUS	UAC (Sukhoi)	2015	2016	-
Mi-28NE <i>Havoc</i>	Atk hel	42	n.k.	RUS	Russian Helicopters (Rostvertol)	2013	n.k.	First hel in test as of late 2015
<i>Super Lynx 300</i>	MRH	6	See notes	ITA	Finmeccanica	2012	n.k.	Part of €2.5bn (US\$3.3bn) deal including two MEKO A200 FFGHM. First hel in test Oct 2014
Mi-26T2 <i>Halo</i>	Hvy tpt hel	14	n.k.	RUS	Russian Helicopters (Rostvertol)	2013	2015	Deliveries ongoing
S-300PMU-2 <i>Favorit (SA-20B)</i>	SAM	32	US\$1bn	RUS	Almaz-Antey	2006	2008	Eight bty. First bty delivered 2008. Deliveries resumed in 2011 after suspension
<i>Buk-M2E (SA-17 Grizzly)</i>	SAM	n.k.	n.k.	RUS	Almaz-Antey	2013	n.k.	-
<b>Egypt (EGY)</b>								
M1A1 <i>Abrams</i>	MBT	n.k.	n.k.	US (EGY)	General Dynamics (Egyptian Tank Plant)	n.k.	n.k.	MBT kits and parts assembled in EGY
<i>Gowind-class</i>	FSGM	4	€1bn (US\$1.33bn)	FRA	DCNS	2014	2017	First to be built in FRA; remainder in EGY. First of class under construction
<i>Mistral-class</i>	LHD	2	€980m (US\$1.1bn)	FRA	DCNS	2015	2016	Originally built for RUS. Contract cancelled in 2015 and ships resold to EGY
C-295M	Lt tpt ac	14	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2013	2014	Third and fourth orders; delivery suspended Aug 2013, but later resumed
Ka-52 <i>Hokum</i>	Atk hel	50	n.k.	RUS	Russian Helicopters	2015	2016	-
S-300VM	SAM	n.k.	US\$500m	RUS	Almaz-Antey	2014	n.k.	Delivery schedule to be negotiated
<b>Iran (IRN)</b>								
<i>Mowj-class</i>	FSGM	5	n.k.	IRN	IRIN	2004	2010	Second vessel commissioned Mar 2015
S-300PMU-2 <i>Favorit (SA-20B)</i>	SAM	5 bty	n.k.	RUS	Government surplus	2015	2016	-
<b>Iraq (IRQ)</b>								
T-72	MBT	n.k.	n.k.	CZE	Excalibur Group	2015	n.k.	Second-hand vehs
BMP-1	AIFV	n.k.	n.k.	CZE	Excalibur Group	2015	n.k.	Second-hand vehs



Table 13 Selected Arms Procurements and Deliveries, Middle East and North Africa

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<i>Assad-class</i>	FSGM	2	n.k.	ITA	Fincantieri	1980	n.k.	Ships did not leave ITA due to IRN-IRQ war. Will now be modernised and delivered
F-16C/D <i>Fighting Falcon</i>	FGA ac	36	n.k.	US	Lockheed Martin	2011	2015	24 C and 12 D models. First four ac delivered Jul 2015
FA-50	FGA ac	24	US\$1.1bn	ROK	KAI	2013	2016	Deliveries to occur 2016-17
L-159	Trg ac	15	US\$29.5m	CZE	Government surplus	2014	2015	First batch of two delivered in Nov 2015
Mi-28NE <i>Havoc</i>	Atk hel	15	n.k.	RUS	Russian Helicopters (Rostvertol)	2012	2014	Deliveries ongoing
Mi-35M <i>Hind</i>	Atk hel	28	n.k.	RUS	Russian Helicopters (Rostvertol)	2013	2013	Deliveries ongoing
<b>Israel (ISR)</b>								
<i>Merkava Mk IV</i>	MBT	n.k.	n.k.	ISR	MANTAK	2001	2003	Deliveries ongoing
<i>Namer</i>	APC (T)	n.k.	n.k.	US	General Dynamics (GDLS)	2011	2012	Deliveries ongoing
<i>Dolphin II-class (Type-800)</i>	SSK	3	€1.5bn (US\$1.71bn)	GER	TKMS	2006	2014	With AIP system. First boat delivered Sep 2014. Third of class ordered 2012
<i>Sa'ar 6</i>	FS	4	€430m (US\$478m)	GER	TKMS	2015	n.k.	GER to pay €115m (US\$177m) of the order cost
F-35A <i>Lightning II</i>	FGA ac	33	n.k.	US	Lockheed Martin	2010	2016	Contract for 19 ac signed in 2010. Second contract for 14 more signed in Feb 2015. LRIP 8 contains two ac and LRIP 9 contains seven for ISR
C-130J-30 <i>Hercules</i>	Med tpt ac	1	US\$81.2m	US	Lockheed Martin	2013	2016	Contract for fourth ac
M-346 <i>Master</i>	Trg ac	30	US\$1bn	ITA	Finmeccanica (Alenia Aermacchi)	2012	2014	Part of a deal under which ITA agrees to purchase US\$1bn of military equipment from ISR suppliers. Deliveries ongoing
<b>Jordan (JOR)</b>								
<i>Mbombe</i>	APC (W)	50	n.k.	JOR/RSA	ADI	2015	n.k.	-
<i>Gepard</i>	AD	60	€21m (US\$29m)	NLD	Government surplus	2013	2014	-
<b>Kuwait (KWT)</b>								
<i>Fuchs 2</i>	RECCE CBRN	12	n.k.	GER	Rheinmetall	2015	2017	-
H225M	Hvy tpt hel	24	€1bn (US\$1.1bn)	Int'l	Airbus Group (Airbus Helicopters)	2015	n.k.	-
<i>Patriot PAC-3</i>	SAM Upgrade	7	US\$263m	US	Lockheed Martin	2013	2015	-
<b>Lebanon (LBN)</b>								
VBTP-MR <i>Guarani</i>	APC (W)	10	€€30m (US\$40m)	BRZ	IVECO Latin America	2014	n.k.	Contract is for ten <i>Guarani</i> and a range of other vehs
VAB	APC (W)	Up to 100	See notes	FRA	Renault Trucks Defense/ Government surplus	2014	2017	Part of package paid for by US\$3bn SAU grant. Either ex-FRA or new build

Table 13 Selected Arms Procurements and Deliveries, Middle East and North Africa

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
CAESAR	Arty (155mm SP)	24	See notes	FRA	Nexter	2014	2017	Part of package paid for by US\$3bn SAU grant
<i>Combattante</i> FS56	PCFM	3 to 4	See notes	FRA	Abu Dhabi MAR (CMN)	2014	2015	Part of package paid for by US\$3bn SAU grant. Will be armed with <i>Simbad</i> AD and 20mm <i>Narwhal</i> guns
EMB-314 <i>Super Tucano</i>	Trg ac	6	US\$172.5m	US	Sierra Nevada	2015	n.k.	-
SA342 <i>Gazelle</i>	MRH	n.k.	See notes	FRA	Government surplus	2014	2015	Part of package paid for by US\$3bn SAU grant
AS532 <i>Cougar</i>	Med tpt hel	n.k.	See notes	FRA	Airbus Group (Airbus Helicopters)/ Government surplus	2014	2015	Part of package paid for by US\$3bn SAU grant. Either ex-FRA or new build
<b>Morocco (MOR)</b>								
M1A1 <i>Abrams</i>	MBT	222	n.k.	US	Government surplus	2015	n.k.	Ex-US Army surplus. Being refitted by General Dynamics
<b>Oman (OMN)</b>								
<i>Al-Ofouq</i> -class	PCO	4	€535m (US\$880m)	SGP	ST Engineering	2012	2015	First two vessels delivered in 2015
<i>Al Mubshir</i> -class	AP	2	US\$124.9m	AUS	Austal	2014	2016	High Speed Support Vessel. First launched late 2015
NH90 TTH	Med tpt hel	20	n.k.	FRA/GER/ITA/NLD	NH Industries	2004	2010	Deliveries ongoing
Eurofighter <i>Typhoon</i>	FGA ac	12	See notes	GER/ITA/ESP/UK	Eurofighter GmbH (BAE Systems)	2013	2017	Part of GB£2.5bn (US\$3.9bn) deal including 8 <i>Hawk</i> Mk128. Nine single-seat and three twin-seat
C-295M	Lt tpt ac	8	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2012	2013	For air force. Five in tpt and three in MP configuration
<i>Hawk</i> Mk128 Advanced Jet Trainer	Trg ac	8	See notes	UK	BAE Systems	2012	n.k.	Part of GB£2.5bn (US\$3.9bn) deal including 12 Eurofighter <i>Typhoon</i>
<b>Qatar (QTR)</b>								
<i>Leopard</i> 2A7	MBT	62	See notes	GER	KMW	2013	2015	Part of €1.89bn (US\$2.47bn) contract incl 24 PzH 2000. First four veh en route as of late 2015
PzH 2000	Arty (155mm SP)	24	See notes	GER	KMW	2013	2015	Part of €1.89bn (US\$2.47bn) contract incl 62 <i>Leopard</i> 2A7. First three veh en route as of late 2015
<i>Javelin</i>	MANPATS	n.k.	n.k.	US	Raytheon/ Lockheed Martin	2014	n.k.	-
<i>Rafale</i>	FGA ac	24	n.k.	FRA	Dassault	2015	n.k.	-
B-737 AEW	AEW&C ac	3	n.k.	US	Boeing	2014	n.k.	-
C-17A <i>Globemaster</i> III	Hvy tpt ac	4	n.k.	US	Boeing	2015	n.k.	-
PC-21	Trg ac	24	n.k.	CHE	Pilatus	2012	2014	Deliveries ongoing
AH-64E <i>Apache Guardian</i>	Atk hel	24	R8.9bn (US\$2.1bn)	US	Boeing	2014	n.k.	-

Table 13 Selected Arms Procurements and Deliveries, Middle East and North Africa

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<i>Patriot PAC-3</i>	SAM	n.k.	n.k.	US	Raytheon	2014	n.k.	-
<b>Saudi Arabia (SAU)</b>								
LAV	APC (W)	n.k.	US\$10bn	CAN	General Dynamics Land Systems – Canada	2014	n.k.	SAU light armoured vehicle, possibly based on existing LAV
<i>Eurofighter Typhoon</i>	FGA ac	72	GB£4.43bn (US\$8.9bn)	GER/ITA/ESP/UK	Eurofighter GmbH (BAE Systems)	2005	2008	Project <i>Salam</i> . First 24 delivered by Sep 2011. Original plan to final assemble remaining 48 in SAU dropped; deliveries from UK started 2013
<i>F-15E Strike Eagle</i>	FGA ac	84	US\$11.4bn	US	Boeing	2012	2015	F-15SA variant. Part of a package including F-15S upgrades, AH-64 and AH-6i hel that could total US\$24bn
KC-130J <i>Hercules</i>	Tkr ac	2	US\$180m	US	Lockheed Martin	2013	n.k.	Initial two aircraft pending agreement of larger order
C-295W	Med tpt ac	4	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	2015	n.k.	-
PC-21	Trg ac	55	n.k.	CHE	Pilatus	2012	2014	To replace PC-9s. Deliveries ongoing
<i>Hawk Mk128 Advanced Jet Trainer</i>	Trg ac	22	n.k.	UK	BAE Systems	2012	2016	-
AH-64E <i>Apache Guardian</i>	Atk hel	48	US\$450m	US	Boeing	2013	2014	36 For RSLF and 12 for national guard. Deliveries ongoing
AH-6i <i>Little Bird</i>	MRH	24	n.k.	US	Boeing	2014	2016	For National Guard
<i>Patriot PAC-3</i>	SAM upgrade	n.k.	US\$1.7bn	US	Raytheon	2011	n.k.	Incl ground systems, training package and support equipment
<b>Syria (SYR)</b>								
MiG-29M2 <i>Fulcrum</i>	Ftr ac	12	n.k.	RUS	UAC (MiG)	2007	2016	Delivery delayed by SYR conflict
Yak-130	Trg ac	36	US\$550m	RUS	UAC (Irkut)	2012	n.k.	Delivery delayed by SYR conflict
<b>Tunisia (TUN)</b>								
UH-60M <i>Black Hawk</i>	Med tpt ac	24	n.k.	US	Lockheed Martin (Sikorsky)	2015	2015	Three separate orders. First delivery due in second half of 2015
<b>United Arab Emirates (UAE)</b>								
<i>Baynunah-class</i>	FSGHM	6	AED3bn (US\$820m)	FRA/UAE	ADSB	2003	2006	First of class built in FRA; others to be built in UAE. Fourth vessel delivered 2015
Global 6000 SRSS	ISR ac	2	US\$1.27bn	SWE	Saab	2015	n.k.	-
C-17A <i>Globemaster III</i>	Hvy tpt ac	2	US\$618m	US	Boeing	2015	n.k.	-
Terminal High-Altitude Area Defense (THAAD)	SAM	12	n.k.	US	Lockheed Martin	2011	2015	Two batteries
<i>Falcon Eye</i>	ISR satellite	2	€800m (US\$1.1bn)	Int'l	Airbus Group/Thales	2013	2017	First satellite due to launch 2017; second 2018

## Chapter Eight

# Latin America and the Caribbean

Organised criminal and narco-trafficking groups intensified their attacks against security forces in several Latin American countries during 2015, and the activity of these groups again dominated regional defence activity. Criminal and guerrilla groups deliberately targeted military forces, especially in the slums of Rio de Janeiro in Brazil, and in parts of Mexico and El Salvador. In response, regional armed forces were increasingly involved in internal security deployments. Meanwhile, although regional military procurements were limited by a weakening economic environment throughout the region, some armed forces continued to consider future force postures and potential overseas roles.

### Organised crime in Central America

Honduras, Guatemala and El Salvador again deployed military force in the face of high levels of violent crime. In El Salvador, there was a steep rise in gang attacks in urban areas directed at police and military personnel, and 63 troops and police officers were killed in the year to September. More broadly, the country's security forces had to deal with a daily homicide rate that, according to the National Police, was by September running at 18 per day, in contrast to an average of 17 during the civil war that ended in 1992. In response, San Salvador announced the creation of a new special-forces branch under the command of the armed forces. Three battalions of the new *Fuerzas Especiales de Reacción* (FER, or Special Reaction Forces), each with 200 members, began training in April 2015. An initial force of 60 was deployed ahead of schedule in May in Aguilares, near San Salvador, in response to a clash between Barrio 18 gang members and the army. The increasingly tough stance on gangs also included a pronouncement by the Supreme Court on 24 August declaring gang members and their supporters 'terrorists'. This means they can now be charged under anti-terrorism legislation and are subject to longer sentences than usual for criminal cases.

In neighbouring Honduras and Guatemala, homicide numbers began to edge higher in mid-2015, after 18 months of gradual decline, likely due to disputes

between rival criminal groups. Nonetheless, the average daily homicide rate in Honduras fell from 17 in 2013 to nine in 2015. President Juan Orlando Hernández argued that this was due to the 2013 initiative to create the *Policia Militar del Orden Público* (Public Order Military Police, or PMOP). The force has grown from 1,000 in late 2013 to 3,228 in 2015, comprising six battalions. Meanwhile, in February, Guatemala's defence ministry created the *Escuadrones del Cuerpo Especial de Reserva para la Seguridad Ciudadana* (Special Reserve squads for Citizen Security), a new army unit devoted to urban security.

### Changing roles and missions

Drug-trafficking and criminal networks are reported to have recently increased their activity in Argentina, and the air force has become more active in moves to combat this threat. At least one IA-58 *Pucará* light attack aircraft was scheduled to be redeployed close to the Bolivian and Paraguayan borders, and a long-range radar (*Radar Primario Argentino 3D*) was moved to improve surveillance of northern airspace. However, the air force's capacity to continue these measures is limited given budgetary constraints. Combat capability was further reduced with the announcement that the fleet of Dassault *Mirage* combat aircraft, in operation for 43 years, would be retired at the end of 2015.

Further north, Bolivia reinforced its capabilities against the aerial movement of illegal narcotics with the purchase from French company Thales of 17 radars and a command-and-control centre for airspace monitoring. The agreement was announced in April 2015 but put on hold in August, as the price had reportedly surpassed the originally calculated limit. A €200m (US\$223m) contract was eventually signed in November.

Colombia was the exception to the regional trend, even as peace talks continued between the government and FARC. With Bogotá promising its armed forces continued support to prevent action by guerrillas in a post-conflict environment, the defence ministry was excluded from austerity measures announced in the 2016 budget. The main threat

### Guerrilla threats continue

Renewed military activity during the first half of 2015 resulted in a fragile phase in the peace talks between FARC and the Colombian government, which have been taking place in Cuba since November 2012. Eleven troops were killed in an ambush in April. The government recommenced airstrikes against FARC targets and, after 26 insurgents were killed in May, the group called off its ceasefire and mounted a series of attacks on infrastructure. Despite fears that the peace talks would collapse, a new unilateral ceasefire was announced by FARC on 8 July, and the government announced a de-escalation of the conflict. Later in the year, it was reported that the president was hoping that further progress in the talks would allow a bilateral ceasefire to be declared on 1 January 2016.

However, other guerrilla groups remained active in South America during 2015. Attacks by the Paraguayan People's Army (EPP) raised to 29 the number of killings attributed to or claimed by the group since August 2013. This was despite the establishment of a Joint Task Force, launched by President Horacio Cartes shortly after he took office in 2013, to concentrate on combating EPP activity in central and northeastern areas. The task force

is composed of members of the army, police and the National Anti-Drugs Secretariat. Paraguay also sought help from other South American countries to counter this group, and army units received training in counter-narcotics, counter-insurgency and intelligence from the United States and Colombia during 2015. In addition, the government started discussing with Brazil the use of its unmanned aerial vehicles for surveillance in areas of known EPP activity.

In Peru, two joint operations in late July 2015 by the army and police freed 54 people being held captive by the remnants of the Shining Path, a Maoist guerrilla group, in the Apurímac, Ene and Mantaro river valley. A number of procurements were designed to reinforce Peru's air capabilities in the face of the continuing Shining Path threat and in response to the use by transnational criminal networks of aircraft to transport cocaine (see p. 419). These will assist in the enforcement of a new Air-space Surveillance and Control Law passed by congress in August 2015, authorising the interception and destruction of aircraft suspected of being used to transport drugs, weapons or explosives.

perception shifted from guerrillas to criminal groups – the latter are expected to benefit from the vacuum left by FARC should a peace agreement be signed. The police are usually responsible for counter-criminal activity, but the army declared plans to take a more direct role by announcing a *Fuerza de Tarea de Armas Combinadas Medianas* (Medium Combined Arms Task Force, or FUTAM). This task force was activated in the department of La Guajira (bordering Venezuela) in January 2015, when it also received 32 LAV III armoured vehicles, among the equipment already in the army inventory. The task force is part of Plan Minerva, a 2015–22 programme to prepare and configure the armed forces for challenges beyond those posed by FARC.

The Colombian armed forces are also planning for a greater role in international security operations. In August, Bogotá dispatched the ARC 7 de Agosto ocean-patrol vessel to the EU-led *Operation Atalanta* counter-piracy mission off Somalia. Agreement was reached between the United Nations and Colombia in January on a framework agreement for possible deployment on UN missions. Mexico also detailed plans to increase its foreign deployments, with a focus on peacekeeping operations. The government announced the intention to form by 2020 an

infantry battalion specifically for this role, with the first deployment to take place the year after. A Peace Operations Centre will also be formed between 2017 and 2019 to coordinate the composition of civil–military peacekeeping units, to include engineers, health professionals and police officers, among others.

### Cross-border issues

There were limited developments in regional cooperation in 2015, with defence ministers reviewing ongoing efforts to improve intelligence sharing and border coordination in relation to the challenges posed by narco-trafficking and organised crime. The most significant new regional cooperation initiative is the Alliance for Prosperity, announced in late 2014 and supported by the US government and the Inter-American Development Bank. This includes plans for up to US\$1 billion in US aid to countries in the northern triangle of Central America, though the plan still requires US congressional approval. The main focus will be on economic development and peacebuilding, with the defence and security sectors expected to receive a smaller share of resources.

Meanwhile, four member countries of the Union of South American Nations (UNASUR) – Argentina, Brazil, Ecuador and Venezuela – met in Caracas in



April 2015 to discuss technical details for the development phase of the UNASUR I basic training aircraft. The project involves plans to start production of 92 aircraft (50 for Argentina, 24 for Venezuela and 18 for Ecuador) in 2020. Although Brazil has not expressed interest in buying the aircraft, all four countries restated their commitment to build it through a new company to be called UNASUR Aero SA. Meanwhile, Brazil started consulting fellow UNASUR members about a joint unmanned aerial vehicle (UAV) project even though many members – including Brazil – already produce their own systems.

Conversely, the regional economic slowdown has renewed the importance of talks with countries outside Latin America. Venezuela strengthened its ties with Russia amid increasing pressure from the US. On 9 March, the White House declared Venezuela an ‘unusual and extraordinary threat’ to US national security. Just a few days later, Caracas staged a ten-day military exercise involving an unspecified amount of Russian troops and hardware. In September, despite a severe economic crisis, President Nicolás Maduro announced that he would discuss the purchase of 12 new Sukhoi combat aircraft from Russia. Meanwhile, there were developments in the long-running border dispute between Venezuela and Guyana when, in May, Caracas announced three new maritime and air ‘defence zones’, one of which included waters currently administered by Guyana, but part of Venezuela’s long-held claim; earlier in May Exxon Mobil had announced a significant oil discovery offshore of Guyana, in waters falling within the Venezuelan claim.

Whereas Russia’s defence links to the region have tended to focus on conventional capabilities in Venezuela, the US continues to cooperate with other regional states on counter-narcotics surveillance and interception. The US-led *Operation Hammer* seized 54 tonnes of drugs between October 2014 and August 2015, more than in the previous three years combined. The US Coast Guard, which takes part in the operation alongside the US Navy, said it has improved its strategies to intercept semi-submersible vessels used by drug traffickers. In April, the US announced the first deployment to Central America of Special Purpose Marine Air-Ground Task Force–South – a rapid-response marine task force of around 250 members headquartered at Soto Cano air base in Honduras. The marines, equipped with a mission package that includes four CH-53E helicopters and a Joint High Speed Vessel, will move on an ad hoc

basis to other regional states on missions involving counter-narcotics and humanitarian assistance.

Progress was made in 2015 in regional defence training and strategic thinking, with the inauguration in April of the South American Defence College under the UNASUR umbrella in Quito, Ecuador. Initially, its mission is to serve as a think tank and formulate a coherent South American view of defence policies, coordinating with other military and academic centres. The college’s research activities have begun with a focus on cyber defence, strategic vision and the development of a common military doctrine for the region.

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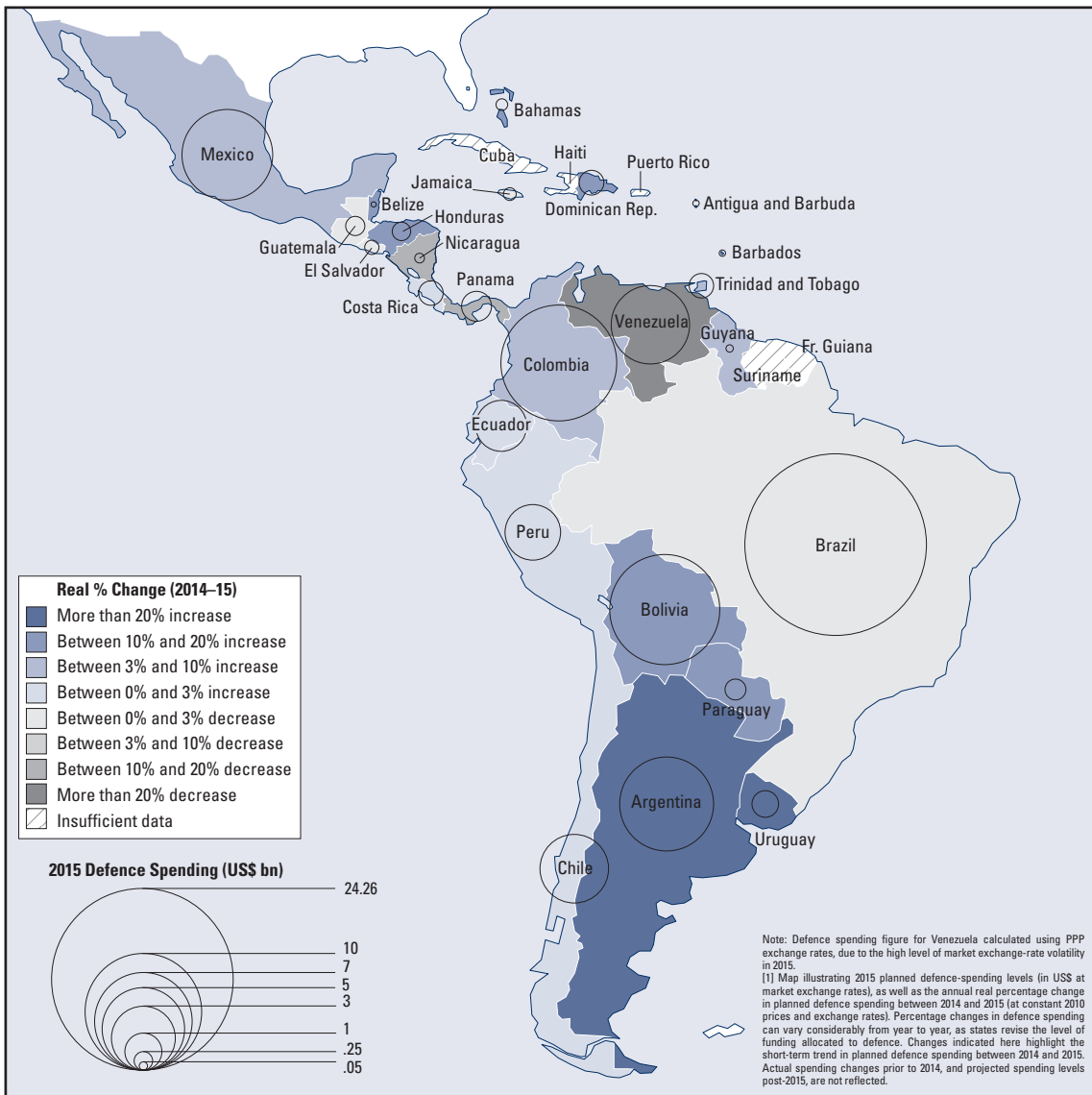
## DEFENCE ECONOMICS

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### Macroeconomics

Economic expansion in Latin America and the Caribbean has gradually slowed following the 6% high reached in 2010. In 2015, regional growth turned negative for the first time since 2009, with GDP contracting by 0.25%. The slowdown in the region’s principal raw-materials export market, China, and the collapse in commodity prices more broadly following the end of the recent ‘commodity super-cycle’ has resulted in lower real incomes, exchange-rate depreciation, deteriorating terms of trade and widening current-account deficits. Whereas metals prices had been declining steadily since 2011 (giving copper and iron-ore exporters such as Chile and Peru more time to adjust), the rapid decline in oil prices since mid-2014 caused considerable terms-of-trade dislocations for net energy exporters such as Ecuador, Bolivia and Colombia; this factor alone was estimated by the IMF to have produced a reduction in GDP of between five and ten percentage points in these states. In the heavily energy-dependent Venezuelan economy, where oil accounts for around one-third of GDP, nearly half of government revenue and some 95% of export earnings, the decline was more than 20 percentage points, resulting in a 10% overall economic contraction.

The IMF estimated that this terms-of-trade shock had been less severe in Argentina, Brazil and Mexico. However, Brazil’s post-2010 economic stagnation worsened in 2015, with the country projected to experience a 3% decline in output. Lax monetary policy and weakened exchange rates engineered to boost growth during the Dilma Rousseff administration’s first term instead resulted in rising inflation; this was projected at 8.8% in 2015, well above the central



Map 7 **Latin America and the Caribbean Regional Defence Spending<sup>1</sup>**

bank's target upper limit of 6.5%. Meanwhile, with Brazil's huge pre-salt oil deposits only starting to be exploited, the country's future growth prospects appeared considerably weaker in a global environment of low oil prices. In September 2015, Brazil's credit rating was downgraded to below investment grade, a move that accelerated capital outflows and caused the currency to reach a 13-year low against the US dollar.

The Brazilian downturn adversely affected its trading partners, including Argentina and Paraguay, both of which resorted to fiscal-stimulus measures to boost domestic economic activity. Elsewhere,

lower commodity prices benefited importing states in Central America and the Caribbean, as did the gradual recovery in the US economy, on which many of these states are economically dependent for trade, tourism and remittances.

### Defence spending

Regional defence spending has been severely affected by the slowdown in economic activity. After growing by 5.5% in 2012, real defence-spending growth fell to 3.5% in 2013 and then stagnated at just 0.7% in 2014. This trend continued in 2015, with aggregate real outlays falling by 2%, the first real-terms fall in

defence spending since 2011. These real-terms reductions were mirrored in nominal figures: total regional defence spending fell from US\$72.2bn in 2014 to US\$60bn in 2015, a decline of 17% that marked the second straight reduction in aggregate regional outlays (after a 3.3% nominal fall in 2014). As rates of defence spending drop below already low GDP growth rates, regional defence spending as a proportion of GDP has declined correspondingly, falling from 1.31% of GDP in 2010 to 1.21% in 2015 (see Figure 22).

This overall reduction in spending was partly the result of fiscal consolidation in Brazil, the region's largest defence spender, which accounts for 40–50% of annual regional defence allocations (see Figure 20). In order to stabilise Brazil's rising debt-to-GDP ratio – which currently stands at around 65% of GDP – the newly re-elected Rousseff administration has sought to deliver a budget surplus by raising additional tax revenues and reducing expenditure in discretionary areas. However, around 90% of government spending (mainly social benefits and entitlements) is deemed non-discretionary by the constitution, while measures to generate new revenues have so far produced only limited results due to the deepening recession. This has meant that the remaining discretionary areas – including defence capital spending on equipment and infrastructure – have had to bear a disproportionate burden of fiscal adjustment. In May 2015, it was announced that the military procurement budget would be cut by 25%, falling from the previously approved level of R22.6bn (US\$7bn) to R17bn (US\$5.2bn). The defence ministry has responded by slowing current procurement plans – such as the KC-390 transport aircraft – by extending delivery dates, re-negotiating existing financial terms and delaying new orders (see pp. 371–72), though it was reported late in the year that the reductions were also beginning to affect Brazil's large naval-modernisation and submarine-construction ambitions.

Budgetary constraints have also affected defence spending in Argentina. In August 2015, Buenos Aires announced a series of measures to reduce expenditure, including cuts to personnel working hours, the suspension of maintenance activity for aircraft taken out of service and the retirement of the air force's fleet of Dassault *Mirage* combat aircraft. Elsewhere, the B33.1bn (US\$5.3bn at the official exchange rate) allocated to the armed forces in Venezuela's projected 2015 budget represented an 11% nominal decline on the previous year's allocation, while the country's

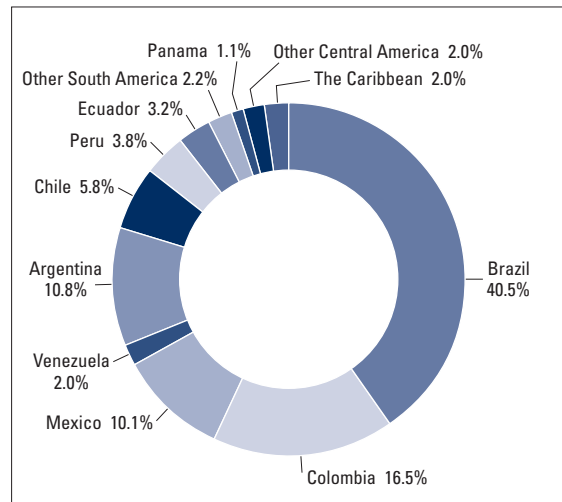


Figure 20 **Latin America & the Caribbean Defence Spending by Country & Sub-Region**

160% rate of inflation estimated by the IMF for 2015 is likely to substantially deplete the real-terms allocation to salaries and operating expenses, which make up the bulk of the defence budget. (Acquisitions have been funded off-budget, using the country's various development funds.) Rampant domestic inflation eroded the real-terms value of Venezuela's defence outlays in 2014, and a severe shortage of foreign exchange in 2015 is also likely to curtail the availability of hard currency for major foreign weapons purchases.

Meanwhile, Colombia's defence minister announced in January 2015 that the country was unlikely to see defence allocations diminish in the near term – despite declining tax revenues due to low commodity prices and the expected peace deal with FARC – owing to the costs associated with reconfiguring the roles and capabilities of the armed forces and police. By contrast, the medium-term decline in Chilean defence outlays continued in 2015 as economic growth slowed and the country prioritised social-expenditure areas such as health and education; low global copper prices have also diminished the amount available to fund procurement activity, which has traditionally been supported by a share of profits from Chile's copper exports.

### Procurement

As shown in Figure 21, the Latin America and the Caribbean region tends to be a limited equipment-acquisition market: on average, only around 17% of regional states feature in each of the procurement

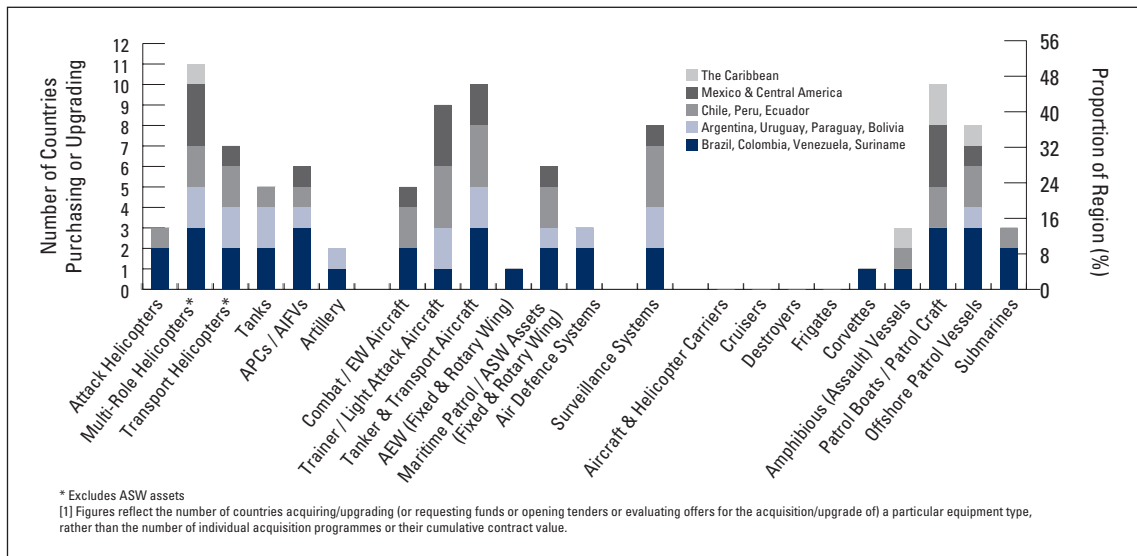


Figure 21 **Latin America & the Caribbean: Selected Procurement & Upgrade Priorities Since 2011<sup>1</sup>**

categories analysed, less than other emerging defence markets such as the Middle East and North Africa (24%) and Asia (38%). Reflecting its position as the region's largest defence spender, Brazil was active in more than three-quarters of the equipment categories. Other states with significant defence budgets in the region (i.e. above US\$4bn), such as Argentina, Chile, Colombia, Mexico and Venezuela, were represented in 30–50% of equipment categories. Peru was an outlier in this respect, active in around 50% of equipment categories despite a considerably smaller defence budget (at around US\$2.5bn) than the other states demonstrating similar levels of activity. As might be expected, the smallest defence spenders in the region – states in Central America and the Caribbean, which typically allocate less than US\$1bn to defence – were least engaged in regional armament markets, generally featuring in under 15% of acquisition categories.

Overall, regional procurement priorities have centred on improving air mobility and enhancing surveillance systems, as well as purchasing assets for counter-narcotics and internal- or border-security operations, particularly light attack aircraft, multi-role helicopters, offshore-patrol vessels and patrol boats.

#### *Combat and light attack/trainer aircraft*

Brazil's purchase of 36 new, advanced *Gripen* combat aircraft is an exception in the region – fighter acquisitions/upgrade activity has featured in just five states

since 2011, and in the case of Colombia, Chile and Ecuador orders were for refurbished second-hand aircraft. In general, with limited procurement budgets across the region, many states have instead focused on acquiring light attack/trainer aircraft that combine intelligence, surveillance and reconnaissance (ISR), and ground-attack capabilities. The acquisition/upgrade of such platforms has featured in nine out of 27 states since 2011. This has led to increased demand for Embraer's EMB-314 *Super Tucano*. Meanwhile, in 2015, Argentina, Chile and Peru all received deliveries of trainer aircraft, while Argentina's latest AT-63 advanced trainer variant, the *Pampa III*, was test flown in September 2015 for the first time.

#### *Rotary and fixed-wing airlift*

Rotary and fixed-wing airlift-platform acquisitions have featured heavily in the region, with 25–40% of states purchasing/upgrading these platforms since 2011. These include multi-year deliveries of UH-60 *Black Hawk* helicopters to Colombia, while Brazil and Mexico have also placed *Black Hawk* orders in recent years. A variety of platforms from Airbus Helicopters (formerly Eurocopter) have been delivered throughout the region since 2011, while Russian Mi-171 transport-helicopter variants have been delivered to Ecuador and Peru. Increased emphasis on air mobility has meant that transport-aircraft purchases/upgrade activity has also improved – featuring in ten out of 27 states since 2011 – with Mexico and Venezuela particularly active in this area.

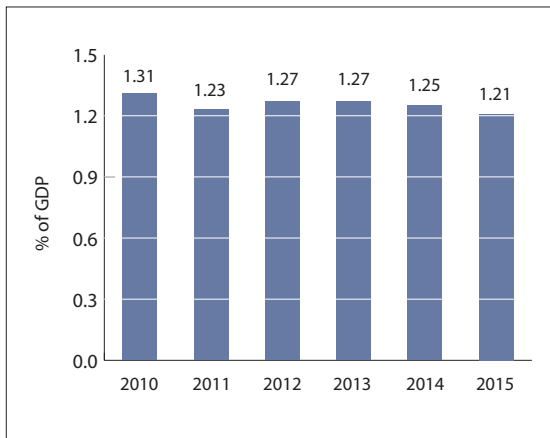


Figure 22 **Latin America and the Caribbean Regional Defence Expenditure** as % of GDP

#### *Offshore-patrol vessels and patrol boats*

In the naval arena, there has been more activity relating to offshore-patrol-vessel and patrol-boat acquisition/upgrades than to larger platforms. These vessels represented some of the most evenly distributed procurement activity in the region, with states from all parts of Latin America active in this market. As well as procurements from abroad, such as China and France's DCNS, regional shipyards are also increasingly active in meeting regional requirements for this type of vessel.

### **BRAZIL**

The Brazilian defence ministry in 2015 encountered new obstacles to its plans to modernise its military capabilities. While priority programmes such as the construction of a nuclear-powered submarine (SSN) progressed, budget cuts announced in May delayed other key procurement initiatives. The cuts are part of a far-reaching austerity effort, affecting all ministries, to reduce public debt and maintain investment-grade status from international rating agencies. In total, the government cut R\$69.9bn (US\$21.5bn) from the original 2015 expenditure forecast – the largest budgetary adjustment in contemporary Brazilian history. Defence lost 24% (R\$5.6bn/US\$1.7bn) of the funds allocated for maintenance and procurement in 2015, bringing total discretionary expenditure that year to R\$17bn (US\$5.2bn).

Despite the financially driven delays to priority programmes and the prospect of further budget limitations, there was no revision of the ambition of the programmes themselves – to strengthen the navy,

reinforce border surveillance, acquire Saab *Gripen* combat aircraft and further develop cyber-defence capabilities. Additionally, operations, training, salaries and facilities were not affected by the budget cuts, but the reduced scale of the regular *Ágata* counter-criminal mission in 2015 may be linked to budget restrictions and more pressing law-enforcement demands in Rio de Janeiro.

The delivery date for the Embraer KC-390 transport aircraft was postponed by almost two years and is now expected by the first half of 2018. Although the government provided the resources for the final stages of the aircraft's development, which was scheduled for 2015, the financing expected for commercial production was affected by the budget cuts. However, Embraer conducted a successful first test flight of the KC-390 in February, and the company has received orders from the Brazilian government, Argentina, the Czech Republic and Portugal, with interest expressed by others. Meanwhile, delivery of 50 H225M helicopters to the Brazilian armed forces by Helibras, the Brazilian subsidiary of Airbus, was also postponed by two years, with the new deadline set for 2019.

Meanwhile, Brazil's major defence-aerospace project, the procurement of Saab *Gripen* NG combat aircraft, got under way in Sweden. The contract came into effect on 10 September, marking the official start of the programme. The technology-transfer phase began in October, with Brazilian military and civilian specialists involved in the development phase in Sweden. Saab expects to establish in partnership with its local partner, Embraer, a *Gripen* NG assembly line in Brazil to begin producing the aircraft at a point as yet undetermined. First delivery of *Gripen* to the Brazilian Air Force is scheduled for 2019, with the last aircraft to be handed over by 2024.

A variety of domestic and foreign air-launched weapons are intended to be integrated with the *Gripen* NG. Primary air-to-air missiles (AAM) will include the South African Denel Dynamics *A-Darter* imaging infrared guided missile – developed in partnership with the Brazilian Air Force and Brazilian companies Mectron, Avibras and Optoeletrônica – and possibly the MBDA *Meteor* rocket/ramjet active-radar guided AAM. The AMR-1 anti-radiation missile is also intended for integration on the *Gripen* NG, as is the Israeli *Spice* precision-guided glide bomb. These weapons, combined with the aircraft's sensor suite of an active electronically scanned array radar and infra-red search and track, will provide the air force with a highly capable combat aircraft, argu-



ably superior to any other type presently in service on the continent.

At the same time, work continued on the first boat for the navy's core priority project, PROSUB, though this was reported to have been slowed. PROSUB will result in the construction of four *Scorpene*-class conventional submarines (SSKs) as well as the SSN. The first SSK is due to be delivered in 2018, while the SSN is expected by 2025, though this might now see some delay. However, the programme to develop surface vessels, PROSUPER, stalled due to budget constraints. The project, still in the bidding phase, includes plans for five 1,800-tonne offshore-patrol vessels, five 6,000-tonne escort frigates and one logistics-support vessel. In April 2015, Defence Minister Jaques Wagner euphemistically said the bidding process was 'temporarily paralysed' and that the project was 'hibernating'.

Another priority programme, the Integrated Border Monitoring System (SISFRON), also suffered delays. SISFRON is an ambitious army project to electronically monitor with radars, UAVs, electromagnetic sensors and satellites 17,000 kilometres of Brazil's land borders. The budget for the pilot phase, to be conducted along a 650km-long stretch of the border, was cut by 42% to R\$285m (US\$87.7m) in 2015. General Antonino dos Santos Guerra Neto, former commander of the army's Science and Technology Department Electronic Warfare Centre, told congress that at the current pace of funding, SISFRON would only be completed by 2074.

Nonetheless, the army – the lead service in Brazil's cyber-defence efforts – made progress in the cyber domain with the activation in July 2015 of the Cyber Defence Command Centre, aimed at integrating members from the three services of the armed forces. The centre began operating alongside a National Cyber Defence School, which will train personnel and offer postgraduate courses on cyber operations. Both organisations are subordinated to the army-led Cyber Defence Centre (CDCiber), which was inaugurated in Brasília in 2010.

The most immediate challenge for the armed forces is security for the 2016 Summer Olympic Games in Rio de Janeiro. The Joint Chiefs of Staff announced that 38,000 army, navy and air-force personnel will take part in the security operations. Another internal-security task for the armed forces has been participation in the pacification programme in the slums of Rio de Janeiro, a strategy that involves a permanent state presence in areas previously controlled by armed

criminal groups. A contingent of 3,300 members of the army and navy was responsible for law enforcement in one of the largest slum areas in the city, Maré, between April 2014 and June 2015. This chaotic urban area of 64,000 people living amid narrow streets allowed criminals to stage hit-and-run and sniper attacks against the armed forces, leading to the killing of one soldier on 28 November 2014.

Border-security operations, led by the army and usually targeting transnational criminal networks, were smaller in scale than in 2014, when the *Ágata 8* operation enveloped the entire 17,000km length of Brazil's borders. *Ágata 9*, in July 2015, involved security operations along just 4,000km of borders in four states of the south and southwest, combating criminal networks operating through Bolivia and Paraguay. However, *Ágata 10*, which took place during October, covered 11,400km of border through three states adjoining Bolivia, Peru, Colombia, Venezuela, Guyana, Suriname and French Guiana. In addition, between March and September, the army's 1st Jungle Infantry Brigade staged three border missions called *Operation Curare*, one on the northwestern border of Acre State and two on the northern frontier of Roraima State. The operation comes amid growing unrest and criminal violence in Venezuela. Alongside police and other civilian institutions, the military operations targeted criminal networks, particularly those engaged in illegal logging and drug trafficking.

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## MEXICO

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### Outward look amid continuing internal deployments

Mexico's domestic struggle against narco-traffickers and other criminal organisations continues. Significantly, and in response to pressure from the security forces, large drug-trafficking organisations – some boasting substantial weaponry – have in recent years fragmented and diversified into an array of criminal activities. These include: kidnapping; extortion; murder; fuel-siphoning and smuggling; logging; illegal mining; large-volume cattle theft; and highway cargo robberies, targeting multiple commodities.

Despite heightened domestic violence and criminal activity, the Mexican economy has grown at a steady rate. However, government and business agree that this recent shift in the organised criminal groups' business model threatens economic growth. Meanwhile, Mexico's local, state and federal police forces – hampered by a chronic capability deficit, as

well as corruption and jurisdictional issues – find themselves outnumbered and under-equipped in the struggle against organised crime. The armed forces have intervened to assist and at times replace law-enforcement agencies. Local and state law-enforcement reform is slowly under way but will take several more years to fully implement.

### Defence response

A 5,000-strong National Gendarmerie was created in mid-2014, with the aim of taking on the role of countering organised crime. When initially conceived in 2012, the gendarmerie was intended to become a fourth armed service. Personnel strength was envisioned to top 40,000 and it was to have its own intelligence, aviation and naval support branches, but this ambition has lost momentum. Instead, the gendarmerie will remain a division of the Federal Police, and be used for special interventions, such as in hotspots of criminality or areas affected by natural disasters. As a result, Mexico's armed forces will remain at the forefront of internal-security operations during 2016.

However, large-scale troop deployments to urban centres have been replaced with smaller, special-unit operations targeting the leadership of criminal organisations. At the same time, there has been an increase in military activities geared towards the protection of energy-production facilities, as well as transport and trade infrastructure. This is because the ten structural economic reforms announced in 2014, including to the energy and telecommunications sectors, are shortly expected to take effect. These were designed in part to introduce competition and increase the potential for private-sector participation in certain economic sectors. Reforms in the energy sector will, it is hoped, lead to an expansion in exploration and production; the fear is that the involvement of more companies could lead to greater opportunities for criminal gangs.

This concern has led the army to plan for 38 rapid-reaction units specifically tasked with patrolling and protecting electricity, oil and gas installations. These units will be equipped with a mix of light tactical and fast-response vehicles, as well as embedded C4ISR (or command, control, communications, computers, intelligence, surveillance and reconnaissance) assets. Their main task will be to provide surveillance, patrolling and quick-reaction forces to counter fuel-siphoning and smuggling. The state oil company, PEMEX, is directly funding the acquisition of mobile command posts, as well as fixed and mobile

ground-surveillance systems. In addition, a variety of UAVs – including the *Hermes 450*, *G1 Guerrero* and *S4 Ehécatl* – are employed by the air force to provide ISR over strategic installations and key transport infrastructure. PEMEX has also supplied the navy with six Rafael *Protector* unmanned surface vessels to provide surveillance of its oil and gas terminals in the Campeche Sound.

The navy is creating a network of coastal search-and-rescue (SAR) stations, *Estaciones Navales de Búsqueda y Rescate*, equipped with fast boats, land-based helicopters and UAVs that can also provide security for offshore energy exploration and production facilities. Furthermore, in order to provide security at Mexican ports, it will in 2016 establish specialised units tasked with port security and protection, similar to the 14 existing *Centro Unificado de Protección Marítima y Portuaria* (Unified Maritime and Port Protection Centres) and 19 *Unidades Navales de Protección Portuaria* (Naval Port Protection Units). Two H225LP long-range helicopters are being procured to provide rapid reaction, SAR and logistics support for offshore oil and gas facilities.

### Force modernisation

As well as the adaptations forced on Mexico's armed forces by substantial internal-security operations, they are also modernising to prepare for new external commitments – potentially including international peacekeeping missions. This comes after the September 2014 announcement by the president that Mexico would participate in such operations. Augmenting power-projection capabilities is now seen as a requirement, as Mexico's involvement in regional training exercises evolves towards supporting extra-regional multinational operations.

Mexico's armed forces have begun to set out their requirements for capability modernisation. The navy is at the forefront of this programme. It launched two landing ship tanks during 2013–14 and in July 2015 started a project to locally build a multi-role frigate. The army and air force will follow with requirements for new armour, artillery, transport and C4ISR aircraft, light attack helicopters, and multi-role combat aircraft.

Separate to this, Mexico has invested nearly US\$4.7bn in new procurement since 2013, most of which has been allocated to updating air-mobility and ISR assets. Mexican defence spending has also long been below the regional average, traditionally between 0.4% and 0.6% of GDP. Sustained economic

growth has meant that while overall defence spending is more than US\$8bn, it remains within the aforementioned range as a proportion of GDP. The government's plan is to increase defence expenditure to 1% of GDP by 2018, mainly to fund deeper force-modernisation requirements.

Air-force and naval-aviation squadrons have begun to replace ageing Pilatus PC-7 and L-90TP *Redigo* trainers with a new fleet of T-6C+ *Texan II* tactical support aircraft; as of late 2015, 65 had been ordered for both services. The Beech 350ER *King Air* is becoming the standard ISR platform for both services, with 14 ordered so far. Likewise, both services have standardised on the Airbus Military C-295M as their medium transport aircraft and are procuring up to 26 UH-60M *Black Hawks*, 18 of which are destined for the air force and eight for the navy, with deliveries expected to begin in 2016. Meanwhile, the army and marines have received the first few

hundred of an expected 3,335 HMMWVs, including some up-armoured variants, deliveries of which will continue in 2016.

The navy is continuing with procurement of the locally assembled *Tenochtitlan*-class (Damen Stan 4207) patrol vessels, taking overall procurement to 14, along with 24 additional *Polaris II*-class (IC 16M) interceptor craft and local construction of four new 1,680-tonne *Oaxaca*-class offshore-patrol vessels (OPVs), the first of which is due to be delivered in late 2016. Maritime patrol will be augmented by up to four more CN-235MP *Persuader* surveillance aircraft, to join the six already in service, and the delivery of ten AS565MBe *Panther* multi-role helicopters to serve aboard OPVs. It is believed that these assets will form part of the inventory of Mexico's new coast guard, intended to operate as an arm of the regular navy, which was announced in August 2015. It is possible that this new formation may be stood up before the end of 2016.

## Antigua and Barbuda ATG

East Caribbean Dollar EC\$	2014	2015	2016
GDP	EC\$ 3.37bn	3.47bn	
	US\$ 1.25bn	1.29bn	
<i>per capita</i>	US\$ 14,126	14,391	
Growth	% 4.2	2.2	
Inflation	% 1.1	0.8	
Def bdtg [a]	EC\$ 74m	72m	
	US\$ 27m	27m	

US\$1=EC\$ 2.70 2.70

[a] Budget for the Ministry of Legal Affairs, Public Safety, Immigration & Labour

Population 92,436

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.1%	4.5%	3.9%	3.4%	20.1%	3.2%
Female	11.7%	4.5%	4.0%	3.8%	24.3%	4.3%

### Capabilities

Internal security and counter-narcotics operations are the main focus for the state's small armed forces. Regional cooperation is evident in long-standing involvement with the *Tradewinds* exercise series and ongoing efforts to counter the illicit narcotics trade, including a recent joint operation with Jamaican authorities. The defence forces also maintain a disaster-response remit, contributing to 2015 relief efforts in the Dominican Republic. China has donated equipment including vehicles, motorbikes and general supplies. While 2015 saw the closure of the US air station – a radar-tracking and telemetry facility – both the US and Antigua authorities stressed future opportunities for defence cooperation; these already exist in areas like training exercises, but also in training for selected personnel in US military academies.

#### ACTIVE 180 (Army 130 Coast Guard 50)

(all services form combined Antigua and Barbuda Defence Force)

#### RESERVE 80 (Joint 80)

### ORGANISATIONS BY SERVICE

#### Army 130

##### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 inf bn HQ

1 inf coy

##### COMBAT SERVICE SUPPORT

1 spt gp (1 engr unit, 1 med unit)

#### Coast Guard 50

##### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS • PB 2: 1

*Dauntless*; 1 *Swift*

## Argentina ARG

Argentine Peso P	2014	2015	2016
GDP	P 4.41tr	5.24tr	
	US\$ 543bn	579bn	
<i>per capita</i>	US\$ 12,735	13,428	
Growth	% 0.5	0.4	
Inflation	% n.k.	16.8	
Def bdtg	P 35.1bn	58.7bn	67.8bn
	US\$ 4.32bn	6.49bn	

US\$1=P 8.13 9.05

Population 43,431,886

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.7%	4.0%	4.0%	3.8%	20.0%	4.8%
Female	12.1%	3.8%	3.8%	3.8%	20.5%	6.7%

### Capabilities

Hampered by limited funding, Argentina's armed forces have prioritised border security, surveillance and counter-narcotics tasks, in particular through the *Northern Shield* operation. Equipment in all services is ageing and increasingly difficult and expensive to maintain, leading to low levels of availability and operational readiness. Upgrade programmes are under way for some key equipment types, such as the TAM main battle tank fleet and the navy's submarines, but the 2015 retirement of the air force's *Mirage* fleet without replacement underlines the challenge in maintaining existing conventional capabilities under budgetary pressure. Power-projection capability is extremely limited, although units continue to contribute to UN peace-keeping missions and the binational force with Chile.

**ACTIVE 74,400 (Army 42,800 Navy 19,000 Air 12,600) Paramilitary 31,250**

### ORGANISATIONS BY SERVICE

#### Army 42,800; 7,000 civilian

Regt and gp are usually bn-sized

##### FORCES BY ROLE

##### SPECIAL FORCES

1 SF gp

##### MANOEUVRE

###### Mechanised

1 (1st) div (1 armd bde (4 tk regt, 1 mech inf regt, 1 SP arty gp, 1 cbt engr bn, 1 int coy, 1 sigs coy, 1 log coy), 1 (3rd) jungle bde (2 jungle inf regt, 1 arty gp, 1 engr bn, 1 int coy, 1 sigs coy, 1 log coy, 1 med coy); 1 (12th) jungle bde (3 jungle inf regt, 1 arty gp, 1 engr bn, 1 int coy, 1 sigs coy, 1 log coy, 1 med coy), 2 engr bn, 1 sigs bn, 1 log coy)

1 (3rd) div (1 mech bde (1 armd recce regt, 1 tk regt, 2 mech inf regt, 1 SP arty gp, 1 cbt engr bn, 1 int coy, 1 sigs coy, 1 log coy), 1 mech bde (1 armd recce tp, 1 tk regt, 2 mech inf regt, 1 SP arty gp, 1 cbt engr bn, 1 int coy, 1 sigs coy, 1 log coy), 1 int bn, 1 sigs bn, 1 log coy)

1 (Rapid Deployment) force (1 armd bde (1 recce sqn, 3 tk regt, 1 mech inf regt, 1 SP arty gp, 1 cbt engr coy, 1 int coy, 1 sigs coy, 1 log coy), 1 mech bde (1 armd recce regt, 3 mech inf regt, 1 arty gp, 1 cbt engr coy, 1 int coy, 1 sigs coy, 1 log coy), 1 AB bde (1 recce tp, 2 para regt, 1 arty gp, 1 cbt engr coy, 1 sigs coy, 1 log coy), 1 AD gp (2 AD bn))

**Light**

1 mot cav regt (presidential escort)

**Air Manoeuvre**

1 air aslt regt

**Mountain**

1 (2nd) div (2 mtn inf bde (1 armd recce regt, 3 mtn inf regt, 2 arty gp, 1 cbt engr bn, 1 sigs coy, 1 log coy), 1 mtn inf bde (1 armd recce bn, 2 mtn inf regt, 1 jungle inf regt, 2 arty gp, 1 cbt engr bn, 1 sigs coy, 1 construction coy, 1 log coy), 1 AD gp, 1 sigs bn)

**Aviation**

1 avn gp (bde) (1 avn bn, 1 hel bn)

**COMBAT SUPPORT**

1 arty gp (bn)

1 engr bn

1 sigs gp (1 EW bn, 1 sigs bn, 1 maint bn)

1 sigs bn

1 sigs coy

**COMBAT SERVICE SUPPORT**

5 maint bn

**EQUIPMENT BY TYPE**

**MBT** 213: 207 TAM, 6 TAM S21

**LT TK** 123: 112 SK-105A1 *Kuerassier*; 6 SK-105A2

*Kuerassier*; 5 *Patagón*

**RECCE** 47 AML-90

**AIFV** 377: 263 VCTP (incl variants); 114 M113A2 (20mm cannon)

**APC (T)** 294: 70 M113A1-ACAV; 224 M113A2

**ARTY** 1,113

**SP 155mm** 37: 20 Mk F3; 17 VCA 155 *Palmaria*

**TOWED** 185: **105mm** 76 M-56 (Oto Melara); **155mm**

109: 25 CITEFA M-77/CITEFA M-81; 84 SOFMA L-33

**MRL** 8: **105mm** 4 SLAM *Pampero*; **127mm** 4 CP-30

**MOR** 883: **81mm** 492; **120mm** 353 Brandt

**SP** 38: **107mm** 25 M106A2; **120mm** 13 TAM-VCTM

**AT**

**MSL** • **SP** 3 M1025 HMMWV with TOW-2A

**RCL** **105mm** 150 M-1968

**AIRCRAFT**

**TPT** • **Light** 17: 1 Beech 80 *Queen Air*; 1 C-212-200

*Aviocar*; 3 Cessna 207 *Stationair*; 2 Cessna 208EX *Grand*

*Caravan*; 1 Cessna 500 *Citation* (survey); 2 DHC-6 *Twin*

*Otter*; 3 SA-226 *Merlin* IIIA; 3 SA-226AT *Merlin* IVA; 1

*Sabreliner* 75A (*Gaviao* 75A)

**TRG** 5 T-41 *Mescalero*

**HELICOPTERS**

**MRH** 5: 4 SA315B *Lama*; 1 Z-11

**TPT** 47: **Medium** 3 AS332B *Super Puma*; **Light** 44: 1 Bell

212; 25 Bell 205 (UH-1H *Iroquois* – 6 armed); 5 Bell 206B3;

13 UH-1H-II *Huey* II

**AD**

**SAM** 6 RBS-70

**GUNS** • **TOWED** 371: **20mm** 230 GAI-B01; **30mm** 21 HS L81; **35mm** 12 GDF Oerlikon (*Skyguard* fire control);

**40mm** 108: 24 L/60 (training); (40 more in store); 76 L/60; 8 L/70

**RADAR** • **AD RADAR** 11: 5 Cardion AN/TPS-44;

6 *Skyguard*

**LAND** 18+: M113A1GE *Green Archer* (mor); 18 RATRAS (veh, arty)

**ARV** *Greif*

**Navy 19,000; 7,200 civilian**

Commands: Surface Fleet, Submarines, Naval Avn, Marines

**FORCES BY ROLE****SPECIAL FORCES**

1 (diver) SF gp

**EQUIPMENT BY TYPE****SUBMARINES** • **TACTICAL** • **SSK** 3:

1 *Salta* (GER T-209/1200) with 8 single 533mm TT with Mk 37/SST-4 HWT

2 *Santa Cruz* (GER TR-1700) with 6 single 533mm TT with SST-4 HWT (one undergoing MLU)

**PRINCIPAL SURFACE COMBATANTS** 11**DESTROYERS** 5

**DDGHM** 4 *Almirante Brown* (GER MEKO 360) with

2 quad Inchr with MM-40 *Exocet* ASHM, 1 octuple

*Albatros* Inchr with *Aspide* SAM, 2 triple B515

ILAS-3 324mm TT with A244 LWT, 1 127mm gun

(capacity 1 AS555 *Fennec*/SA316B *Alouette* III hel)

**DDH** 1 *Hercules* (UK Type-42 – utilised as a fast troop transport ship), with 1 114mm gun (capacity 1 SH-3H *Sea King* hel)

**FRIGATES** • **FFGHM** 6:

6 *Espora* (GER MEKO 140) with 2 twin Inchr with

MM-38 *Exocet* ASHM, 2 triple B515 ILAS-3 324mm

ASTT with A244 LWT, 1 76mm gun (capacity either

1 SA319 *Alouette* III hel or 1 AS555 *Fennec* hel)

**PATROL AND COASTAL COMBATANTS** 17

**CORVETTES** • **FSG** 3 *Drummond* (FRA A-69) with 2

twin Inchr with MM-38 *Exocet* ASHM, 2 triple Mk32

324mm ASTT with A244 LWT, 1 100mm gun

**PSO** 3:

2 *Irigoyen* (ex-US *Cherokee*)

1 *Teniente Olivieri* (ex-US oilfield tug)

**PCO** 3:

2 *Murature* (ex-US *King* – trg/river patrol role) with 3 105mm gun

1 *Sobral* (ex-US *Sotoyomo*)

**PCGT** 1 *Intrepida* (GER Lurssen 45m) with 2 single Inchr

with MM-38 *Exocet* ASHM, 2 single 533mm TT with

SST-4 HWT, 1 76mm gun

**PCC** 1 *Intrepida* (GER Lurssen 45m) with 1 76mm gun

**PB** 6: 4 *Baradero* (*Dabur*); 2 *Point*

**AMPHIBIOUS** 18 LCPV**LOGISTICS AND SUPPORT** 26

**ABU** 3 *Red*

**AFD** 1

**AGB** 1 *Almirante Irizar* (damaged by fire in 2007; now expected to return to service in 2015)

**AGE** 2

**AGHS** 1 *Puerto Deseado* (ice-breaking capability, used for polar research)



AGOR 1 *Comodoro Rivadavia*  
 AK 3 *Costa Sur*  
 AOR 1 *Patagonia* (FRA *Durance*) with 1 hel platform  
 AORL 1 *Ingeniero Julio Krause*  
 AXS 1 *Libertad*  
 YTB 11

## Naval Aviation 2,000

### EQUIPMENT BY TYPE

AIRCRAFT 23 combat capable  
 FGA 2 *Super Etendard* (9 more in store)  
 ATK 1 AU-23 *Turbo Porter*  
 ASW 10: 4 S-2T *Tracker*; 6 P-3B *Orion*  
 TPT 9: **Light** 7 *Beech 200F/M King Air*; **PAX** 2 F-28  
*Fellowship*  
 TRG 10 T-34C *Turbo Mentor\**

### HELICOPTERS

ASW 6 SH-3H (ASH-3H) *Sea King*  
 MRH 4 AS555 *Fennec*  
 TPT • **Medium** 4 UH-3H *Sea King*

### MSL

AAM • IR R-550 *Magic*  
 ASM AS-25K CITEFA *Martin Pescador* †  
 AShM AM-39 *Exocet*

## Marines 2,500

### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

1 (fleet) force (1 cdo gp, 1 (AAV) amph bn, 1 mne bn, 1 arty bn, 1 ADA bn)  
 1 (fleet) force (2 mne bn, 2 navy det)  
 1 force (1 mne bn)

### EQUIPMENT BY TYPE

RECCE 12 ERC-90F *Sagaie*  
 APC (W) 24 Panhard VCR  
 AAV 17: 10 LARC-5; 7 LVTP-7  
 ARTY 94  
 TOWED 24: **105mm** 18: 6 M101; 12 Model 56 pack howitzer; 155mm 6 M114  
 MOR 70: **81mm** 58; **120mm** 12  
 AT • **RCL 105mm** 30 M-1974 FMK-1  
 AD  
 SAM 6 RBS-70  
 GUNS **30mm** 10 HS-816; **35mm** GDF-001  
 ARV AAVR 7

## Air Force 12,600; 6,900 civilian

4 Major Comds – Air Operations, Personnel, Air Regions, Logistics, 8 air bde

### Air Operations Command

#### FORCES BY ROLE

##### GROUND ATTACK

2 sqn with A-4/OA-4 (A-4AR/OA-4AR) *Skyhawk*  
 2 (tac air) sqn with IA-58 *Pucara*; EMB-312 *Tucano* (on loan for border surv/interdiction)

##### ISR

1 sqn with Learjet 35A

### SEARCH & RESCUE/TRANSPORT HELICOPTER

2 sqn with Bell 212; Bell 212 (UH-1N); Mi-171, SA-315B *Lama*

### TANKER/TRANSPORT

1 sqn with C-130B/E/H *Hercules*; KC-130H *Hercules*; L-100-30

### TRANSPORT

1 sqn with B-707  
 1 sqn with DHC-6 *Twin Otter*; Saab 340  
 1 sqn with F-27 *Friendship*  
 1 sqn with F-28 *Fellowship*; Learjet 60  
 1 (Pres) flt with B-757-23ER; S-70A *Black Hawk*, S-76B

### TRAINING

1 sqn with AT-63 *Pampa*  
 1 sqn with EMB-312 *Tucano*  
 1 sqn with Grob 120TP  
 1 hel sqn with Hughes 369; SA-315B *Lama*

### TRANSPORT HELICOPTER

1 sqn with Hughes 369; MD-500; MD500D

### EQUIPMENT BY TYPE

#### AIRCRAFT 72 combat capable

FGA (8 *Mirage IIID/E* (*Mirage IIIDA/EA*); 7 *Nesher S* (*Dagger A*), 3 *Nesher T* (*Dagger B*) all being withdrawn by end 2015)

ATK 52: 20 A-4 (A-4AR) *Skyhawk*; 2 OA-4 (OA-4AR) *Skyhawk*; 21 IA-58 *Pucara*; 9 IA-58M *Pucara*

ELINT 1 Cessna 210

TKR 2 KC-130H *Hercules*

TPT 38: **Medium** 7: 1 C-130B *Hercules*; 1 C-130E *Hercules*; 4 C-130H *Hercules*; 1 L-100-30; **Light** 22: 1 Cessna 310; 8 DHC-6 *Twin Otter*; 4 F-27 *Friendship*; 4 Learjet 35A (test and calibration); 1 Learjet 60; 4 Saab 340; **PAX** 9: 1 B-737; 1 B-757-23ER; 7 F-28 *Fellowship*

TRG 49: 20 AT-63 *Pampa\** (LIFT); 19 EMB-312 *Tucano*; 10 Grob 120TP

### HELICOPTERS

MRH 28: 1 Bell 412EP; 15 Hughes 369; 3 MD-500; 4 MD-500D; 5 SA315B *Lama*

TPT 11 **Medium** 3: 2 Mi-171E; 1 S-70A *Black Hawk*; **Light** 8: 7 Bell 212; 1 S-76B

### MSL

AAM • IR AIM-9L *Sidewinder*; R-550 *Magic*; *Shafir* II †

### AD

GUNS 88: **20mm**: 86 Oerlikon/Rh-202 with 9 Elta EL/M-2106 radar; **35mm**: 2 Oerlikon GDF-001 with *Skyguard* radar

RADAR 6: 5 AN/TPS-43; 1 BPS-1000

## Paramilitary 31,250

### Gendarmerie 18,000

Ministry of Security

#### FORCES BY ROLE

##### COMMAND

7 regional comd

##### SPECIAL FORCES

1 SF unit

##### MANOEUVRE

##### Other

17 paramilitary bn

**Aviation**

1 (mixed) avn bn

**EQUIPMENT BY TYPE**RECCE S52 *Shorland*APC (W) 87: 47 *Grenadier*; 40 UR-416

ARTY • MOR 81mm

**AIRCRAFT**TPT • Light 12: 3 Cessna 152; 3 Cessna 206; 1 Cessna 336; 1 PA-28 *Cherokee*; 2 PC-6B *Turbo Porter*; 2 PC-12**HELICOPTERS**

MRH 2 MD-500C

TPT • Light 16: 5 Bell 205 (UH-1H *Iroquois*); 7 AS350 *Ecureuil*; 1 H135; 3 R-44 *Raven II*

TRG 1 S-300C

**Prefectura Naval (Coast Guard) 13,250**

Ministry of Security

**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 67

PCO 6: 1 *Delfin*; 5 *Mantilla* (F30 *Halcón* – undergoing modernisation)PCC 2: 1 *Mandubi*; 1 *Mariano Moreno*PBF 1 *Surel*PB 57: 1 *Dorado*; 25 *Estrelleamar*; 2 *Lynch* (US *Cape*); 18 *Mar del Plata* (Z-28); 8 *Damen Stan 2200*; 3 *Stan Tender 1750*PBR 1 *Tonina***LOGISTICS & SUPPORT 19**

AG 2

ARS 3

AX 4

YTL 10

**AIRCRAFT**MP 1 Beech 350ER *King Air*TPT • Light 6: 5 C-212 *Aviocar*; 1 Beech 350ER *King Air*TRG 2 Piper PA-28 *Archer III***HELICOPTERS**SAR 3 AS565MA *Panther*MRH 1 AS365 *Dauphin 2*TPT 5: Medium 3: 1 H225 *Puma*; 2 SA330L (AS330L) *Puma*; Light 2 AS355 *Ecureuil II*

TRG 4 S-300C

**DEPLOYMENT****CYPRUS**

UN • UNFICYP 265; 2 inf coy; 1 hel flt; 2 Bell 212

**HAITI**

UN • MINUSTAH 72; 1 fd hospital

**MIDDLE EAST**

UN • UNTSO 3 obs

**WESTERN SAHARA**

UN • MINURSO 3 obs

**Bahamas BHS**

Bahamian Dollar B\$		2014	2015	2016
GDP	B\$	8.51bn	8.88bn	
	US\$	8.51bn	8.88bn	
<i>per capita</i>	US\$	23,629	24,394	
Growth	%	1.0	1.2	
Inflation	%	1.2	1.7	
Def exp	B\$	123m		
	US\$	123m		
Def bdgt	B\$	87m	102m	121m
	US\$	87m	102m	
US\$1=B\$		1.00	1.00	

Population 324,597

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	11.7%	4.3%	4.4%	3.9%	22.0%	2.8%
Female	11.3%	4.1%	4.3%	3.8%	23.0%	4.4%

**Capabilities**

The Royal Bahamas Defence Force is tasked primarily with maritime security and counter-narcotics operations, but also has a strong disaster-relief remit, as was evident in the response to the October 2015 Hurricane Joaquin. The ongoing 'Sandy Bottom' project reflects these responsibilities, providing a substantial fleet upgrade coupled with significant investment in infrastructure at the main base at Coral Harbour and at forward locations. The first of four smaller 30-metre-class vessels was delivered in August 2015, as part of the plan to deliver eight patrol vessels in two classes. A single 56m roll-on/roll-off landing craft is scheduled for delivery in early 2016, providing a limited amphibious capability for domestic, and potentially regional, relief efforts. The country is a regular participant in the *Tradewinds* exercise series and has an ongoing training relationship with US forces.

**ACTIVE 1,300****ORGANISATIONS BY SERVICE****Royal Bahamian Defence Force 1,300****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 mne coy (incl marines with internal and base security duties)

**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 20 (additional 7+ patrol boats under 10 tonnes)

PCC 2 *Bahamas*PBF 6 *Nor-Tech*PB 12: 4 *Arthur Dion Hanna*; 2 *Dauntless*; 1 *Eleuthera*; 1 *Protector*; 2 *Sea Ark 12m*; 2 *Sea Ark 15m*AIRCRAFT • TPT • Light 3: 1 Beech A350 *King Air*; 1 Cessna 208 *Caravan*; 1 P-68 *Observer*

## FOREIGN FORCES

Guyana Navy: Base located at New Providence Island

### Barbados BRB

Barbados Dollar B\$		2014	2015	2016
GDP	B\$	8.71bn	8.9bn	
	US\$	4.35bn	4.45bn	
per capita	US\$	15,603	15,912	
Growth	%	0.2	1.0	
Inflation	%	1.9	1.2	
Def bdgt [a]	B\$	70m	67m	
	US\$	35m	33m	
US\$1=B\$		2.00	2.00	

[a] Defence & security expenditure

Population 290,604

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.1%	3.1%	3.5%	3.5%	24.8%	4.3%
Female	9.1%	3.2%	3.5%	3.5%	25.8%	6.5%

### Capabilities

Maritime security and resource protection are key roles for the Barbados Defence Force. It also has limited ability to participate in regional peacekeeping and disaster relief, deploying to the Dominican Republic for these tasks in August 2015. The country takes part in the *Tradewinds* exercise series. Barbados is home to the headquarters of the Regional Security System (RSS), a grouping of Caribbean nations' police, security and military capabilities that can be called on to address threats to regional security, counter-narcotics and disaster-relief situations, among others. A US–Canada project to modernise the RSS's two C-26 aircraft commenced in 2014.

**ACTIVE 610** (Army 500 Coast Guard 110)

**RESERVE 430** (Joint 430)

### ORGANISATIONS BY SERVICE

#### Army 500

##### FORCES BY ROLE

##### MANOEUVRE

##### Light

1 inf bn (cadre)

#### Coast Guard 110

HQ located at HMBS Pelican, Spring Garden

##### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS • PB 6:**  
1 *Dauntless*; 2 *Enterprise* (Damen Stan 1204); 3 *Trident* (Damen Stan 4207)

**LOGISTICS & SUPPORT • AX 1**

### Belize BLZ

Belize Dollar BZ\$		2014	2015	2016
GDP	BZ\$	3.4bn	3.53bn	
	US\$	1.7bn	1.76bn	
per capita	US\$	4,760	4,842	
Growth	%	3.6	2.2	
Inflation	%	1.2	0.1	
Def bdgt [a]	BZ\$	35m	41m	41m
	US\$	17m	20m	
FMA (US)	US\$	1m	0.8m	1m
US\$1=BZ\$		2.00	2.00	

[a] Excludes funds allocated to Coast Guard and Police Service

Population 347,369

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	17.8%	5.5%	5.1%	4.6%	15.9%	1.7%
Female	17.1%	5.3%	4.9%	4.4%	15.7%	2.0%

### Capabilities

The principal task for Belize's small armed forces is territorial defence. Other tasks include support to civil authorities and, recently, support to law-enforcement authorities. However, most recent activity has focused on countering narcotics smuggling, although the ability to carry this out is hampered by insufficient maritime-patrol or aerial-surveillance and interdiction capacity. There is limited capability to project power. There are established training relationships with the US (including maintenance support), the UK and regional states.

**ACTIVE €1,050** (Army €1,050)

**RESERVE 700** (Joint 700)

### ORGANISATIONS BY SERVICE

#### Army €1,050

##### FORCES BY ROLE

##### MANOEUVRE

##### Light

3 inf bn (3 inf coy)

##### COMBAT SERVICE SUPPORT

1 spt gp

##### EQUIPMENT BY TYPE

MOR 81mm 6

RCL 84mm 8 *Carl Gustav*

#### Air Wing

##### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT • Light 3: 1 BN-2A *Defender*; 1 BN-2B *Defender*; 1 Cessna 182 *Skylane*

TRG 1 T-67M-200 *Firefly*

## Reserve

### FORCES BY ROLE

#### MANOEUVRE

Light  
3 inf coy

### Paramilitary 150

#### Coast Guard 150

#### EQUIPMENT BY TYPE

Approx 20 small craft under 10 tonnes

## FOREIGN FORCES

United Kingdom Army 10

Bolivia BOL						
Bolivian Boliviano B		2014	2015	2016		
GDP	B	228bn	230bn			
	US\$	33.2bn	33.5bn			
<i>per capita</i>	US\$	2,943	2,915			
Growth	%	5.5	4.1			
Inflation	%	5.8	4.3			
Def bdgt	B	2.78bn	2.99bn			
	US\$	405m	435m			
US\$1=B		6.86	6.86			
Population	10,800,882					
Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	16.7%	5.1%	4.8%	4.5%	16.1%	2.2%
Female	16.1%	5.0%	4.7%	4.4%	17.4%	2.8%

## Capabilities

Counter-narcotics and internal and border security are the main tasks of the armed forces, and modest procurement programmes are intended to improve the services' ability to undertake these roles. The current modernisation plan is scheduled to run until 2025, with a budget increase funded by a hydrocarbon tax. Airspace monitoring and air-traffic management have been key requirements, and in November Bolivia signed a contract for radar systems to this end. The government plans to increase military personnel, to over 38,000, to help increase the military presence in the provinces, and an additional army division was established in late 2014 with responsibility for the southern border regions with Argentina and Chile. International deployments have been restricted to UN peacekeeping missions and power-projection capacity remains extremely limited. In late 2015, a methodology seminar was held as part of the process to develop a new defence white paper; the white paper was reported to be well advanced.

**ACTIVE 34,100** (Army 22,800 Navy 4,800 Air 6,500)

**Paramilitary 37,100**

*Conscript liability* 12 months (18-22 years of age)

## ORGANISATIONS BY SERVICE

**Army 9,800; 13,000 conscript (total 22,800)**

### FORCES BY ROLE

#### COMMAND

6 mil region HQ  
10 div HQ

#### SPECIAL FORCES

3 SF regt

#### MANOEUVRE

##### Reconnaissance

1 mot cav gp

##### Armoured

1 armd bn

##### Mechanised

1 mech cav regt

2 mech inf regt

##### Light

1 (aslt) cav gp

5 (horsed) cav gp

3 mot inf regt

21 inf regt

1 (Presidential Guard) inf regt

#### Air Manoeuvre

2 AB regt (bn)

#### Aviation

2 avn coy

#### COMBAT SUPPORT

6 arty regt (bn)

1 ADA regt

6 engr bn

1 int coy

1 MP bn

1 sigs bn

#### COMBAT SERVICE SUPPORT

2 log bn

### EQUIPMENT BY TYPE

**LT TK 54:** 36 SK-105A1 *Kuerassier*; 18 SK-105A2 *Kuerassier*

**RECCE 24 EE-9** *Cascavel*

**APC 148+**

**APC (T) 87+:** 50+ M113, 37 M9 half-track

**APC (W) 61:** 24 EE-11 *Urutu*; 22 MOWAG *Roland*; 15 V-100 *Commando*

**ARTY 311+**

**TOWED 61:** 105mm 25 M101A1; 122mm 36 M-30 (M-1938)

**MOR 250+:** 81mm 250 M29; Type-W87; 107mm M30; 120mm M120

#### AT

##### MSL

SP 2 *Koyak* with HJ-8

MANPATS HJ-8

**RCL 90mm M67; 106mm M40A1**

#### AIRCRAFT

**TPT • Light 4:** 1 Fokker F-27-200; 1 Beech 90 *King Air*; 1

C-212 *Aviocar*; 1 Cessna 210 *Centurion*

#### HELICOPTERS

MRH 6 H425

TRG 1 Robinson R55

**AD • GUNS • TOWED 37mm** 18 Type-65  
**ARV** 4 4K-4FA-SB20 *Greif*; M578

### Navy 4,800

Organised into six naval districts with HQ located at Puerto Guayaramerín.

#### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS • PBR** 3: 1 *Santa Cruz*; 2 others (additional five patrol boats and 30–40 small craft under 10 tonnes)

#### LOGISTICS AND SUPPORT 27

**AG** 1  
**AH** 2  
**YFL** 10 (river transports)  
**YTL** 14

**Marines** 1,700 (incl 1,000 Naval Military Police)

#### FORCES BY ROLE

##### MANOEUVRE

###### Mechanised

1 mech inf bn

###### Amphibious

6 mne bn (1 in each Naval District)

##### COMBAT SUPPORT

4 (naval) MP bn

**Air Force** 6,500 (incl conscripts)

#### FORCES BY ROLE

##### GROUND ATTACK

2 sqn with AT-33AN *Shooting Star*  
 1 sqn with K-8WB *Karakorum*

##### ISR

1 sqn with Cessna 206; Cessna 402; Learjet 25B/25D (secondary VIP role)

##### SEARCH & RESCUE

1 sqn with AS332B *Super Puma*; H125 *Ecureuil*; H145

##### TRANSPORT

1 sqn with BAe-146-100; CV-580; MA60  
 1 (TAB) sqn with C-130A *Hercules*; MD-10-30F  
 1 sqn with C-130B/H *Hercules*  
 1 sqn with F-27-400M *Troopship*  
 1 (VIP) sqn with Beech 90 *King Air*; Beech 200 *King Air* Beech 1900; *Falcon* 900EX; *Sabreliner* 60  
 6 sqn with Cessna 152/206; IAI-201 *Arava*; PA-32 *Saratoga*; PA-34 *Seneca*

##### TRAINING

1 sqn with DA40; T-25  
 1 sqn with Cessna 152/172  
 1 sqn with PC-7 *Turbo Trainer*  
 1 hel sqn with R-44 *Raven II*

##### TRANSPORT HELICOPTER

1 (anti-drug) sqn with Bell 205 (UH-1H *Iroquois*)

##### AIR DEFENCE

1 regt with Oerlikon; Type-65

#### EQUIPMENT BY TYPE

**AIRCRAFT** 38 combat capable

**ATK** 15 AT-33AN *Shooting Star*  
**TPT** 85: **Heavy** 1 MD-10-30F; **Medium** 4: 1 C-130A *Hercules*; 2 C-130B *Hercules*; 1 C-130H *Hercules*; **Light**

70: 1 *Aero Commander* 690; 3 Beech 90 *King Air*; 2 Beech 200 *King Air*; 1 Beech 1900; 5 C-212-100; 10 Cessna 152; 2 Cessna 172; 19 Cessna 206; 1 Cessna 402; 1 CV-580; 9 DA40; 3 F-27-400M *Troopship*; 4 IAI-201 *Arava*; 2 Learjet 25B/D; 2 MA60; 1 PA-32 *Saratoga*; 3 PA-34 *Seneca*; 1 *Sabreliner* 60; **PAX** 10: 1 B-727; 3 B-737-200; 5 BAe-146-100; 1 *Falcon* 900EX (VIP)

**TRG** 29: 6 K-8W *Karakorum*\*; 6 T-25; 17 PC-7 *Turbo Trainer*\*

#### HELICOPTERS

**MRH** 1 SA316 *Alouette III*

**TPT** 31: **Medium** 2 AS332B *Super Puma*; **Light** 29: 2 H125 *Ecureuil*; 19 Bell 205 (UH-1H *Iroquois*); 2 H145; 6 R-44 *Raven II*

**AD • GUNS** 18+: **20mm** Oerlikon; **37mm** 18 Type-65

**Paramilitary** 37,100+

**National Police** 31,100+

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

27 frontier sy unit  
 9 paramilitary bde  
 2 (rapid action) paramilitary regt

**Narcotics Police** 6,000+

FOE (700) – Special Operations Forces

### DEPLOYMENT

#### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 3

#### CÔTE D'IVOIRE

UN • UNOCI 3 obs

#### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 8 obs

#### HAITI

UN • MINUSTAH 1

#### LIBERIA

UN • UNMIL 1 obs

#### SOUTH SUDAN

UN • UNMISS 3; 3 obs

#### SUDAN

UN • UNAMID 2 obs



Brazil BRZ				
Brazilian Real R		2014	2015	2016
GDP	R	5.52tr	5.85tr	
	US\$	2.35tr	1.8tr	
<i>per capita</i>	US\$	11,573	8,802	
Growth	%	0.1	-3.0	
Inflation	%	6.3	8.9	
Def bdtg [a]	R	72.9bn	78.8bn	82.6bn
	US\$	31bn	24.3bn	
US\$1=R		2.35	3.25	

[a] Includes military pensions

Population 204,259,812

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	11.9%	4.3%	4.1%	4.2%	21.6%	3.3%
Female	11.4%	4.1%	4.0%	4.1%	22.5%	4.5%

## Capabilities

Aspirations of enhanced power-projection capabilities, better surveillance of the Amazon region and coastal waters, and further development of Brazil's defence-industrial base have all suffered following a reduction in the defence budget during 2015. Several high-profile programmes have been delayed, including the SIVAM border-monitoring system and Embraer's KC-390 transport aircraft. By year end, the PROSUB submarine-development programme, a cornerstone of the navy's long-term blue-water ambition, was also affected by the reductions. A financing deal was also agreed for 36 *Gripen* E/F tactical aircraft, to be delivered from 2019. Internal and border security remain priorities in the near term, with law-and-order deployments continuing in the run-up to the 2016 Olympic Games and the *Ágata* series of border operations starting its tenth iteration in October. The armed forces continue to work towards a national cyber-defence capability, regularly participate in domestic and international exercises, and provide the largest contingent of troops for the UN peacekeeping mission in Haiti. The army is creating an expeditionary force to support future peacekeeping operations, based around a battalion from the 2nd Infantry Division, with a planned operational date of 2022. (See pp. 371–72.)

**ACTIVE 334,500 (Army 198,000 Navy 69,000 Air 67,500) Paramilitary 395,000**

*Conscript liability* 12 months (can go to 18; often waived)

**RESERVE 1,340,000**

## ORGANISATIONS BY SERVICE

**Army 128,000; 70,000 conscript (total 198,000)**

### FORCES BY ROLE

#### COMMAND

- 8 mil comd HQ
- 12 mil region HQ
- 7 div HQ (2 with regional HQ)

### SPECIAL FORCES

- 1 SF bde (1 SF bn, 1 cdo bn)
- 1 SF coy

### MANOEUVRE

#### Reconnaissance

- 3 mech cav regt

#### Armoured

- 1 (5th) armd bde (1 mech cav sqn, 2 armd bn, 2 armd inf bn, 1 SP arty bn, 1 engr bn, 1 sigs coy, 1 log bn)
- 1 (6th) armd bde (1 mech cav sqn, 2 armd bn, 2 armd inf bn, 1 SP arty bn, 1 AD bty, 1 engr bn, 1 sigs coy, 1 log bn)

#### Mechanised

- 3 (1st, 2nd & 4th) mech cav bde (1 armd cav bn, 3 mech cav bn, 1 arty bn, 1 engr coy, 1 sigs coy, 1 log bn)
- 1 (3rd) mech cav bde (1 armd cav bn, 2 mech cav bn, 1 arty bn, 1 engr coy, 1 sigs coy, 1 log bn)
- 1 (15th) mech inf bde (3 mech inf bn, 1 arty bn, 1 engr coy, 1 log bn)

#### Light

- 1 (3rd) mot inf bde (1 mech cav sqn, 2 mot inf bn, 1 inf bn, 1 arty bn, 1 engr coy, 1 sigs coy, 1 log bn)
- 1 (4th) mot inf bde (1 mech cav sqn, 1 mot inf bn, 1 inf bn, 1 mtn inf bn, 1 arty bn, 1 sigs coy, 1 log bn)
- 1 (7th) mot inf bde (3 mot inf bn, 1 arty bn)
- 1 (8th) mot inf bde (1 mech cav sqn, 3 mot inf bn, 1 arty bn, 1 log bn)
- 1 (10th) mot inf bde (1 mech cav sqn, 4 mot inf bn, 1 inf coy, 1 arty bn, 1 engr coy, 1 sigs coy)
- 1 (13th) mot inf bde (1 mot inf bn, 2 inf bn, 1 inf coy, 1 arty bn)
- 1 (14th) mot inf bde (1 mech cav sqn, 3 inf bn, 1 arty bn)
- 1 (11th) lt inf bde (1 mech cav regt, 3 inf bn, 1 arty bn, 1 engr coy, 1 sigs coy, 1 MP coy, 1 log bn)

#### 11 inf bn

#### Air Manoeuvre

- 1 AB bde (1 cav sqn, 3 AB bn, 1 arty bn, 1 engr coy, 1 sigs coy, 1 log bn)
- 1 (12th) air mob bde (1 cav sqn, 3 air mob bn, 1 arty bn, 1 engr coy, 1 sigs coy, 1 log bn)

#### Jungle

- 1 (1st) jungle inf bde (1 mech cav sqn, 2 jungle inf bn, 1 arty bn)
- 3 (2nd, 16th & 17th) jungle inf bde (3 jungle inf bn)
- 1 (23rd) jungle inf bde (1 cav sqn, 4 jungle inf bn, 1 arty bn, 1 sigs coy, 1 log bn)
- 2 jungle inf bn

#### Other

- 1 (9th) mot trg bde (3 mot inf bn, 1 arty bn, 1 log bn)
- 1 (18th) sy bde (2 sy bn, 2 sy coy)
- 1 sy bn
- 7 sy coy
- 3 gd cav regt
- 1 gd inf bn

#### Aviation

- 1 avn bde (3 hel bn, 1 maint bn)
- 1 hel bn

### COMBAT SUPPORT

- 3 SP arty bn
- 6 fd arty bn

1 MRL bn  
 1 STA bty  
 1 ADA bde (5 ADA bn)  
 6 engr bn  
 1 EW coy  
 1 int coy  
 6 MP bn  
 3 MP coy  
 4 sigs bn  
 2 sigs coy

**COMBAT SERVICE SUPPORT**

1 engr gp (1 engr bn, 4 construction bn)  
 1 engr gp (4 construction bn, 1 construction coy)  
 2 construction bn  
 5 log bn  
 1 tpt bn  
 4 spt bn

**EQUIPMENT BY TYPE**

**MBT** 393: 128 *Leopard* 1A1BE; 220 *Leopard* 1A5BR; 45 M60A3/TTS

**LT TK** 50 M41C

**RECCE** 408 EE-9 *Cascavel*

**APC** 935

**APC (T)** 584 M113

**APC (W)** 351: 223 EE-11 *Urutu*; 128 VBTP-MR *Guarani* 6×6

**ARTY** 1,847

**SP** 145: **105mm** 72 M7/108; **155mm** 73: 37 M109A3; 36 M109A5

**TOWED** 431

**105mm** 336: 233 M101/M102; 40 L118 Light Gun; 63 Model 56 pack howitzer

**155mm** 95 M114

**MRL** **127mm** 26: 20 ASTROS II Mk3; 6 ASTROS II Mk6

**MOR** 1,245: **81mm** 1,168: 453 Royal Ordnance L-16, 715 M936 AGR; **120mm** 77 M2

**AT**

**MSL** • **MANPATS** *Eryx*; *Milan*; MSS-1.2 AC

**RCL** 343: **84mm** 149 *Carl Gustav*; **106mm** 194 M40A1

**HELICOPTERS**

**MRH** 49: 32 AS565 *Panther* (HM-1); 17 AS550U2 *Fennec* (HA-1 – armed)

**TPT** 32: **Heavy** 5 H225M *Super Cougar* (HM-4); **Medium** 12: 8 AS532 *Cougar* (HM-3); 4 S-70A-36 *Black Hawk* (HM-2); **Light** 15 AS350L1 *Ecureuil* (HA-1)

**AD**

**SAM** • **MANPAD** RBS-70; 9K38 *Igla* (SA-18 *Grouse*)

**GUNS** 100:

**SP** **35mm** 34 *Gepard* 1A2

**TOWED** 66: **35mm** 39 GDF-001 towed (some with *Super Fledermaus* radar); **40mm** 27 L/70 (some with BOFI)

**RADAR**: 5 SABER M60

**AEV** 4+: *Greif*; HART; 4+ *Leopard* 1; M578

**ARV** *Leopard* 1

**VLB** 4+: XLP-10; 4 *Leopard* 1

**Navy 69,000**

Organised into 9 districts with HQ I Rio de Janeiro, HQ II Salvador, HQ III Natal, HQ IV Belém, HQ V Rio Grande, HQ VI Ladario, HQ VII Brasilia, HQ VIII Sao Paulo, HQ IX Manaus.

**FORCES BY ROLE****SPECIAL FORCES**

1 (diver) SF gp

**EQUIPMENT BY TYPE****SUBMARINES** • **TACTICAL** • **SSK** 5:

4 *Tupi* (GER T-209/1400) with 8 single 533mm TT with Mk48 HWT

1 *Tikuna* with 8 single 533mm TT with Mk48 HWT

**PRINCIPAL SURFACE COMBATANTS** 14**AIRCRAFT CARRIERS** • **CV** 1:

1 *Sao Paulo* (FRA *Clemenceau*) with 2 sextuple *Sadral Inchr* with *Mistral* SAM (capacity 15–18 A-4 *Skyhawk* atk ac; 4–6 SH-3D/A *Sea King*/S-70B *Seahawk* ASW hel; 3 AS355/AS350 *Ecureuil* hel; 2 AS532 *Cougar* hel)

**DESTROYERS** • **DDGHM** 3:

3 *Greenhalgh* (UK *Broadsword*, 1 low readiness) with 4 single Inchr with MM-40 *Exocet* Block II ASHM, 2 sextuple Inchr with *Sea Wolf* SAM, 6 single STWS Mk2 324mm ASTT with Mk 46 LWT (capacity 2 *Super Lynx* Mk21A hel)

**FRIGATES** 10

**FFGHM** 6 *Niteroi* with 2 twin Inchr with MM-40 *Exocet* Block II ASHM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple Mk32 324mm ASTT with Mk 46 LWT, 1 twin 375mm A/S mor, 2 *Sea Trinity* Mk3 CIWS, 1 115mm gun (capacity 1 *Super Lynx* Mk21A hel)

**FFGH** 4:

3 *Inhauma* with 2 twin Inchr with MM-40 *Exocet* Block II ASHM, 2 triple Mk32 324mm ASTT with Mk 46 LWT, 1 115mm gun (1 *Super Lynx* Mk21A hel)

1 *Barroso* with 2 twin Inchr with MM-40 *Exocet* Block II ASHM, 2 triple 324mm ASTT with Mk 46 LWT, 1 *Sea Trinity* CIWS, 1 115mm gun (capacity 1 *Super Lynx* Mk21A hel)

**PATROL AND COASTAL COMBATANTS** 48

**PSO** 3 *Amazonas*

**PCO** 6: 4 *Bracui* (UK *River*); 1 *Imperial Marinheiro* with 1 76mm gun; 1 *Parnaiba* with 1 hel landing platform

**PCC** 2 *Macaé*

**PCR** 5: 2 *Pedro Teixeira*; 3 *Roraima*

**PB** 28: 12 *Grajau*; 6 *Marlim*; 6 *Piratini* (US PGM); 4 *Tracker* (Marine Police)

**PBR** 4 LPR-40

**MINE WARFARE** • **MINE COUNTERMEASURES** •

**MSC** 5 *Aratu* (GER *Schutz*)

**AMPHIBIOUS****PRINCIPAL AMPHIBIOUS SHIPS** • **LSD** 1:

1 *Ceara* (US *Thomaston*) with 3 twin 76mm guns (capacity either 21 LCM or 6 LCU; 345 troops)

**LANDING SHIPS** 3

**LST** 1 *Mattoso Maia* (US *Newport*) with 1 *Phalanx* CIWS (capacity 3 LCVP; 1 LCPL; 400 troops)

**LSLH** 2: 1 *Garcia D'Avila* (UK *Sir Galahad*) (capacity 1 hel; 16 MBT; 340 troops); 1 *Almirante Saboia* (UK *Sir Bedivere*) (capacity 1 med hel; 18 MBT; 340 troops)

**LANDING CRAFT** 32: 3 LCU; 8 LCVP; 21 LCM

**LOGISTICS AND SUPPORT 100+**

**ABU 35+**: 4 *Comandante Varella*; 1 *Faroleiro Mario Seixas*; 30+ others

**ABUH 1** *Almirante Graca Arana*h (lighthouse tender)

**AFD 4**

**AG 1** *Potengi*

**AGHS 5**: 1 *Caravelas* (riverine); 4 *Rio Tocantin*

**AGOB 2**: 1 *Ary Rongel* with 1 hel landing platform; 1 *Almirante Maximiano* (capacity 2 AS350/AS355 *Ecureuil* hel)

**AGS 8**: 1 *Aspirante Moura*; 1 *Cruzeiro do Sul*; 1 *Antares*; 3 *Amorim do Valle* (ex-UK *Rover*); 1 *Rio Branco*; 1 *Vital de Oliveira*

**AGSC 4**

**AGSH 1** *Sirius*

**AH 5**: 2 *Oswaldo Cruz* with 1 hel landing platform; 1 *Dr Montenegro*; 1 *Tenente Maximiano*l with 1 hel landing platform; 1 *Soares de Meirelles*

**AK 5**

**AOR 2**: 1 *Gastao Motta*; 1 *Marajo*

**AP 7**: 1 *Almirante Leverger*; 1 *Paraguassu*; 1 *Para* (all river transports); 4 *Rio Pardo*

**ASR 1** *Felinto Perry* (NOR *Wildrake*) with 1 hel landing platform

**ATF 5**: 3 *Tritao*; 2 *Almirante Guihem*

**AX 1** *Brasil* with 1 hel landing platform

**AXL 3** *Nascimento*

**AXS 1** *Cisne Barco*

**YTB 8**

**YPT 1**

**Naval Aviation 2,100****FORCES BY ROLE****GROUND ATTACK**

1 sqn with A-4/4M (AF-1) *Skyhawk*; TA-4/4M (AF-1A) *Skyhawk*

**ANTI SURFACE WARFARE**

1 sqn with *Super Lynx* Mk21A

**ANTI SUBMARINE WARFARE**

1 sqn with SH-3G/H *Sea King*; S-70B *Seahawk* (MH-16)

**TRAINING**

1 sqn with Bell 206B3 *Jet Ranger* III

**TRANSPORT HELICOPTER**

1 sqn with AS332 *Super Puma*; AS532 *Cougar*

4 sqn with AS350 *Ecureuil* (armed); AS355 *Ecureuil* II (armed)

**EQUIPMENT BY TYPE****AIRCRAFT** 12 combat capable

**ATK 12**: 9 A-4/4M (AF-1/1B) *Skyhawk*; 3 TA-4/4M (AF-1A) *Skyhawk*

**HELICOPTERS**

**ASW 22**: 12 *Super Lynx* Mk21A; 4 SH-3G/H *Sea King* (being withdrawn); 6 S-70B *Seahawk* (MH-16)

**TPT 51**: **Heavy** 6 H225M *Super Cougar* (UH-15);

**Medium** 7: 5 AS332 *Super Puma*; 2 AS532 *Cougar*

(UH-14); **Light** 38: 15 AS350 *Ecureuil* (armed); 8 AS355 *Ecureuil* II (armed); 15 Bell 206B3 *Jet Ranger* III (IH-6B)

**MSL • AshM**: AM-39 *Exocet*; *Sea Skua*; AGM-119 *Penguin* (on order)

**Marines 16,000****FORCES BY ROLE****SPECIAL FORCES**

1 SF bn

**MANOEUVRE****Amphibious**

1 amph div (1 lt armd bn, 3 mne bn, 1 arty bn)

1 amph aslt bn

7 (regional) mne gp

1 rvn bn

**COMBAT SUPPORT**

1 engr bn

**COMBAT SERVICE SUPPORT**

1 log bn

**EQUIPMENT BY TYPE**

**LT TK 18 SK-105** *Kuerassier*

**APC 60**

**APC (T)** 30 M113A1 (incl variants)

**APC (W)** 30 *Piranha* III C

**AAV 25**: 13 AAV-7A1; 12 LVTP-7

**ARTY 59+**

**TOWED 41**: **105mm** 33: 18 L118 Light Gun; 15 M101;

**155mm** 8 M114

**MRL 127mm** some ASTROS II Mk6

**MOR 81mm** 18 M29

**AT • MSL • MANPATS** RB-56 *Bill*; MSS-1.2 AC

**AD • GUNS 40mm** 6 L/70 (with BOFI)

**AEV 1** AAVR7

**Air Force 67,500**

Brazilian airspace is divided into 7 air regions, each of which is responsible for its designated air bases. Air assets are divided among four designated air forces (I, II, III & V) for operations (IV Air Force temporarily deactivated).

**FORCES BY ROLE****FIGHTER**

4 sqn with F-5EM/FM *Tiger* II

**FIGHTER/GROUND ATTACK**

2 sqn with AMX (A-1A/B)

**GROUND ATTACK/ISR**

4 sqn with EMB-314 *Super Tucano* (A-29A/B)\*

**MARITIME PATROL**

1 sqn with P-3AM *Orion*

2 sqn with EMB-111 (P-95A/B/M)

**ISR**

1 sqn with AMX-R (RA-1)\*

1 sqn with Learjet 35 (R-35A); EMB-110B (R-95)

**AIRBORNE EARLY WARNING & CONTROL**

1 sqn with EMB-145RS (R-99); EMB-145SA (E-99)

**TANKER/TRANSPORT**

1 sqn with C-130H/KC-130H *Hercules*

**TRANSPORT**

1 VIP sqn with A319 (VC-1A); EMB-190 (VC-2); AS332M *Super Puma* (VH-34); AS355 *Ecureuil* II (VH-55); H135M (VH-35)

1 VIP sqn with EMB-135BJ (VC-99B); ERJ-135LR (VC-99C); ERJ-145LR (VC-99A); Learjet 35A (VU-35); Learjet 55C (VU-55C)

2 sqn with C-130E/H *Hercules*

2 sqn with C-295M (C-105A)

7 (regional) sqn with Cessna 208/208B (C-98); Cessna 208-G1000 (C-98A); EMB-110 (C-95); EMB-120 (C-97)  
 1 sqn with ERJ-145 (C-99A)  
 1 sqn with EMB-120RT (VC-97), EMB-121 (VU-9)

#### TRAINING

1 sqn with EMB-110 (C-95)  
 2 sqn with EMB-312 *Tucano* (T-27) (incl 1 air show sqn)  
 1 sqn with T-25A/C

#### ATTACK HELICOPTER

1 sqn with Mi-35M *Hind* (AH-2)

#### TRANSPORT HELICOPTER

1 sqn with AS332M *Super Puma* (H-34); H225M *Super Cougar* (H-36)  
 1 sqn with AS350B *Ecureuil* (H-50); AS355 *Ecureuil II* (H-55)  
 1 sqn with Bell 205 (H-1H); H225M *Super Cougar* (H-36)  
 2 sqn with UH-60L *Black Hawk* (H-60L)

#### ISR UAV

1 sqn with *Hermes* 450/900

#### EQUIPMENT BY TYPE

##### AIRCRAFT 221 combat aircraft

**FTR** 57: 6 F-5E *Tiger II*; 51 F-5EM/FM *Tiger II*  
**FGA** 49: 38 AMX (A-1); 11 AMX-T (A-1B)  
**ASW** 9 P-3AM *Orion*  
**MP** 19: 10 EMB-111 (P-95A *Bandeirulha*)\*; 8 EMB-111 (P-95B *Bandeirulha*)\*; 1 EMB-111 (P-95M *Bandeirulha*)  
**ISR**: 8: 4 AMX-R (RA-1)\*; 4 EMB-110B (R-95)  
**ELINT** 6: 3 EMB-145RS (R-99); 3 Learjet 35A (R-35A)  
**AEW&C** 5 EMB-145SA (E-99)  
**SAR** 7: 2 C-295M *Amazonas* (SC-105); 4 EMB-110 (SC-95B), 1 SC-130E *Hercules*  
**TKR/TPT** 2 KC-130H  
**TPT** 197: **Medium** 20: 4 C-130E *Hercules*; 16 C-130H *Hercules*; **Light** 169: 10 C-295M (C-105A); 7 Cessna 208 (C-98); 9 Cessna 208B (C-98); 13 Cessna 208-G1000 (C-98A); 52 EMB-110 (C-95A/B/C/M); 16 EMB-120 (C-97); 4 EMB-120RT (VC-97); 5 EMB-121 (VU-9); 7 EMB-135BJ (VC-99B); 3 EMB-201R *Ipanema* (G-19); 2 EMB-202A *Ipanema* (G-19A); 2 ERJ-135LR (VC-99C); 7 ERJ-145 (C-99A); 1 ERJ-145LR (VC-99A); 9 Learjet 35A (VU-35); 1 Learjet 55C (VU-55); 9 PA-34 *Seneca* (U-7); 12 U-42 *Regente*; **PAX** 8: 1 A319 (VC-1A); 3 EMB-190 (VC-2); 4 Hawker 800XP (EU-93A – calibration)  
**TRG** 265: 101 EMB-312 *Tucano* (T-27); 39 EMB-314 *Super Tucano* (A-29A)\*; 44 EMB-314 *Super Tucano* (A-29B)\*; 81 T-25A/C

#### HELICOPTERS

**ATK** 12 Mi-35M *Hind* (AH-2)  
**MRH** 2 H135M (VH-35)  
**TPT** 85: **Heavy** 7 H225M *Super Cougar* (4 H-36 & 2 VH-36); **Medium** 26: 10 AS332M *Super Puma* (H-34/VH-34); 16 UH-60L *Black Hawk* (H-60L); **Light** 52: 24 AS350B *Ecureuil* (H-50); 4 AS355 *Ecureuil II* (H-55/VH-55); 24 Bell 205 (H-1H)

**UAV • ISR • Medium** 5: 4 *Hermes* 450; 1 *Hermes* 900

**MSL • AAM • IR** MAA-1 *Piranha*; *Magic* 2; *Python* III; *Python* IV; **SARH** Super 530F; **ARH** *Derby*

**ARM** MAR-1 (in development)

## Paramilitary 395,000 opcon Army

### Public Security Forces 395,000

State police organisation technically under army control. However, military control is reducing, with authority reverting to individual states.

#### EQUIPMENT BY TYPE

**UAV • ISR • Heavy** 3 *Heron* (deployed by Federal Police for Amazon and border patrols)

## Cyber

Cyber was a key component of the 2008 National Defence Strategy and the July 2012 Defence White Paper. In 2011, the army inaugurated Brazil's cyber-defence centre (CDCiber) to coordinate the existing activities of the army, navy and air force. A late 2013 contract for a strategic-communications satellite intended to enhance government-communications security was, analysts believed, driven by allegations of cyber exploitation of Brazilian systems. CDCiber has been heavily involved in coordinating tasks related to cyber security for major sporting events hosted by Brazil, which will have afforded useful training and also liaison exchanges. There is an active training programme, run by the Institute of Cyber Defence among others, while in 2013 the country's first Cyber Operations Simulator (SIMOC) was set up.

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 3; 1 obs

### CÔTE D'IVOIRE

UN • UNOCI 3; 4 obs

### CYPRUS

UN • UNFICYP 1

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 5; 1 obs

### HAITI

UN • MINUSTAH 982; 1 inf bn; 1 engr coy

### LEBANON

UN • UNIFIL 201; 1 FFGH

### LIBERIA

UN • UNMIL 2; 2 obs

### SOUTH SUDAN

UN • UNMISS 4; 5 obs

### WESTERN SAHARA

UN • MINURSO 9 obs

Chile CHL				
Chilean Peso pCh		2014	2015	2016
GDP	pCh	147tr	156tr	
	US\$	258bn	240bn	
<i>per capita</i>	US\$	14,480	13,331	
Growth	%	1.9	2.3	
Inflation	%	4.4	4.4	
Def bdtg [a]	pCh	2.16tr	2.25tr	2.33tr
	US\$	3.78bn	3.46bn	
US\$1=pCh		570.37	650.45	

[a] Includes military pensions

Population 17,508,260

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	10.4%	3.9%	4.2%	4.1%	22.3%	4.3%
Female	10.0%	3.7%	4.0%	4.0%	23.1%	5.9%

## Capabilities

Assuring sovereignty, territorial integrity and internal security remain core roles, and the armed forces have spent the past decade recapitalising the equipment of all three services with second-hand US and European equipment. However, there is an increasing focus on non-traditional military roles, such as disaster relief, illustrated by deployments in response to flooding in Atacama and an earthquake in Coquimbo in 2015. Procurement priorities have changed to reflect this, focusing on littoral and blue-water surveillance capabilities and new helicopters, although slower economic growth will likely delay or reduce the scope of some of these plans. Training takes place regularly on a national basis, and the armed forces also routinely participate in exercises with international and regional partners; Chile is also looking to increase its contribution to UN missions.

**ACTIVE 64,750 (Army 37,850 Navy 19,100 Air 7,800) Paramilitary 44,700**

*Conscript liability* Army 1 year; Navy 21 months; Air Force 18 months. Legally, conscription can last for 2 years

**RESERVE 40,000 (Army 40,000)**

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

##### SATELLITES

ISR 1 SSOT (Sistema Satelital del la Observación del la Tierra)

### Army 37,850

6 military administrative regions.

#### FORCES BY ROLE

Currently being reorganised into 4 armd, 2 mot, 2 mtn and 1 SF brigade. Standard regt/gp are single bn strength, reinforced regt comprise multiple bn.

#### COMMAND

6 div HQ

#### SPECIAL FORCES

1 SF bde (1 SF bn, 1 (mtn) SF gp, 1 para bn, 1 cdo coy, 1 log coy)  
2 cdo coy

#### MANOEUVRE

##### Reconnaissance

1 armd recce pl  
3 cav sqn  
4 recce pl

##### Armoured

3 (1st, 2nd & 3rd) armd bde (1 armd recce pl, 1 armd cav gp, 1 mech inf bn, 1 arty gp, 1 AT coy, 1 engr coy, 1 sigs coy)  
1 (4th) armd bde (1 armd recce pl, 1 armd cav gp, 1 mech inf bn, 1 arty gp, 1 engr coy)

##### Mechanised

1 (1st) mech inf regt

##### Light

1 (1st) reinforced regt (1 mot inf bn, 1 arty gp, 2 AT coy, 1 engr bn)  
1 (4th) reinforced regt (1 mot inf bn, 1 MRL gp, 1 mor coy, 1 AT coy, 1 engr bn)  
1 (5th) reinforced regt (1 armd cav gp, 1 mech inf coy, 1 arty gp, 1 engr coy)  
1 (7th) reinforced regt (1 mot inf bn, 1 arty gp, 1 sigs coy)  
1 (10th) reinforced regt (1 mot inf bn, 1 AT coy, 1 engr bn, 1 sigs bn)  
2 (11th & 24th) reinforced mot inf regt (1 mot inf bn, 1 arty gp, 1 AT coy)  
1 (14th) reinforced mot inf regt (1 mot inf bn, 1 sigs coy, 1 AT coy)  
7 mot inf regt

##### Mountain

1 (3rd) reinforced mtn regt (1 mtn inf bn, 1 arty gp, 1 engr coy)  
1 (9th) reinforced mtn regt (1 mtn inf bn, 1 engr bn)  
1 (17th) reinforced mtn regt (1 mtn inf bn, 1 engr coy)  
2 mtn inf regt

##### Aviation

1 avn bde (1 tpt avn bn, 1 hel bn, 1 maint bn, 1 spt bn, 1 log coy)

#### COMBAT SUPPORT

3 arty regt  
1 engr regt  
2 sigs regt  
1 int regt  
1 MP bn

#### COMBAT SERVICE SUPPORT

1 log div (2 log regt)  
4 log regt  
6 log coy  
1 maint div (1 maint regt)

#### EQUIPMENT BY TYPE

MBT 245: 114 *Leopard* 1; 131 *Leopard* 2A4

AIFV 191: 173 *Marder*; 18 YPR-765

APC 548

APC (T) 369 M113A1/A2

APC (W) 179 *Cardoen Piranha*



**ARTY 1,391****SP 155mm** 48: 24 M109A3; 24 M109A5+**TOWED 233: 105mm** 193: 89 M101; 104 Mod 56; **155mm** 40 M-68**MRL 160mm** 12 LAR-160**MOR 1,098:****81mm** 744: 303 ECIA L65/81; 175 FAMAE; 266 Soltam;**120mm** 282: 173 ECIA L65/120; 16 FAMAE; 93 Soltam M-65**SP 120mm** 72: 36 FAMAE (on *Piranha* 6x6); 36 Soltam (on M113A2)**AT****MSL • MANPATS Spike****RCL 84mm Carl Gustav; 106mm** 213 M40A1**AIRCRAFT****TPT • Light** 8: 2 C-212-300 *Aviocar*; 3 Cessna 208 *Caravan*; 3 CN-235**HELICOPTERS****ISR 9 MD-530F Lifter** (armed)**TPT 18: Medium** 13: 8 AS532AL *Cougar*; 1 AS532ALe *Cougar*; 4 SA330 *Puma*; **Light** 5: 4 H125 *Ecureuil*; 1 AS355F *Ecureuil* II**AD****SAM • MANPAD Mistral****GUNS 41:****SP 20mm** 16 *Piranha*/TCM-20**TOWED 20mm** 25 M167 *Vulcan*AEV 8 *Leopard* 1ARV 21 *Leopard* 1VLB 13 *Leopard* 1MW 3 *Leopard* 1**Navy 19,100**

5 Naval Zones; 1st Naval Zone and main HQ at Valparaiso; 2nd Naval Zone at Talcahuano; 3rd Naval Zone at Punta Arenas; 4th Naval Zone at Iquique; 5th Naval Zone at Puerto Montt.

**FORCES BY ROLE****SPECIAL FORCES**

1 (diver) SF comd

**EQUIPMENT BY TYPE****SUBMARINES • TACTICAL • SSK 4:**2 *O'Higgins (Scorpene)* with 6 single 533mm TT with A-184 *Black Shark* HWT/SUT HWT/SM-39 *Exocet* Block II ASHm (1 currently in repair)2 *Thompson* (GER T-209/1300) with 8 single 533mm TT A-184 *Black Shark* HWT/SUT HWT/SM-39 *Exocet* Block II ASHm**PRINCIPAL SURFACE COMBATANTS 8****DESTROYERS • DDGHM** 1 *Almirante Williams* (UK Type-22) with 2 quad Mk141 Inchr with RGM-84 *Harpoon* ASHm, 2 octuple VLS with *Barak* SAM; 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun (capacity 1 AS532SC *Cougar*)**FRIGATES 7:****FFGHM 5:**3 *Almirante Cochrane* (UK *Duke*-class Type-23) with 2 quad Mk141 Inchr with RGM-84C *Harpoon* ASHm, 1 32-cell VLS with *Sea Wolf* SAM, 2 twin 324mm ASTT with Mk46 Mod 2 LWT, 1 114mm gun (capacity 1 AS-532SC *Cougar*)2 *Almirante Riveros* (NLD *Karel Doorman*-class) with 2 twin Inchr with RGM-84 *Harpoon* ASHm, 1 octuple Mk48 Inchr with RIM-7P *Sea Sparrow* SAM, 4 single Mk32 Mod 9 324mm ASTT with Mk46 Mod 5 HWT, 1 76mm gun (capacity 1 AS532SC *Cougar*)**FFGM 2:**2 *Almirante Lattore* (NLD *Jacob Van Heemskerck*-class) with 2 twin Mk141 Inchr with RGM-84 *Harpoon* ASHm, 1 Mk13 GMLS with SM-1MR SAM, 1 octuple Mk48 Inchr with RIM-7P *Sea Sparrow* SAM, 2 twin Mk32 324mm ASTT with Mk46 LWT, 1 *Goalkeeper* CIWS**PATROL AND COASTAL COMBATANTS 13****PSOH 3 Piloto Pardo****PCG 5:**3 *Casma* (ISR *Sa'ar* 4) with 4 GI *Gabriel* I ASHm, 2 76mm guns2 *Tiger* (GER Type-148) with 4 single Inchr with MM-38 *Exocet* ASHm, 1 76mm gun**PCO 5 Micalvi****AMPHIBIOUS****PRINCIPAL AMPHIBIOUS SHIPS****LPD 1 Sargento Aldea** (FRA *Foudre*) with 3 twin *Simbad* Inchr with *Mistral* SAM (capacity 4 med hel; 1 LCT; 2 LCM; 22 tanks; 470 troops)**LANDING SHIPS 3****LSM 1 Elicura****LST 2 Maipo** (FRA *Batral*) with 1 hel landing platform (capacity 7 tanks; 140 troops)**LANDING CRAFT 3****LCT 1 CDIC** (for use in *Sargento Aldea*)**LCM 2** (for use in *Sargento Aldea*)**LOGISTICS AND SUPPORT 19****ABU 1 George Slight Marshall** with 1 hel landing platform **AFD 3****AGOR 1 Cabo de Hornos****AGP 1 Almirante Jose Toribio Merino Castro** (also used as general spt ship) with 1 hel landing platform**AGHS 1 Micalvi****AGS 1 Type-1200** (ice-strengthened hull, ex-CAN) with 1 hel landing platform**AOR 2: 1 Almirante Montt** with 1 hel landing platform; 1 *Araucano***AP 1 Aguiles** (1 hel landing platform)**ATF 2 Veritas****AXS 1 Esmeralda****YFB 2****YTB 3****MSL • AshM MM-38 Exocet****Naval Aviation 600****EQUIPMENT BY TYPE****AIRCRAFT** 17 combat capable**ASW 4:** 2 C-295ASW *Persuader*; 2 P-3ACH *Orion***MP 4:** 1 C-295MPA *Persuader*; 3 EMB-111 *Bandeirante*\***ISR 2** Cessna O-2A *Skymaster*\***TRG 7** PC-7 *Turbo Trainer*\***HELICOPTERS****ASW 5** AS532SC *Cougar***MRH 8** AS365 *Dauphin***TPT • Light 7:** 3 Bell 206 *Jet Ranger*; 4 Bo-105S**MSL • AshM AM-39 Exocet**

**Marines 3,600****FORCES BY ROLE****MANOEUVRE****Amphibious**

- 1 amph bde (2 mne bn, 1 cbt spt bn, 1 log bn)
- 2 coastal def unit

**EQUIPMENT BY TYPE**

**LT TK** 15 *Scorpion*

**APC (W)** 25 MOWAG *Roland*

**AAV** 12 AAV-7

**ARTY** 39

**TOWED** 23: 105mm 7 KH-178; 155mm 16 Soltam M-71

**MOR** 81mm 16

**AShM** MM-38 *Exocet*

**AD • SAM • SP** 14: 4 M998 Avenger; 10 M1097 *Avenger*

**Coast Guard**

Integral part of the Navy

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS** 55

**PBF** 26 *Archangel*

**PB** 29: 18 *Alacalufe* (Protector-class); 4 *Grumete Diaz* (Dabor-class); 6 *Pelluhue*; 1 *Ona*

**Air Force 7,800**

Flying hours 100 hrs/year

**FORCES BY ROLE****FIGHTER**

- 1 sqn with F-5E/F *Tiger* III+
- 2 sqn with F-16AM/BM *Fighting Falcon*

**FIGHTER/GROUND ATTACK**

- 1 sqn with F-16C/D Block 50 *Fighting Falcon* (*Puma*)

**ISR**

- 1 (photo) flt with; DHC-6-300 *Twin Otter*; Learjet 35A

**AIRBORNE EARLY WARNING**

- 1 flt with B-707 *Phalcon*

**TANKER/TRANSPORT**

- 1 sqn with B-737-300; C-130B/H *Hercules*; KC-130R *Hercules*; KC-135 *Stratotanker*

**TRANSPORT**

- 3 sqn with Bell 205 (UH-1H *Iroquois*); C-212-200/300 *Aviocar*; Cessna O-2A; Cessna 525 *Citation* CJ1; DHC-6-100/300 *Twin Otter*; PA-28-236 *Dakota*; Bell 205 (UH-1H *Iroquois*)

- 1 VIP flt with B-737-500 (VIP); Gulfstream IV

**TRAINING**

- 1 sqn with EMB-314 *Super Tucano*\*
- 1 sqn with PA-28-236 *Dakota*; T-35A/B *Pillan*

**TRANSPORT HELICOPTER**

- 1 sqn with Bell 205 (UH-1H *Iroquois*); Bell 206B (trg); Bell 412 *Twin Huey*; Bo-105CBS-4; S-70A *Black Hawk*

**AIR DEFENCE**

- 1 AD regt (5 AD sqn) with *Crotale*; *Mistral*; M163/M167 *Vulcan*; Oerlikon GDF-005

**EQUIPMENT BY TYPE**

**AIRCRAFT** 79 combat capable

**FTR** 48: 10 F-5E *Tigre* III+; 2 F-5F *Tigre* III+; 29 F-16AM *Fighting Falcon*; 7 F-16BM *Fighting Falcon*

**FGA** 10: 6 F-16C Block 50 *Fighting Falcon*; 4 F-16D Block 50 *Fighting Falcon*

**ATK** 9 C-101CC *Aviojet* (A-36 *Halcón*)

**ISR** 2 Cessna O-2A

**AEW&C** 1 B-707 *Phalcon*

**TKR** 4: 1 KC-130R *Hercules*; 3 KC-135 *Stratotanker*

**TPT** 37: **Medium** 3: 1 C-130B *Hercules*; 2 C-130H

*Hercules*; **Light** 30: 2 C-212-200 *Aviocar*; 1 C-212-300

*Aviocar*; 4 Cessna 525 *Citation* CJ1; 3 DHC-6-100 *Twin*

*Otter*; 7 DHC-6-300 *Twin Otter*; 2 Learjet 35A; 11 PA-28-

236 *Dakota*; **PAX** 4: 1 B-737-300; 1 B-737-500; 1 B-767-

300ER; 1 Gulfstream IV

**TRG** 46: 4 Cirrus SR-22T; 12 EMB-314 *Super Tucano*\*; 30

T-35A/B *Pillan*

**HELICOPTERS**

**MRH** 12 Bell 412EP *Twin Huey*

**TPT** 22: **Medium** 1 S-70A *Black Hawk*; **Light** 21: 13 Bell

205 (UH-1H *Iroquois*); 5 Bell 206B (trg); 2 BK-117; 1 Bo-

105CBS-4

**UAV • ISR Medium** 3 *Hermes* 900

**AD****SAM**

**SP** 5 *Crotale*; *Mistral* (*Aspic*)

**MANPAD** *Mistral*

**SYSTEMS** *Mygale*

**GUNS • TOWED** 20mm M163/M167 *Vulcan*; 35mm

Oerlikon GDF-005

**MSL**

**AAM • IR** AIM-9J/M *Sidewinder*; *Python* III; *Python* IV;

*Shafir*†; **ARH** AIM-120C AMRAAM; *Derby*

**ASM** AGM-65G *Maverick*

**BOMBS**

**INS/GPS guided** JDAM

**Laser-guided** *Paveway* II

**Paramilitary 44,700****Carabineros 44,700**

Ministry of Interior; 15 zones, 36 districts, 179 *comisaria*

**EQUIPMENT BY TYPE**

**APC (W)** 20 MOWAG *Roland*

**ARTY • MOR** 81mm

**AIRCRAFT**

**TPT • Light** 4: 1 Beech 200 *King Air*; 1 Cessna 208; 1

Cessna 550 *Citation* V; 1 PA-31T *Cheyenne* II

**HELICOPTERS • TPT • Light** 15: 5 AW109E *Power*; 1

Bell 206 *Jet Ranger*; 2 BK 117; 5 Bo-105; 2 H135

**Cyber**

The Joint Staff coordinates cyber-security policies for the Ministry of Defense and the Armed Forces. Each service has a cyber-security organisation within their security structure. The Ministry of Interior and Public Security (Internal Affairs) is the national coordination authority for cyber security and is currently developing a National Cyber Security Strategy.

**DEPLOYMENT**

**Legal provisions for foreign deployment:**

**Constitution:** Constitution (1980, since amended)

**Decision on deployment of troops abroad:** Article 63, number 13 of the constitution, concerning matters of law, states that the procedures for foreign deployment are a matter that must be established by law by congress. Law Number 19.067 regulates matters concerning the foreign deployment of Chilean troops and deployment of foreign troops in Chile. It states that the government needs to request congressional approval.

#### BOSNIA-HERZEGOVINA

EU • EUFOR • *Operation Althea* 15

#### CYPRUS

UN • UNFICYP 14

#### HAITI

UN • MINUSTAH 331; 1 inf bn HQ; 2 inf coy; 1 hel sqn

#### INDIA/PAKISTAN

UN • UNMOGIP 2 obs

#### MIDDLE EAST

UN • UNTSO 3 obs

## Colombia COL

Colombian Peso pC		2014	2015	2016
GDP	pC	756tr	783tr	
	US\$	378bn	274bn	
<i>per capita</i>	US\$	7,928	5,687	
Growth	%	4.6	2.5	
Inflation	%	2.9	4.4	
Def bdgt [a]	pC	26.1tr	28.1tr	29.1tr
	US\$	13.1bn	9.84bn	
FMA (US)	US\$	29m	25m	25m
US\$1=pC		2,001.11	2,855.62	

[a] Includes decentralised expenditures

Population 46,736,728

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	12.8%	4.5%	4.6%	4.3%	20.4%	2.9%
Female	12.2%	4.3%	4.4%	4.2%	21.5%	4.0%

## Capabilities

Colombia's security and defence requirements continue to be dominated by counter-insurgency and counter-narcotics operations, although the prospect of a peace deal with FARC guerrillas is leading the defence ministry to consider a shift towards more conventional military structures and inventories. A substantial portion of the country's limited inventory of *Kfir* combat aircraft was deployed to the Venezuela border in September, in the wake of border tensions, and the air force is now seeking to add additional combat aircraft to its inventory. The strong relationship with the United States has been valuable not least in terms of training and equipment support, although this has reduced in recent years due to an improving security situation. The air force continues to operate a large fleet of US helicop-

ter types to provide tactical mobility, whilst the navy has upgraded its frigates and submarines through the Orion Plan and has increased its offshore-patrol capabilities by acquiring a new corvette and patrol boats. Meanwhile, Bogotá remains keen to develop international ties not only so that the military can share the lessons of its recent past, but also learn from international forces and organisations.

**ACTIVE 296,750** (Army 237,000, Navy 46,150 Air 13,600) Paramilitary 159,000

**RESERVE 34,950** (Army 25,050 Navy 6,500 Air 3,400)

## ORGANISATIONS BY SERVICE

### Army 237,000

#### FORCES BY ROLE

##### SPECIAL FORCES

1 anti-terrorist SF bn

##### MANOEUVRE

###### Mechanised

1 (1st) div (1 (2nd) mech bde (2 mech inf bn, 1 mtn inf bn, 1 engr bn, 1 MP bn, 1 cbt spt bn, 1 log bn, 1 Gaula anti-kidnap gp); 1 (10th) mech bde (1 (med) tk bn, 1 mech cav bn, 1 mech inf bn, 1 mtn inf bn, 2 sy bn, 2 arty bn, 1 engr bn, 1 cbt spt bn, 2 Gaula anti-kidnap gp); 2 sy bn; 1 log bn)

###### Light

1 (2nd) div (1 (5th) lt inf bde (3 lt inf bn, 1 jungle inf bn, 1 sy bn, 1 arty bn, 1 AD bn, 1 engr bn, 1 cbt spt bn, 1 Gaula anti-kidnap gp); 1 (30th) lt inf bde (1 cav recce bn, 2 lt inf bn, 1 sy bn, 1 arty bn, 1 engr bn, 1 cbt spt bn, 1 log bn); 1 (29th) mtn bde (1 mtn inf bn, 1 lt inf bn, 2 COIN bn, 1 cbt spt bn, 1 log bn); 2 rapid reaction force (total: 7 mobile sy bde))

1 (3rd) div (1 (3rd) lt inf bde (2 lt inf bn, 1 mtn inf bn, 1 COIN bn, 1 arty bn, 1 engr bn, 1 cbt spt bn, 1 MP bn, 1 log bn, 1 Gaula anti-kidnap gp); 1 (23rd) lt inf bde (1 cav gp, 1 lt inf bn, 1 jungle inf bn, 1 cbt spt bn, 1 log bn); 1 (29th) mtn bde (1 mtn inf bn, 1 lt inf bn, 2 COIN bn, 1 cbt spt bn, 1 log bn); 2 rapid reaction force (total: 7 mobile sy bde))

1 (4th) div (1 (7th) air mob bde (2 air mob inf bn, 1 lt inf bn, 1 COIN bn, 1 engr bn, 1 cbt spt bn, 1 log bn, 1 Gaula anti-kidnap gp); 1 (22nd) jungle bde (1 air mob inf bn, 1 lt inf bn, 1 jungle inf bn, 1 COIN bn, 1 cbt spt bn, 1 log bn); 1 (31st) jungle bde (1 lt inf bn, 1 jungle inf bn))

1 (5th) div (1 (6th) lt inf bde (2 lt inf bn, 1 mtn inf bn, 2 COIN bn, 1 cbt spt bn, 1 log bn, 1 Gaula anti-kidnap gp); 1 (8th) lt inf bde (1 lt inf bn, 1 mtn inf bn, 1 arty bn, 1 engr bn, 1 cbt spt bn, 1 Gaula anti-kidnap gp); 1 (9th) lt inf bde (1 SF bn, 2 lt inf bn, 1 arty bn, 1 COIN bn, 1 cbt spt bn, 1 sy bn, 1 log bn, 1 Gaula anti-kidnap gp); 1 (13th) lt inf bde (2 cav recce bn, 1 airmob inf bn, 3 lt inf bn, 1 COIN bn, 1 arty bn, 1 engr bn, 1 cbt spt bn, 2 MP bn, 1 log bn, 2 Gaula anti-kidnap gp); 1 rapid reaction force (3 mobile sy bde))

1 (6th) div (1 (12th) lt inf bde (2 lt inf bn, 2 jungle inf bn, 1 COIN bn, 1 engr bn, 1 cbt spt bn, 1 Gaula anti-kidnap gp); 1 (13th) mobile sy bde (4 COIN bn); 1 (26th)

jungle bde (1 lt jungle inf bn, 1 COIN bn, 1 cbt spt bn); 1 (27th) lt inf bde (2 lt inf bn, 1 jungle inf bn, 1 sy bn, 1 arty bn, 1 cbt spt bn, 1 log bn)

1 (7th) div (1 (4th) lt inf bde (1 cav recce bn, 3 lt inf bn, 1 sy bn, 1 arty bn, 1 engr bn, 1 MP bn, 1 cbt spt bn, 1 log bn); 1 (11th) lt inf bde (2 lt inf bn, 1 sy bn, 1 engr bn, 1 cbt spt bn); 1 (14th) lt inf bde (2 lt inf bn, 1 sy bn, 1 engr bn, 1 cbt spt bn, 1 log bn); 1 (15th) jungle bde (1 lt inf bn, 1 COIN bn, 1 engr bn, 1 log bn); 1 (17th) lt inf bde (2 lt inf bn, 1 COIN bn, 1 engr bn, 1 cbt spt bn, 1 log bn); 1 rapid reaction force (1 (11th) mobile sy bde (3 COIN bn)))

1 (8th) div (1 (16th) lt inf bde (1 mech cav recce bn, 1 lt inf bn, 1 log bn, 1 Guala anti-kidnap gp); 1 (18th) lt inf bde (1 air mob gp, 1 sy bn, 1 arty bn, 1 engr bn, 1 cbt spt bn, 1 log bn); 1 (28th) jungle bde (2 inf, 2 COIN, 1 cbt spt bn); 1 rapid reaction force (1 (5th) mobile sy bde (3 COIN bn); 1 (31st) mobile sy bde (5 COIN bn)))

3 COIN mobile bde (each: 4 COIN bn, 1 cbt spt bn)

#### Other

1 indep rapid reaction force (1 SF bde, 3 mobile sy bde)

#### Aviation

1 air aslt div (1 SF bde (2 SF bn); 1 counter-narcotics bde (3 counter-narcotics bn, 1 spt bn); 1 (25th) avn bde (4 hel bn; 5 avn bn; 1 avn log bn); 1 (32nd) avn bde (1 avn bn, 2 maint bn, 1 trg bn, 1 spt bn); 1 SF avn bn)

#### COMBAT SUPPORT

1 cbt engr bde (1 SF engr bn, 1 (emergency response) engr bn, 1 EOD bn, 1 construction bn, 1 demining bn, 1 maint bn)

1 int bde (2 SIGINT bn, 1 kog bn, 1 maint bn)

#### COMBAT SERVICE SUPPORT

2 spt/log bde (each: 1 spt bn, 1 maint bn, 1 supply bn, 1 tpt bn, 1 medical bn, 1 log bn)

#### EQUIPMENT BY TYPE

RECCE 215: 121 EE-9 *Cascavel*; 38 M1117 *Guardian*; 56 VCL

AIFV 60: 28 *Commando Advanced*; 32 LAV III

APC 114

APC (T) 54: 28 M113A1 (TPM-113A1); 26 M113A2 (TPM-113A2)

APC (W) 56 EE-11 *Urutu*

PPV 4 RG-31 *Nyala*

ARTY 1,603

TOWED 121: 105mm 108: 20 LG1 MkIII; 88 M101; 155mm 13 155/52 APU SBT-1

MOR 1,482: 81mm 1,374; 120mm 108

AT

MSL

SP 77 *Nimrod*

MANPATS TOW; *Spike-ER*

RCL 106mm 73 M40A1

AD • GUNS • TOWED 40mm 4 M1A1

AIRCRAFT

ELINT 3: 2 Beech B200 *King Air*; 1 Beech 350 *King Air*

TPT • Light 23: 2 An-32B; 2 Beech B200 *King Air*; 2 Beech 350 *King Air*; 2 Beech 200 *King Air* (Medevac); 1 Beech C90 *King Air*; 2 C-212 *Aviocar* (Medevac); 8 Cessna 208B *Grand Caravan*; 4 Turbo Commander 695A

HELICOPTERS

MRH 21: 8 Mi-17-1V *Hip*; 8 Mi-17MD; 5 Mi-17V-5 *Hip*

TPT 97: **Medium** 57: 50 UH-60L *Black Hawk*; 7 S-70i *Black Hawk*; **Light** 40: 24 Bell 205 (UH-1H *Iroquois*); 16 Bell 212 (UH-1N *Twin Huey*)

## Navy 46,150 (incl 12,100 conscript)

HQ located at Puerto Carreño.

#### EQUIPMENT BY TYPE

SUBMARINES • TACTICAL • SSK 4:

2 *Pijao* (GER T-209/1200) each with 8 single 533mm TT each with HWT

2 *Intrepido* (GER T-206A) each with 8 single 533mm TT each with HWT

PRINCIPAL SURFACE COMBATANTS 4

FRIGATES • FFG 4 *Almirante Padilla* with 2 twin Inchr with MM-40 *Exocet* ASHM, 2 twin *Simbad* Inchr with *Mistral* SAM, 2 triple B515 *ILAS-3* 324mm ASTT each with A244 LWT, 1 76mm gun (capacity 1 Bo-105/AS555SN *Fennec* hel)

PATROL AND COASTAL COMBATANTS 51

CORVETTES • FS 1 *Narino* (ex-ROK *Dong Hae*) with 2 triple 324mm ASTT with Mk46 LWT, 1 76mm gun

PSOH 2 *20 de Julio*

PCO 2: 1 *Valle del Cauca Durable* (ex-US *Reliance*) with 1 hel landing platform; 1 *San Andres* (ex-US *Balsam*)

PCC 3 *Punta Espada* (CPV-46)

PCR 10: 2 *Arauca* with 2 76mm guns; 8 *Nodrizza* (PAF-II) with hel landing platform

PBF 1 *Quitaeño* (US *Asheville*) with 1 76mm gun

PB 12: 1 *11 de Noviembre* (CPV-40) with 1 *Typhoon* CIWS; 2 *Castillo y Rada* (*Swiftships* 105); 2 *Jaime Gomez*; 1 *José Maria Palas* (*Swiftships* 110); 4 *Point*; 2 *Toledo*

PBR 23: 6 *Diligente*; 3 LPR-40; 3 *Swiftships*; 9 *Tenerife*; 2 PAF-L

AMPHIBIOUS 19

LCAC 7 *Griffon* 2000TD

LCM 3 LCM-8 (there are more than 200 small assault RHIBs also in service)

LCU 9: 2 *Golfo de Tribuga*; 7 *Morrosquillo* (LCU 1466)

LOGISTICS AND SUPPORT 20

ABU 1 *Quindío*

AG 2 *Lunenburg* (ex-GER, depot ship for patrol vessels)

AGOR 2 *Providencia*

AGP 1 *Inirida*

AGS 1 *Gorgona*

AXS 1 *Gloria*

YTL 12

## Naval Aviation 150

#### EQUIPMENT BY TYPE

AIRCRAFT

MP 3 CN-235 MPA *Persuader*

ISR 1 PA-31 *Navajo* (upgraded for ISR)

TPT • Light 11: 1 C-212 (Medevac); 4 Cessna 206; 3 Cessna 208 *Caravan*; 1 PA-31 *Navajo*; 1 PA-34 *Seneca*; 1 Beech 350 *King Air*

HELICOPTERS

MRH 9: 2 AS555SN *Fennec*; 3 Bell 412 *Twin Huey*; 4 Bell 412EP *Twin Huey*

TPT • Light 10: 1 Bell 212; 6 Bell 212 (UH-1N); 1 BK-117; 2 Bo-105



**Marines 25,600****FORCES BY ROLE****SPECIAL FORCES**

1 SF bde (4 SF bn)

**MANOEUVRE****Amphibious**

1 mne bde (1 SF (Gaula) bn, 5 mne bn, 2 rvn bn, 1 spt bn)

1 mne bde (1 SF bn, 2 mne bn, 2 rvn bn, 1 spt bn)

1 rvn bde (1 SF bn, 1 mne bn, 2 rvn bn, 1 spt bn)

1 rvn bde (4 rvn bn)

1 rvn bn (3 rvn bn)

**COMBAT SERVICE SUPPORT**

1 log bde (6 spt bn)

1 trg bde (7 trg bn, 1 spt bn)

**EQUIPMENT BY TYPE****ARTY** • MOR 82: 81mm 74; 120mm 8**Air Force 13,600**

6 Combat Air Commands (CACOM) plus CACOM 7 (former Oriental Air Group)

**FORCES BY ROLE****FIGHTER GROUND ATTACK**1 sqn with *Kfir* C-10/C-12/TC-12**GROUND ATTACK/ISR**1 sqn with A-37B/OA-37B *Dragonfly*

1 sqn with AC-47T; Hughes 369

1 sqn with EMB-312 *Tucano*\*2 sqn with EMB-314 *Super Tucano*\* (A-29)1 sqn with OV-10A *Bronco***EW/ELINT**2 sqn with Beech 350 *King Air*; Cessna 208; Cessna 560; C-26B *Metroliner*; SA 2-37**MARITIME PATROL/SEARCH & RESCUE**

1 sqn with Bell 212, EMB-110P1 (C-95)

**TRANSPORT**1 (Presidential) sqn with B-707 Tkr; B-727; B-737BBJ; EMB-600 *Legacy*; KC-767; Bell 212; Bell 412EP; F-28 *Fellowship*1 sqn with C-130B/H *Hercules*; C-295M1 sqn with Beech C90 *King Air*; C-212; CN-235M; Do-328; IAI *Arava***TRAINING**1 (primary trg) sqn with Bell 205 (UH-1H *Iroquois*); PA-42 *Cheyenne*1 (basic trg) sqn with Lancair *Synergy* (T-90 *Calima*)

1 sqn with T-37B

2 hel sqn with Bell 206B3

**HELICOPTER**1 sqn with AH-60L *Arpia* III1 sqn with UH-60L *Black Hawk* (CSAR)

1 sqn with MD500; Bell 205 (UH-1H)

1 sqn with Hughes 369

1 sqn with Bell 205 (UH-1H); Hughes 369

1 sqn with Bell 206B3; Hughes 369

**EQUIPMENT BY TYPE****AIRCRAFT** 85 combat capable**FGA** 19: 9 *Kfir* C-10; 9 *Kfir* C-12; 1 *Kfir* TC-12**ATK** 18: 7 A-37B/OA-37B *Dragonfly*; 6 AC-47T *Spooky* (*Fantasma*); 5 OV-10A *Bronco***ISR** 13: 1 C-26B *Metroliner*; 5 Cessna 560 *Citation V*; 6 SA 2-37; 1 Beech C90 *King Air***ELINT** 12: 4 Beech 350 *King Air*; 6 Cessna 208 *Grand Caravan*; 2 Cessna 337G**TKR/TPT** 2: 1 B-707 Tkr; 1 KC-767**TPT** 63: **Medium** 8: 4 C-130B *Hercules* (3 more in store); 3 C-130H *Hercules*; 1 B-737F; **Light** 47: 5 ATR-42; 2 ATR-72; 2 Beech 300 *King Air*; 2 Beech 350C *King Air*; 1 Beech 350i *King Air* (VIP); 4 Beech C90 *King Air*; 4 C-212; 6 C-295M; 1 Cessna 182R; 12 Cessna 208B (medevac); 1 Cessna 550; 2 CN-235M; 2 EMB-110P1 (C-95); 1 EMB-170-100LR; 1 IAI-201 *Arava*; 1 *Turbo Commander* 695; **PAX** 8: 2 B-727; 1 B-737-400 1 B-737BBJ; 1 EMB-600 *Legacy*; 1 F-28-1000 *Fellowship*; 1 F-28-3000 *Fellowship*; 1 Learjet 60 **TRG** 80: 14 EMB-312 *Tucano*\*; 24 EMB-314 *Super Tucano* (A-29)\*; 25 Lancair *Synergy* (T-90 *Calima*); 17 T-37B**HELICOPTERS****ISR** 22 OH-58 *Kiowa***MRH** 18: 13 AH-60L *Arpia* III; 1 AH-60L *Arpia* IV; 2 Bell 412EP *Twin Huey* VIP tpt); 2 Hughes 500M**TPT** 48: **Medium** 13 UH-60L *Black Hawk* (incl 1 VIP hel);**Light** 35: 12 Bell 205 (UH-1H *Iroquois*); 12 Bell 206B3 *Jet Ranger* III; 11 Bell 212**UAV** • **ISR** • **Medium** 3+: 2 *Hermes* 450; 1+ *Hermes* 900**MSL** • **IR** *Python* III; **IIR** *Python* IV **ARH** *Derby***Paramilitary 159,000****National Police Force 159,000****EQUIPMENT BY TYPE****AIRCRAFT****ELINT** 3 C-26B *Metroliner***TPT** • **Light** 43: 3 ATR-42; 3 Beech 200 *King Air*; 3Beech 300 *King Air*; 2 Beech 1900; 1 Beech C99; 4 BT-67; 4 C-26 *Metroliner*; 3 Cessna 152; 3 Cessna 172; 9Cessna 206; 2 Cessna 208 *Caravan*; 2 DHC 6 *Twin Otter*;1 DHC-8; 3 PA-31 *Navajo***HELICOPTERS****MRH** 3: 1 Bell 412EP; 2 MD-500D**TPT** 65: **Medium** 9 UH-60L *Black Hawk*; **Light** 56: 34Bell 205 (UH-1H-II *Huey II*); 3 Bell 206B; 6 Bell 206L/L3/L4 *Long Ranger*; 8 Bell 212; 5 Bell 407**Cyber**

Colombia publicised policy guidelines for cyber security and cyber defence in 2011. There are three main organisations: the CERT team (colCERT); the Police Cyber Centre; and the armed forces' Joint Cyber Command. The defence ministry is the coordinating body for cyber defence, and Colombia has an active training and simulation programme in cyber defence, with the Higher War College also organising courses in cyber warfare for military (a staff course) and civil personnel. The army published the Manual de Ciberdefensa, and the armed forces are reported to be in the process of devolving cyber capability to the tactical level.

**DEPLOYMENT****GULF OF ADEN & SOMALI BASIN****NATO** • *Operation Ocean Shield* 1 PSOH



**EGYPT**

MFO 354; 1 inf bn

**FOREIGN FORCES**

United States US Southern Command: 50

**Costa Rica CRI**

Costa Rican Colon C		2014	2015	2016
GDP	C	26.7tr	28tr	
	US\$	49.6bn	51.6bn	
<i>per capita</i>	US\$	10,378	10,672	
Growth	%	3.5	3.0	
Inflation	%	4.5	2.3	
Sy Bdgt [a]	C	227bn	238bn	215bn
	US\$	421m	438m	
FMA (US)	US\$	1m	1m	1m
US\$1=C		538.31	542.56	

[a] Paramilitary budget

Population 4,814,144

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	11.8%	4.3%	4.5%	4.6%	21.7%	3.4%
Female	11.3%	4.1%	4.3%	4.5%	21.8%	3.9%

**Capabilities**

The armed forces were constitutionally abolished in 1949, and Costa Rica relies on paramilitary-style police organisations for internal security, counter-narcotics and counter-criminal tasks, as well as participation in regional peace-keeping operations. Some elements, such as the special-operations unit, have received training from non-regional states, including the US. The coast-guard unit has benefited from a series of US donations and the air wing is relatively well equipped with light aircraft. Costa Rica in May 2014 launched a joint-services initiative (known as OPMAT) to develop closer cooperation between the Public Force, Coast Guard and Air Surveillance Unit.

**PARAMILITARY 9,800****ORGANISATIONS BY SERVICE****Paramilitary 9,800****Special Intervention Unit****FORCES BY ROLE****SPECIAL FORCES**

1 spec ops unit

**Public Force 9,000****FORCES BY ROLE****MANOEUVRE****Other**1 (tac) police *comisaria*6 (provincial) paramilitary *comisaria*7 (urban) paramilitary *comisaria*2 (border) sy comd (8 *comisaria*)

8 paramilitary comd

**Coast Guard Unit 400****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 8:**

PB 8: 2 *Cabo Blanco* (US *Swift* 65); 1 *Isla del Coco* (US *Swift* 105); 3 *Point*; 1 *Primera Dama* (US *Swift* 42); 1 *Puerto Quebos* (US *Swift* 36)

**Air Surveillance Unit 400****EQUIPMENT BY TYPE**

**AIRCRAFT • TPT • Light** 15: 4 Cessna T210 *Centurion*; 4 Cessna U206G *Stationair*; 1 DHC-7 *Caribou*; 2 PA-31 *Navajo*; 2 PA-34 *Seneca*; 1 Piper PA-23 *Aztec*; 1 Cessna 182RG

**HELICOPTERS • MRH** : 3 2 MD-500E; 1 MD 600N

**Cuba CUB**

Cuban Peso P		2014	2015	2016
GDP	P			
	US\$			
<i>per capita</i>	US\$			
Growth	%			
Inflation	%			
Def bdgt	P			
	US\$			

US\$1=P

\*definitive economic data unavailable

Population 579,633

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	8.2%	3.3%	3.5%	3.8%	25.0%	5.8%
Female	7.8%	3.2%	3.3%	3.7%	25.3%	7.1%

**Capabilities**

Though numerically significant, the Cuban armed forces are hampered by an ageing and predominantly Soviet-era equipment inventory relying on continued maintenance over replacement. It is also unlikely that Havana will be in a position to finance significant equipment recapitalisation in the near term. The US embargo on Cuba remains despite the re-establishment of diplomatic relations, with the future of the US base at Guantanamo Bay also uncertain. Cuba's defence focus is on protecting territorial integrity, as well as sustaining ties to some regional military partners such as Venezuela. Cuba also maintains military ties with Russia and China, though reports that Moscow might re-establish a Russian signals-intelligence facility have yet to be evidenced.

**ACTIVE 49,000 (Army 38,000 Navy 3,000 Air 8,000)****Paramilitary 26,500***Conscript liability* 2 years**RESERVE 39,000 (Army 39,000) Paramilitary 1,120,000**

Ready Reserves (serve 45 days per year) to fill out Active and Reserve units; see also Paramilitary.

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**ORGANISATIONS BY SERVICE**


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**Army** €38,000**FORCES BY ROLE****COMMAND**

- 3 regional comd HQ
- 3 army comd HQ

**MANOEUVRE****Armoured**

up to 5 armd bde

**Mechanised**

9 mech inf bde (1 armd regt, 3 mech inf regt, 1 arty regt, 1 ADA regt)

**Light**

1 (frontier) bde

**Air Manoeuvr**

1 AB bde

**COMBAT SUPPORT**

- 1 ADA regt
- 1 SAM bde

**Reserves** 39,000**FORCES BY ROLE****MANOEUVRE****Light**

14 inf bde

**EQUIPMENT BY TYPE†**

**MBT** €900 T-34/T-54/T-55/T-62

**LT TK** PT-76

**RECCE** BRDM-2; BTR-60 100mm

**AIFV** €50 BMP-1/1P

**APC** €500 BTR-152/BTR-50/BTR-60

**ARTY** 1,715+

**SP** 40+: **100mm** AAPMP-100; CATAP-100; **122mm** 2S1; AAP-T-122; AAP-BMP-122; *Jupiter III*; *Jupiter IV*; **130mm** AAP-T-130; *Jupiter V*; **152mm** 2S3

**TOWED** 500: **122mm** D-30; M-30; **130mm** M-46; **152mm** D-1; M-1937

**MRL** • **SP** 175: **122mm** BM-21 **140mm** BM-14

**MOR** 1,000: **82mm** M-41; **82mm** M-43; **120mm** M-43; M-38

**AT**

**MSL** • **MANPATS** 2K16 *Shmel* (AT-1 *Snapper*); 9K11 *Malyutka* (AT-3 *Sagger*)

**GUNS** 600+: **57mm** 600 M-1943; **85mm** D-44

**AD** • **SAM**

**SP** 200+: 200 9K35 *Strela-10* (SA-13 *Gopher*); 2K12 *Kub* (SA-6 *Gainful*); 9K33 *Osa* (SA-8 *Gecko*); 9K31 *Strela-1* (SA-9 *Gaskin*)

**MANPAD** 9K36 *Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1* (SA-16 *Gimlet*); 9K32 *Strela-2* (SA-7 *Grail*)‡

**GUNS** 400

**SP** **23mm** ZSU-23-4; **30mm** BTR-60P SP; **57mm** ZSU-57-2

**TOWED** **100mm** KS-19/M-1939/**85mm** KS-12/**57mm** S-60/**37mm** M-1939/**30mm** M-53/**23mm** ZU-23

**Navy** €3,000

Western Comd HQ at Cabanas; Eastern Comd HQ at Holquin.

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 8

**PSO** 1 *Rio Damuji* with two single P-15M *Termit* (SS-N-2C *Styx*) AShM, 2 57mm guns, 1 hel landing platform

**PCM** 1 *Pauk II*† (FSU) with 1 quad Inchr (manual aiming) with 9K32 *Strela-2* (SA-N-5 *Grail*) SAM, 4 single ASTT, 2 RBU 1200 A/S mor, 1 76mm gun

**PBF** 6 *Osa II*† (FSU) each with 4 single Inchr (for P-15 *Termit* (SS-N-2B *Styx*) AShM – missiles removed to coastal defence units)

**MINE WARFARE AND MINE COUNTERMEASURES** 5

**MHI** 3 *Yevgenyat* (FSU)

**MSC** 2 *Sonyat* (FSU)

**LOGISTICS AND SUPPORT** 5

**ABU** 1

**AX** 1

**YTL** 3

**Coastal Defence**

**ARTY** • **TOWED** **122mm** M-1931/37; **130mm** M-46; **152mm** M-1937

**MSL** • **AshM** 4+: *Bandera IV* (reported); 4 4K51 *Rubezh* (SS-C-3 *Styx*)

**Naval Infantry** 550+**FORCES BY ROLE****MANOEUVRE****Amphibious**

2 amph aslt bn

**Anti-aircraft Defence and Revolutionary Air Force** €8,000 (incl conscripts)

Air assets divided between Western Air Zone and Eastern Air Zone.

Flying hours 50 hrs/year

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

3 sqn with MiG-21ML *Fishbed*; MiG-23ML/MF/UM *Flogger*; MiG-29A/UB *Fulcrum*

**TRANSPORT**

1 (VIP) tpt sqn with An-24 *Coke*; Mi-8P *Hip*; Yak-40

**ATTACK HELICOPTER**

2 sqn with Mi-17 *Hip H*; Mi-35 *Hind*

**TRAINING**

2 (tac trg) sqn with L-39C *Albatros* (basic); Z-142 (primary)

**EQUIPMENT BY TYPE****AIRCRAFT** 45 combat capable

**FTR** 33: 16 MiG-23ML *Flogger*; 4 MiG-23MF *Flogger*; 4 MiG-23U *Flogger*; 4 MiG-23UM *Flogger*; 2 MiG-29A *Fulcrum*; 3 MiG-29UB *Fulcrum* (6 MiG-15UTI *Midjet*; 4+ MiG-17 *Fresco*; 4 MiG-23MF *Flogger*; 6 MiG-23ML *Flogger*; 2 MiG-23UM *Flogger*; 2 MiG-29 *Fulcrum* in store)

**FGA** 12: 4 MiG-21ML *Fishbed*; 8 MiG-21U *Mongol A* (up to 70 MiG-21bis *Fishbed*; 30 MiG-21F *Fishbed*; 28 MiG-21PFM *Fishbed*; 7 MiG-21UM *Fishbed*; 20 MiG-23BN *Flogger* in store)

ISR 1 An-30 *Clank*

TPT 11: **Heavy** 2 Il-76 *Candid*; **Light** 9: 1 An-2 *Colt*; 3 An-24 *Coke*; 2 An-32 *Cline*; 3 Yak-40 (8 An-2 *Colt*; 18 An-26 *Curl* in store)

TRG 45: 25 L-39 *Albatros*; 20 Z-326 *Trener Master*

#### HELICOPTERS

ATK 4 Mi-35 *Hind* (8 more in store)

ASW (5 Mi-14 in store)

MRH 8 Mi-17 *Hip H* (12 more in store)

TPT • **Medium** 2 Mi-8P *Hip*

#### AD • SAM

SP S-75 *Dvina* mod (SA-2 *Guideline* – on T-55 chassis);

S-125 *Pechora* mod (SA-3 *Goa* – on T-55 chassis)

TOWED S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)

#### MSL

AAM • IR R-3† (AA-2 *Atoll*); R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); IR/SARH R-23/24† (AA-7 *Apex*); R-27 (AA-10 *Alamo*)

ASM Kh-23† (AS-7 *Kerry*)

### Paramilitary 26,500 active

#### State Security 20,000

Ministry of Interior

#### Border Guards 6,500

Ministry of Interior

#### PATROL AND COASTAL COMBATANTS 20

PCC 2 *Stenka*

PB 18 *Zhuk*

#### Youth Labour Army 70,000 reservists

#### Civil Defence Force 50,000 reservists

#### Territorial Militia €1,000,000 reservists

### FOREIGN FORCES

United States US Southern Command: 750 (JTF-GTMO) at Guantánamo Bay

## Dominican Republic DOM

Dominican Peso pRD		2014	2015	2016
GDP	pRD	2.79tr	2.98tr	
	US\$	64.1bn	66.6bn	
<i>per capita</i>	US\$	6,481	6,664	
Growth	%	7.3	5.5	
Inflation	%	3.0	1.1	
Def bdggt	pRD	17.4bn	20bn	
	US\$	399m	446m	
US\$1=pRD		43.50	44.82	

Population 10,349,741

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.0%	4.8%	4.6%	4.2%	19.7%	3.3%
Female	13.5%	4.6%	4.4%	4.0%	18.9%	3.9%

## Capabilities

Internal and border security, along with disaster relief, have traditionally been key tasks for the armed forces, though counter-narcotics operations are an increasing focus of training and operations. The shared border with Haiti continues to be a focus of attention. The country has continued to engage in regional military and security cooperation including the multinational *Unitas* 2015 naval exercise. A military partnership agreement signed with the US in 2015 represents a new level of formalised cooperation between the two countries, which will include temporary deployments of US personnel for training and exercises. Dominican naval personnel have also received training in Colombia, and also exercise with regional partners.

**ACTIVE 56,050 (Army 28,750 Navy 11,200 Air 16,100) Paramilitary 15,000**

### ORGANISATIONS BY SERVICE

#### Army 28,750

5 Defence Zones

#### FORCES BY ROLE

##### SPECIAL FORCES

3 SF bn

##### MANOEUVRE

##### Mechanised

1 armd bn

##### Light

1 (2nd) inf bde (4 inf bn, 1 mtn inf bn)

2 (1st & 3rd) inf bde (3 inf bn)

2 (4th & 5th) inf bde (2 inf bn)

1 (6th) inf bde (1 inf bn)

##### Air Manoeuvre

1 air cav bde (1 cdo bn, 1 (6th) mtn regt, 1 hel sqn with

Bell 205 (op by Air Force); OH-58 *Kiowa*; R-22; R-44

*Raven II*)

##### Other

1 (Presidential Guard) gd regt

1 (MoD) sy bn

##### COMBAT SUPPORT

2 arty bn

1 engr bn

##### EQUIPMENT BY TYPE

LT TK 12 M41B (76mm)

APC (W) 8 LAV-150 *Commando*

ARTY 104

TOWED 105mm 16: 4 M101; 12 *Reinosa* 105/26

MOR 88: 81mm 60 M1; 107mm 4 M30; 120mm 24 Expal Model L

##### AT

RCL 106mm 20 M40A1

GUNS 37mm 20 M3

##### HELICOPTERS

ISR 8: 4 OH-58A *Kiowa*; 4 OH-58C *Kiowa*

**TPT • Light** 6: 4 R-22; 2 R-44 *Raven II* Navy 10,000

HQ located at Santo Domingo

**FORCES BY ROLE**  
**SPECIAL FORCES**

1 (SEAL) SF unit

**MANOEUVRE****Amphibious**

1 mne sy unit

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 17**PCO 1 *Almirante Díez Burgos* (ex-US *Balsam*)PCC 2 *Tortuguero* (ex-US *White Sumac*)PB 14: 2 *Altair* (Swiftships 35m); 4 *Bellatrix* (US Sewart Seacraft); 2 *Canopus* (Swiftships 101); 3 *Hamal* (Damen Stan 1505); 3 *Point***AMPHIBIOUS 1** *Neyba* (ex-US LCU 1675)**LOGISTICS AND SUPPORT 13**

AG 8

YFD 1

YTL 4

**Air Force 10,000**

Flying hours 60 hrs/year

**FORCES BY ROLE****GROUND ATTACK**1 sqn with EMB-314 *Super Tucano*\***SEARCH & RESCUE**1 sqn with Bell 205 (UH-1H *Huey II*); Bell 205 (UH-1H *Iroquois*); Bell 430 (VIP); OH-58 *Kiowa* (CH-136); S-333**TRANSPORT**1 sqn with C-212-400 *Aviocar*; PA-31 *Navajo***TRAINING**1 sqn with T-35B *Pillan***AIR DEFENCE**

1 ADA bn with 20mm guns

**EQUIPMENT BY TYPE****AIRCRAFT 8** combat capableISR 1 AMT-200 *Super Ximango*TPT • Light 12: 3 C-212-400 *Aviocar*; 1 Cessna 172; 1 Cessna 182; 1 Cessna 206; 1 Cessna 207; 1 *Commander* 690; 3 EA-100; 1 PA-31 *Navajo*TRG 13: 8 EMB-314 *Super Tucano*\*; 5 T-35B *Pillan***HELICOPTERS**ISR 9 OH-58 *Kiowa* (CH-136)TPT • Light 16: 8 Bell 205 (UH-1H *Huey II*); 5 Bell 205 (UH-1H *Iroquois*); 1 H155 (VIP); 2 S-333**AD • GUNS 20mm 4****Paramilitary 15,000****National Police 15,000****Ecuador ECU**

United States Dollar \$ [a]	2014	2015	2016
GDP	US\$ 101bn	98.9bn	
per capita	US\$ 6,273	6,077	
Growth	% 3.8	-0.6	
Inflation	% 3.6	4.1	
Def bdgt	US\$ 1.9bn	1.91bn	40.1tr
FMA (US)	US\$ 0.45m		

[a] The US dollar was adopted as the official currency in 2000

**Population** 15,654,411

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.3%	4.9%	4.5%	4.2%	18.4%	3.4%
Female	13.7%	4.7%	4.4%	4.2%	19.5%	3.7%

**Capabilities**

Defence policy is aimed at guaranteeing sovereignty and territorial integrity, and also allows the armed forces to participate in international peacekeeping operations. In 2015, the armed forces' role has been expanded to include law-enforcement support. Border security has long been a priority but there has been a growing emphasis on maritime security in recent years, though there remains little capacity for sustained power projection beyond national borders. A modernisation programme announced in 2014 is intended to reduce bases and units, and reduce personnel numbers from 41,000 to 34,500 by 2025. Much of the inventory is ageing, with acquisitions often second-hand, and the air force has been forced to withdraw its remaining *Dhruv* helicopters after a succession of accidents. The services take part in regular exercises, both domestically and with international partners.

**ACTIVE 40,250** (Army 24,750 Navy 9,100 Air 6,400)  
**Paramilitary 500***Conscript liability* 1 year, selective**RESERVE 118,000** (Joint 118,000)

Ages 18–55

**ORGANISATIONS BY SERVICE****Army 46,500****FORCES BY ROLE**

gp are bn sized.

**COMMAND**

4 div HQ

**SPECIAL FORCES**

1 (9th) SF bde (3 SF gp, 1 SF sqn, 1 para bn, 1 sigs sqn, 1 log comd)

**MANOEUVRE****Mechanised**

1 (11th) armd cav bde (3 armd cav gp, 1 mech inf bn, 1 SP arty gp, 1 engr gp)

1 (5th) inf bde (1 SF sqn, 2 mech cav gp, 2 inf bn, 1 cbt engr coy, 1 sigs coy, 1 log coy)

**Light**

- 1 (1st) inf bde (1 SF sqn, 1 armd cav gp, 1 armd recce sqn, 3 inf bn, 1 med coy)  
 1 (3rd) inf bde (1 SF gp, 1 mech cav gp, 1 inf bn, 1 arty gp, 1 hvy mor coy, 1 cbt engr coy, 1 sigs coy, 1 log coy)  
 1 (7th) inf bde (1 SF sqn, 1 armd recce sqn, 1 mech cav gp, 3 inf bn, 1 jungle bn, 1 arty gp, 1 cbt engr coy, 1 sigs coy, 1 log coy, 1 med coy)  
 1 (13th) inf bde (1 SF sqn, 1 armd recce sqn, 1 mot cav gp, 3 inf bn, 1 arty gp, 1 hvy mor coy, 1 cbt engr coy, 1 sigs coy, 1 log coy)

**Jungle**

- 2 (17th & 21st) jungle bde (3 jungle bn, 1 cbt engr coy, 1 sigs coy, 1 log coy)  
 1 (19th) jungle bde (3 jungle bn, 1 jungle trg bn, 1 cbt engr coy, 1 sigs coy, 1 log coy)

**Aviation**

- 1 (15th) avn bde (2 tpt avn gp, 2 hel gp, 1 mixed avn gp)

**COMBAT SUPPORT**

- 1 (27th) arty bde (1 SP arty gp, 1 MRL gp, 1 ADA gp, 1 cbt engr coy, 1 sigs coy, 1 log coy)  
 1 ADA gp  
 1 (23rd) engr bde (3 engr bn)  
 2 indep MP coy  
 1 indep sigs coy

**COMBAT SERVICE SUPPORT**

- 1 (25th) log bde  
 2 log bn  
 2 indep med coy

**EQUIPMENT BY TYPE**

LT TK 24 AMX-13

RECCE 67: 25 AML-90; 10 EE-3 *Jararaca*; 32 EE-9 *Cascavel*

APC 123

APC (T) 95: 80 AMX-VCI; 15 M113

APC (W) 28: 18 EE-11 *Urutu*; 10 UR-416

ARTY 541+

SP 155mm 5 Mk F3

TOWED 100: 105mm 78: 30 M101; 24 M2A2; 24 Model 56 pack howitzer; 155mm 22: 12 M114; 10 M198

MRL 122mm 24: 18 BM-21; 6 RM-70

MOR 412+: 81mm 400 M29; 107mm M30 (4.2in); 160mm 12 M-66 Soltam

AT

RCL 404: 106mm 24 M40A1; 90mm 380 M67

AIRCRAFT

TPT • **Light** 15: 1 Beech 200 *King Air*; 2 C-212; 1 CN-235; 4 Cessna 172; 2 Cessna 206; 1 Cessna 500 *Citation I*; 4 IAI-201 *Arava*

TRG 6: 2 MX-7-235 *Star Rocket*; 2 T-41D *Mescalero*; 2 CJ-6A

HELICOPTERS

MRH 32: 5 H125M *Fennec*; 6 Mi-17-1V *Hip*; 3 SA315B *Lama*; 18 SA342L *Gazelle* (13 with HOT for anti-armour role)

TPT 13: **Medium** 7: 5 AS332B *Super Puma*; 2 Mi-171E; (3 SA330 *Puma* in store); **Light** 6: 2 AS350B *Ecureuil*; 4 AS350B2 *Ecureuil*

AD

SAM • **MANPAD** *Blowpipe*; 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K38 *Igla* (SA-18 *Grouse*)

GUNS 240

SP 20mm 44 M163 *Vulcan*

TOWED 196: 14.5mm 128 ZPU-1/-2; 20mm 38: 28 M-1935, 10 M167 *Vulcan*; 40mm 30 L/70/M1A1

**Navy 7,300 (incl Naval Aviation, Marines and Coast Guard)****EQUIPMENT BY TYPE****SUBMARINES • TACTICAL • SSK 2:**

2 *Shyri* (GER T-209/1300, 1 undergoing refit in Chile) each with 8 single 533mm TT each with SUT HWT

**PRINCIPAL SURFACE COMBATANTS 2****FRIGATES 2**

FFGHM 1 *Moran Valverde†* (ex-UK *Leander* batch II) with 4 single lnchr with MM-40 *Exocet* ASHM, 3 twin lnchr with *Mistral* SAM, 1 *Phalanx* CIWS, 1 twin 114mm gun (capacity 1 Bell 206B *Jet Ranger* II hel)

FFGH 1 *Presidente Alfaro* (mod UK *Leander*) with 4 single lnchr with MM-40 *Exocet* ASHM, 2 triple 324mm ASTT with Mk 46 LWT, 1 *Phalanx* CIWS, 1 twin 114mm gun (capacity 1 Bell 206B *Jet Ranger* II hel)

**PATROL AND COASTAL COMBATANTS 9**

CORVETTES • **FSGM** 6 *Esmeraldas* (3†) with 2 triple lnchr with MM-40 *Exocet* ASHM, 1 quad *Albatros* lnchr with *Aspide* SAM, 2 triple B515 ILAS-3 324mm ASTT with A244 LWT (removed from two vessels), 1 76mm gun, 1 hel landing platform (upgrade programme ongoing)

PCFG 3 *Quito* (GER Lurssen TNC-45 45m) with 4 single lnchr with MM-38 *Exocet* ASHM, 1 76mm gun (upgrade programme ongoing)

**LOGISTICS AND SUPPORT 15**

AE 1 *Calicuchima*

AGOS 1 *Orion* with 1 hel landing platform

AGSC 1 *Sirius*

AK 1 *Galapagos*

ATF 1

AWT 2: 1 *Quisquis*; 1 *Atahualpa*

AXS 1 *Guayas*

YFD 2 *Rio Napo* (US ARD 12)

YTL 5

**Naval Aviation 380****EQUIPMENT BY TYPE****AIRCRAFT**

MP 1 CN-235-300M

ISR 3: 2 Beech 200T *King Air*; 1 Beech 300 *Catpass King Air*

TPT • **Light** 3: 1 Beech 200 *King Air*; 1 Beech 300 *King Air*; 1 CN-235-100

TRG 6: 2 T-34C *Turbo Mentor*; 4 T-35B *Pillan*

**HELICOPTERS**

TPT • **Light** 9: 3 Bell 206A; 3 Bell 206B; 1 Bell 230; 2 Bell 430

UAV • **ISR** 5: **Heavy** 2 *Heron*; **Medium** 3 *Searcher* Mk.II

**Marines 2,150****FORCES BY ROLE****SPECIAL FORCES**

1 cdo unit

**MANOEUVRE**

**Amphibious**

5 mne bn (on garrison duties)



**EQUIPMENT BY TYPE**

ARTY • MOR 32+ 60mm/81mm/120mm  
AD • SAM • MANPAD *Mistral*; 9K38 *Igla* (SA-18 *Grouse*)

**Air Force 4,200****Operational Command****FORCES BY ROLE****FIGHTER**

1 sqn with *Cheetah C/D*

**FIGHTER/GROUND ATTACK**

2 sqn with EMB-314 *Super Tucano*\*  
1 sqn with *Kfir C-10* (CE); *Kfir C-2*; *Kfir TC-2*

**Military Air Transport Group****FORCES BY ROLE****SEARCH & RESCUE/TRANSPORT HELICOPTER**

1 sqn with Bell 206B *Jet Ranger II*  
1 sqn with PA-34 *Seneca*

**TRANSPORT**

1 sqn with C-130/H *Hercules*; L-100-30  
1 sqn with HS-748  
1 sqn with DHC-6-300 *Twin Otter*  
1 sqn with B-727; EMB-135BJ *Legacy 600*; *Sabreliner 40*

**TRAINING**

1 sqn with Cessna 206; DA20-C1; MXP-650; T-34C  
*Turbo Mentor*

**EQUIPMENT BY TYPE****AIRCRAFT** 42 combat capable

FGA 25: 10 *Cheetah C*; 2 *Cheetah D*; 4 *Kfir C-2*; 7 *Kfir C-10* (CE); 2 *Kfir TC-2*

TPT 30: **Medium** 4: 2 C-130B *Hercules*; 1 C-130H *Hercules*; 1 L-100-30; **Light** 17: 1 Beech E90 *King Air*; 3 C-295M; 1 Cessna 206; 3 DHC-6 *Twin Otter*; 1 EMB-135BJ *Legacy 600*; 2 EMB-170; 2 EMB-190; 1 MXP-650; 2 *Sabreliner 40*; 1 PA-34 *Seneca*; PAX 9: 2 A320; 2 B-727; 5 HS-748

TRG 39: 11 DA20-C1; 17 EMB-314 *Super Tucano*\*; 11 T-34C *Turbo Mentor*

**HELICOPTERS • TPT • Light** 7 Bell 206B *Jet Ranger II*

MSL • AAM • IR *Python III*; *Python IV*; R-550 *Magic*; *Shafrir*†; SARH Super 530

**AD****SAM**

SP 13: 6 9K33 *Osa* (SA-8 *Gecko*); 7 M48 *Chaparral*  
MANPAD *Blowpipe*; 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K310 *Igla-1* (SA-16 *Gimlet*); 9K38 *Igla* (SA-18 *Grouse*)

**GUNS**

SP 20mm 28 M35

TOWED 64: 23mm 34 ZU-23; 35mm 30 GDF-002 (twin)

RADAR: 2 CFTC gap fillers; 2 CETC 2D

**Paramilitary**

All police forces; 39,500

**Police Air Service****EQUIPMENT BY TYPE****HELICOPTERS**

ISR 3 MD530F

TPT • **Light** 6: 2 AS350B *Ecureuil*; 1 Bell 206B *Jet Ranger*; 3 R-44

**Coast Guard 500****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 21**

PCC 3 *Isla Fernandina* (*Vigilante*)

PB 15: 1 *10 de Agosto*; 2 *Espada*; 1 *Isla Isabela*; 2 *Manta* (GER Lurssen 36m); 1 *Point*; 4 *Rio Coca*; 4 *Isla Santa Cruz* (Damen Stan 2606)

PBR 3: 2 *Rio Esmeraldas*; 1 *Rio Puyango*

**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 2 obs

**HAITI**

UN • MINUSTAH 1

**LIBERIA**

UN • UNMIL 1; 2 obs

**SUDAN**

UN • UNAMID 1; 2 obs

UN • UNISFA 1 obs

**El Salvador SLV**

El Salvador Colon C		2014	2015	2016
GDP	C	25.2bn	25.7bn	
	US\$	25.2bn	25.7bn	
<i>per capita</i>	US\$	3,962	4,023	
Growth	%	2.0	2.3	
Inflation	%	1.1	-1.2	
Def bdgt	C	1.33bn	1.32bn	1.3bn
	US\$	151m	150m	
FMA (US)	US\$	2m	2m	2m
US\$1=C		8.92	8.92	

Population 6,125,512

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.0%	5.4%	5.0%	4.1%	16.5%	3.1%
Female	13.3%	5.3%	5.0%	4.3%	20.0%	3.9%

**Capabilities**

Principal roles for El Salvador's armed forces include territorial defence, support to civil authorities, disaster relief and combating non-traditional threats, as well as periodic deployments to counter the domestic activity of organised criminal groups. The armed forces have long-standing internal and external training programmes, and while the forces are reasonably well equipped, there is a desire to upgrade military equipment including that which was deployed with the MINUSMA UN mission to Mali, where El Salvador deployed a small self-sustaining unit. El Salvador also deployed small units to both Iraq and Afghanistan. Current challenges include boosting professionalisation – conscription accounts for a little under half of recruits – and tackling organised crime and narcotics trafficking.

**ACTIVE 24,500** (Army 20,500 Navy 2,000 Air 2,000)**Paramilitary 17,000***Conscript liability* 18 months voluntary**RESERVE 9,900** (Joint 9,900)

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**ORGANISATIONS BY SERVICE**

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**Army 20,500**

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**FORCES BY ROLE****SPECIAL FORCES**

1 spec ops gp (1 SF coy, 1 para bn, 1 (naval inf) coy)

**MANOEUVRE****Reconnaissance**

1 armd cav regt (2 armd cav bn)

**Light**

6 inf bde (3 inf bn)

**Other**

1 (special) sy bde (2 border gd bn, 2 MP bn)

**COMBAT SUPPORT**

1 arty bde (2 fd arty bn, 1 AD bn)

1 engr comd (2 engr bn)

**EQUIPMENT BY TYPE****RECCE** 5 AML-90; (4 more in store)**APC (W)** 38: 30 M37B1 *Cashuat* (mod); 8 UR-416**ARTY** 217+**TOWED 105mm** 54: 36 M102; 18 M-56 (FRY)**MOR** 163+: **81mm** 151 M29; **120mm** 12+: (M-74 in store);

12 UBM 52

**AT****RCL** 399: **106mm** 20 M40A1 (incl 16 SP); **90mm** 379 M67**AD • GUNS** 35: **20mm** 31 M-55; 4 TCM-20

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**Navy 2,000**

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**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 10**PB** 10: 3 Camcraft (30m); 1 *Point*; 1 Swiftships 77; 1

Swiftships 65; 4 Type-44 (ex-USCG)

**AMPHIBIOUS • LANDING CRAFT****LCM** 4

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**Naval Inf (SF Commandos) 90**

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**FORCES BY ROLE****SPECIAL FORCES**

1 SF coy

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**Air Force 2,000**

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Flying hours 90 hrs/year on A-37 *Dragonfly***FORCES BY ROLE****FIGHTER/GROUND ATTACK/ISR**1 sqn with A-37B/OA-37B *Dragonfly*; O-2A/B *Skymaster*\***TRANSPORT**1 sqn with BT-67; Cessna 210 *Centurion*; Cessna 337G;*Commander* 114; IAI-202 *Arava*; SA-226T *Merlin* IIIB**TRAINING**1 sqn with R-235GT *Guerrier*; T-35 *Pillan*; T-41D*Mescalero*; TH-300**TRANSPORT HELICOPTER**1 sqn with Bell 205 (UH-1H *Iroquois*); Bell 407; Bell412EP *Twin Huey*; MD-500E; UH-1M *Iroquois***EQUIPMENT BY TYPE****AIRCRAFT** 25 combat capable**ATK** 14 A-37B *Dragonfly***ISR** 11: 6 O-2A/B *Skymaster*\*; 5 OA-37B *Dragonfly*\***TPT • Light** 10: 2 BT-67; 2 Cessna 210 *Centurion*; 1Cessna 337G *Skymaster*; 1 *Commander* 114; 3 IAI-201*Arava*; 1 SA-226T *Merlin* IIIB**TRG** 11: 5 R-235GT *Guerrier*; 5 T-35 *Pillan*; 1 T-41D*Mescalero***HELICOPTERS****MRH** 14: 4 Bell 412EP *Twin Huey*; 8 MD-500E; 2 UH-1M*Iroquois***TPT • Light** 19: 18 Bell 205 (UH-1H *Iroquois*) (incl 4

SAR); 1 Bell 407 (VIP tpt, govt owned)

**TRG** 5 TH-300**MSL • AAM • IR** *Shafirir*‡

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**Paramilitary 17,000**

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**National Civilian Police 17,000**

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Ministry of Public Security

**AIRCRAFT****ISR** 1 O-2A *Skymaster***TPT • Light** 1 Cessna 310**HELICOPTERS****MRH** 2 MD-520N**TPT • Light** 3: 1 Bell 205 (UH-1H *Iroquois*); 2 R-44*Raven* II

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**DEPLOYMENT**

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**CÔTE D'IVOIRE**

UN • UNOCI 3 obs

**HAITI**

UN • MINUSTAH 34

**LEBANON**

UN • UNIFIL 52; 1 inf pl

**MALI**

UN • MINUSMA 91; 1 hel sqn

**SOUTH SUDAN**

UN • UNMISS 1; 2 obs

**WESTERN SAHARA**

UN • MINURSO 3 obs

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**FOREIGN FORCES**

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**United States** US Southern Command: 1 Forward

Operating Location (Military, DEA, USCG and Customs personnel)

## Guatemala GUA

Guatemalan Quetzal q		2014	2015	2016
GDP	q	454bn	485bn	
	US\$	58.7bn	63.2bn	
per capita	US\$	3,701	3,886	
Growth	%	4.2	3.8	
Inflation	%	3.4	2.9	
Def exp	q	2.04bn		
	US\$	264m		
Def bdtg	q	2.08bn	2.1bn	2.07bn
	US\$	269m	274m	
FMA (US)	US\$	2m	1m	2m
US\$1=q		7.73	7.67	

Population 14,647,083

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	18.1%	5.8%	5.3%	4.4%	13.8%	2.0%
Female	17.4%	5.6%	5.3%	4.5%	15.4%	2.3%

## Capabilities

Guatemala's armed forces retain a limited capability to participate in international operations and disaster-relief tasks, which are two areas identified in the country's 2015 white paper. Rising levels of organised crime and narcotics trafficking have resulted in proposals to increase the defence budget, and increase recruitment and procurement. Equipment requirements include aerial-surveillance radars and coastal-patrol craft to monitor littoral waters, light armoured vehicles and two *Super Tucanos*. Given the transnational nature of organised crime in Central America, there is close cooperation with counterparts from neighbouring countries and the army has recently trained with Colombia in riverine operations.

**ACTIVE 18,050** (Army 15,550 Navy 1,500 Air 1,000)  
Paramilitary 25,000

**RESERVE 63,850** (Navy 650 Air 900 Armed Forces 62,300)

(National Armed Forces are combined; the army provides log spt for navy and air force)

## ORGANISATIONS BY SERVICE

### Army 15,550

15 Military Zones

#### FORCES BY ROLE

##### SPECIAL FORCES

- 1 SF bde (1 SF bn, 1 trg bn)
- 1 SF bde (1 SF coy, 1 ranger bn)
- 1 SF mtn bde

##### MANOEUVRE

###### Light

- 1 (strategic reserve) mech bde (1 inf bn, 1 cav regt, 1 log coy)
- 6 inf bde (1 inf bn)

###### Air Manoeuvre

- 1 AB bde with (2 AB bn)

#### Amphibious

1 mne bde

#### Other

1 (Presidential) gd bde (1 gd bn, 1 MP bn, 1 CSS coy)

#### COMBAT SUPPORT

- 1 engr comd (1 engr bn, 1 construction bn)
- 2 MP bde with (1 MP bn)

#### Reserves

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

ε19 inf bn

#### EQUIPMENT BY TYPE

RECCE (7 M8 in store)

APC 47

APC (T) 10 M113 (5 more in store)

APC (W) 37: 30 *Armadillo*; 7 V-100 *Commando*

ARTY 149

TOWED 105mm 76: 12 M101; 8 M102; 56 M-56

MOR 73: 81mm 55 M1; 107mm (12 M30 in store);

120mm 18 ECIA

AT

RCL 120+: 105mm 64 M-1974 FMK-1 (ARG); 106mm 56 M40A1; 75mm M20

AD • GUNS • TOWED 32: 20mm 16 GAI-D01; 16 M-55

### Navy 1,500

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 10

PB 10: 6 *Cutlass*; 1 *Dauntless*; 1 *Kukulcan* (US *Broadsword* 32m); 2 *Utatlan* (US *Sewart*)

AMPHIBIOUS • LANDING CRAFT • LCP 2 *Machete*

LOGISTICS AND SUPPORT • AXS 3

### Marines 650 reservists

#### FORCES BY ROLE

##### MANOEUVRE

###### Amphibious

2 mne bn (-)

### Air Force 1,000

2 air comd

#### FORCES BY ROLE

FIGHTER/GROUND ATTACK/ISR

1 sqn with A-37B *Dragonfly*

1 sqn with PC-7 *Turbo Trainer\**

TRANSPORT

1 sqn with BT-67; Beech 90/100/200/300 *King Air*; IAI-201 *Arava*

1 (tactical support) sqn with Cessna 206; PA-31 *Navajo*

TRAINING

1 sqn with Cessna R172K *Hawk XP*; T-35B *Pillan*

TRANSPORT HELICOPTER

1 sqn with Bell 206 *Jet Ranger*; Bell 212 (armed); Bell 412 *Twin Huey* (armed); UH-1H *Iroquois*

#### EQUIPMENT BY TYPE

Serviceability of ac is less than 50%

AIRCRAFT 9 combat capable

ATK 2 A-37B *Dragonfly*

TPT • Light 27: 5 Beech 90 *King Air*; 1 Beech 100 *King Air*; 2 Beech 200 *King Air*; 2 Beech 300 *King Air*; 4 BT-67;

2 Cessna 206; 1 Cessna 208B; 5 Cessna R172K *Hawk* XP; 4 IAI-201 *Arava*; 1 PA-31 *Navajo*  
TRG 11: 7 PC-7 *Turbo Trainer*\*; 4 T-35B *Pillan*

## HELICOPTERS

MRH 2 Bell 412 *Twin Huey* (armed)  
TPT • Light 17: 2 Bell 205 (UH-1H *Iroquois*); 8 Bell 206 *Jet Ranger*; 7 Bell 212 (armed)

## Tactical Security Group

Air Military Police

## Paramilitary 25,000 active

### National Civil Police 25,000

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF bn

##### MANOEUVRE

##### Other

1 (integrated task force) paramilitary unit (incl mil and treasury police)

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 2; 2 obs

### CÔTE D'IVOIRE

UN • UNOCI 4 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 151; 1 obs; 1 SF coy

### HAITI

UN • MINUSTAH 54

### LEBANON

UN • UNIFIL 2

### SOUTH SUDAN

UN • UNMISS 4; 2 obs

### SUDAN

UN • UNISFA 1; 1 obs

## Guyana GUY

Guyanese Dollar G\$		2014	2015	2016
GDP	G\$	639bn	681bn	
	US\$	3.06bn	3.2bn	
<i>per capita</i>	US\$	3,826	3,993	
Growth	%	3.8	3.2	
Inflation	%	1.0	1.1	
Def bdgt	G\$	7.93bn	8.61bn	
	US\$	38m	40m	
US\$1=G\$		209.00	212.75	

Population 735,554

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	14.3%	5.8%	5.1%	4.0%	19.0%	2.3%
Female	13.8%	5.6%	4.8%	3.6%	18.6%	3.2%

## Capabilities

The country has a limited military capability based on the Guyana Defence Force. The GDF's main tasks are territorial integrity, assisting the civil power and contributing to economic development, and it also undertakes paramilitary and policing tasks. Long-running border issues with Venezuela returned to the spotlight following the declaration by Caracas of maritime defence zones, one of which included Guyanese waters claimed by Venezuela and which had seen a significant oil discovery in 2015. Guyana has officer-training agreements and military ties with both Brazil and China, and participates in the *Tradewinds* exercise programme.

### ACTIVE 3,400 (Army 3,000 Navy 200 Air 200)

Active numbers combined Guyana Defence Force

### RESERVE 670 (Army 500 Navy 170)

## ORGANISATIONS BY SERVICE

### Army 900

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF coy

##### MANOEUVRE

##### Light

1 inf bn

##### Other

1 (Presidential) gd bn

##### COMBAT SUPPORT

1 arty coy

1 (spt wpn) cbt spt coy

1 engr coy

#### EQUIPMENT BY TYPE

RECCE 9: 6 EE-9 *Cascavel* (reported); 3 S52 *Shorland*

#### ARTY 54

TOWED 130mm 6 M-46†

MOR 48: 81mm 12 L16A1; 82mm 18 M-43; 120mm 18 M-43

### Navy 100

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 5

PCO 1 *Essequibo* (ex-UK *River*)

PB 4 *Barracuda* (ex-US Type-44)

### Air Force 100

#### FORCES BY ROLE

##### TRANSPORT

1 unit with Bell 206; Cessna 206; Y-12 (II)

#### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 2: 1 Cessna 206; 1 Y-12 (II)

##### HELICOPTERS

MRH 1 Bell 412 *Twin Huey*†

TPT • Light 2 Bell 206

## Haiti HTI

Haitian Gourde G		2014	2015	2016
GDP	G	389bn	425bn	
	US\$	8.71bn	8.8bn	
<i>per capita</i>	US\$	833	830	
Growth	%	2.8	2.5	
Inflation	%	3.9	7.4	
FMA (US)	US\$	2m	1m	1m
US\$1=G		44.63	48.29	

Population 9,996,731

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	16.7%	5.7%	5.1%	4.4%	15.8%	1.9%
Female	16.6%	5.7%	5.2%	4.5%	16.2%	2.3%

## Capabilities

Haiti maintains ambitions to re-establish a small army and has sought external assistance in forming a new defence force; some troops have been trained by Ecuador. Plans for expansion were outlined in the country's first White Paper on Security and Defence, published in 2015. The country's internal-security challenges continue to be tackled by the United Nations Multinational Stabilisation Mission (MINUSTAH), with its mandate extended until at least late 2016, but also by the developing police force. The embryonic army has initially focused upon providing an engineering capability for disaster relief with other requirements identified, including for a border-patrol capability.

**ACTIVE 70 (Army 70) Paramilitary 50**

## ORGANISATIONS BY SERVICE

### Army 70

#### Paramilitary 50

##### Coast Guard ε50

##### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 8: 5

*Dauntless*; 3 3812-VCF

## FOREIGN FORCES

Argentina 72; 1 fd hospital

Bangladesh 110; 1 hel sqn

Bolivia 1

Brazil 982; 1 inf bn; 1 engr coy

Canada 5

Chile 331; 1 inf bn HQ; 2 inf coy; 1 hel sqn

Ecuador 1

El Salvador 34

Guatemala 54

Honduras 37

Jordan 3

Mexico 2

Nepal 2

Paraguay 84; 1 engr coy

Peru 162; 1 inf coy

Philippines 137; 1 HQ coy

Sri Lanka 4

United States 5

Uruguay 254; 1 inf bn HQ; 1 inf coy

## Honduras HND

Honduran Lempira L		2014	2015	2016
GDP	L	410bn	440bn	
	US\$	19.5bn	19.9bn	
<i>per capita</i>	US\$	2,361	2,365	
Growth	%	3.1	3.5	
Inflation	%	6.1	3.8	
Def bdtg [a]	L	4.55bn	5.42bn	6.78bn
	US\$	217m	246m	
FMA (US)	US\$	5m	3m	5m
US\$1=L		20.99	22.05	

[a] Defence & national-security budget

Population 8,746,673

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	17.5%	5.6%	5.1%	4.6%	15.7%	1.8%
Female	16.7%	5.4%	4.9%	4.4%	15.9%	2.3%

## Capabilities

Honduras retains a broad range of capabilities, though in many cases its equipment is ageing, with serviceability in doubt. Equipment maintenance and procurement still accounts for a small proportion of the defence budget. In 2011, the armed forces began to deploy in a paramilitary role, in conjunction with the police, to combat organised crime and narcotics trafficking. To this end a new maritime special-forces unit was established in 2012, as were two new security agencies in 2014 – the Public Order Military Police and the TIGRES. The US maintains a small military presence at Soto Cano air base. Recent donations of helicopters by South Korea and Cessna *Grand Caravan* aircraft from the US have gone some way to increasing the air force's light transport capability, though the Cessnas can also be used for surveillance and counter-narcotics operations. The navy is also active in counter-narcotics activities, and operates in coordination with Colombia on *Operation Swordfish*, among other multilateral initiatives.

**ACTIVE 10,700 (Army 7,300 Navy 1,100 Air 2,300) Paramilitary 8,000**

**RESERVE 60,000 (Joint 60,000; Ex-servicemen registered)**

## ORGANISATIONS BY SERVICE

### Army 7,300

6 military zones



**FORCES BY ROLE****SPECIAL FORCES**

1 (special tac) SF gp (1 SF bn, 1 inf/AB bn)

**MANOEUVRE****Mechanised**

1 armd cav regt (1 recce sqn, 1 lt tk sqn, 2 mech bn, 1 arty bty, 1 ADA bty)

**Light**

3 inf bde (3 inf bn, 1 arty bn)

1 inf bde (3 inf bn)

**Other**

1 (Presidential) gd coy

**COMBAT SUPPORT**

1 engr bn

**Reserves****FORCES BY ROLE****MANOEUVRE****Light**

1 inf bde

**EQUIPMENT BY TYPE**

LT TK 12 *Scorpion*

RECCE 57: 13 RBY-1; 40 *Saladin*; 3 *Scimitar*; 1 *Sultan*

ARTY 118+

TOWED 28: 105mm: 24 M102; 155mm: 4 M198

MOR 90+: 81mm; 120mm 60 FMK-2; 160mm 30 M-66

AT • RCL 170: 106mm 50 M40A1; 84mm 120 *Carl Gustav*

AD • GUNS 20mm 48: 24 M55A2; 24 TCM-20

**Navy 1,100****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 17

PB 17: 2 *Lempira* (Damen Stan 4207 – leased); 1 *Chamelecon*

(Swiftships 85); 1 *Tegucigalpa* (US *Guardian* 32m); 4

*Guanaja* (ex-US Type-44); 3 *Guaymuras* (Swiftships 105);

5 *Nacaome* (Swiftships 65); 1 *Rio Coco* (US PB Mk III)

**AMPHIBIOUS • LANDING CRAFT 3**

LCU 1 *Punta Caxinas*

LCM 2

**Marines 830****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 mne bn

**Air Force 2,300****FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with A-37B *Dragonfly*

1 sqn with F-5E/F *Tiger II*

**GROUND ATTACK/ISR/TRAINING**

1 unit with Cessna 182 *Skylane*; EMB-312 *Tucano*; MXT-7-180 *Star Rocket*

**TRANSPORT**

1 sqn with Beech 200 *King Air*; C-130A *Hercules*; Cessna 185/210; IAI-201 *Arava*; PA-42 *Cheyenne*; *Turbo Commander* 690

1 VIP flt with PA-31 *Navajo*; Bell 412EP/SP *Twin Huey*

**TRANSPORT HELICOPTER**

1 sqn with Bell 205 (UH-1H *Iroquois*); Bell 412SP *Twin Huey*

**EQUIPMENT BY TYPE**

AIRCRAFT 17 combat capable

FTR 11: 9 F-5E *Tiger II*; 2 F-5F *Tiger II*

ATK 6 A-37B *Dragonfly*

TPT 15: **Medium** 1 C-130A *Hercules*; **Light** 14: 1 Beech 200 *King Air*; 2 Cessna 182 *Skylane*; 1 Cessna 185; 1

Cessna 208B *Grand Caravan*; 2 Cessna 210; 1 EMB-135

*Legacy* 600; 1 IAI-201 *Arava*; 2 L-410; 1 PA-31 *Navajo*; 1

PA-42 *Cheyenne*; 1 *Turbo Commander* 690

TRG 16: 9 EMB-312 *Tucano*; 7 MXT-7-180 *Star Rocket*

**HELICOPTERS**

MRH 7: 1 Bell 412EP *Twin Huey* (VIP); 5 Bell 412SP *Twin Huey*; 2 Hughes 500

TPT • **Light** 7: 6 Bell 205 (UH-1H *Iroquois*); 1 H125 *Ecureuil*

MSL • AAM • IR *Shafir*†

**Paramilitary 8,000****Public Security Forces 8,000**

Ministry of Public Security and Defence; 11 regional comd

**DEPLOYMENT****HAITI**

UN • MINUSTAH 37

**WESTERN SAHARA**

UN • MINURSO 12 obs

**FOREIGN FORCES**

**United States** US Southern Command: 370; 1 avn bn with CH-47 *Chinook*; UH-60 *Black Hawk*

**Jamaica JAM**

Jamaican Dollar J\$		2014	2015	2016
GDP	J\$	1.52tr	1.62tr	
	US\$	13.7bn	13.8bn	
<i>per capita</i>	US\$	4,898	4,912	
Growth	%	0.4	1.1	
Inflation	%	6.7	5.0	
Def bdgt	J\$	13.6bn	13.9bn	
	US\$	122m	119m	
US\$1=J\$		111.21	117.10	

Population 2,950,210

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.2%	5.4%	5.4%	4.6%	16.4%	3.5%
Female	13.7%	5.3%	5.4%	4.8%	16.9%	4.3%

**Capabilities**

The Jamaican Defence Force is focused upon providing maritime-security and internal-security capability – including some support to police operations. To aid ongo-

ing counter-narcotics challenges, the US is in the process of supplying ten 11-metre patrol craft to defence forces, with a further seven smaller vessels for the police. Though Jamaica maintains a relatively small defence force it benefits from training with larger armed services such as those of the US, UK and Canada.

**ACTIVE 3,450 (Army 2,900 Coast Guard 300 Air 250)**  
(combined Jamaican Defence Force)

**RESERVE 980 (Army 900 Navy 60 Air 20)**

## ORGANISATIONS BY SERVICE

### Army 2,900

#### FORCES BY ROLE

##### MANOEUVRE

Light

2 inf bn

##### COMBAT SUPPORT

1 engr regt (4 engr sqn)

##### COMBAT SERVICE SUPPORT

1 spt bn (1 MP coy, 1 med coy, 1 log coy, 1 tpt coy)

#### EQUIPMENT BY TYPE

##### APC 7

APC (W) 4 LAV-150 *Commando*

PPV 3 *Bushmaster*

ARTY • MOR 81mm 12 L16A1

#### Reserves

##### FORCES BY ROLE

##### MANOEUVRE

Light

1 inf bn

### Coast Guard 300

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 11

PBF 3

PB 8: 3 *Cornwall* (Damen Stan 4207); 4 *Dauntless*; 1 *Paul Bogle* (US 31m)

### Air Wing 250

Plus National Reserve

#### FORCES BY ROLE

##### MARITIME PATROL/TRANSPORT

1 flt with BN-2A *Defender*; Cessna 210M *Centurion*

##### SEARCH & RESCUE/TRANSPORT HELICOPTER

1 flt with Bell 407

1 flt with Bell 412EP

##### TRAINING

1 unit with Bell 206B3; DA40-180FP *Diamond Star*

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT • Light 4: 1 BN-2A *Defender*; 1 Cessna 210M *Centurion*; 2 DA40-180FP *Diamond Star*

##### HELICOPTERS

MRH 2 Bell 412EP

TPT • Light 5: 2 Bell 206B3 *Jet Ranger*; 3 Bell 407

## Mexico MEX

Mexican Peso NP		2014	2015	2016
GDP	NP	17.2tr	18.3tr	
	US\$	1.29tr	1.16tr	
<i>per capita</i>	US\$	10,784	9,592	
Growth	%	2.1	2.3	
Inflation	%	4.0	2.8	
Def bdgt [a]	NP	86.7bn	95.3bn	91.8bn
	US\$	6.52bn	6.05bn	
FMA (US)	US\$	7m	5m	7m
US\$1=NP		13.29	15.77	

[a] National-security expenditure

Population 121,736,809

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.1%	4.6%	4.4%	4.2%	18.7%	3.0%
Female	13.5%	4.5%	4.4%	4.2%	20.7%	3.7%

## Capabilities

Mexico has the most capable armed forces in Central America. They are constitutionally disbarred from international deployment except in wartime, but have been involved in disaster-relief operations. As well as these, main tasks for the armed forces include defending state sovereignty and territorial integrity, internal security and extending aid to civil authorities. The navy retains well-equipped frigates, but the majority of its forces and primary roles are dedicated to maritime security. Under the previous Calderón administration, operations against drug cartels became the army's primary activity, involving about a quarter of its active strength at any given time, while the navy and air force both prioritised procurement of ISR and transport platforms. In 2014, the purchase of light helicopters to destroy narcotics plantations was announced, as well as *King Air* surveillance aircraft. A new National Gendarmerie was activated in August 2014, although plans for an initial establishment of 10,000 were subsequently reduced to 5,000. A continuing problem with desertion has prompted efforts to improve benefits, training and conditions for serving personnel. There exists a significant air- and sea-lift capability that would allow for regional deployments if necessary.

**ACTIVE 277,150 (Army 208,350 Navy 60,300 Air 8,500) Paramilitary 58,900**

**RESERVE 81,500 (National Military Service)**

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

SATELLITES • COMMUNICATIONS 1 *Mexsat-2*

### Army 208,350

12 regions (total: 46 army zones)

**FORCES BY ROLE****SPECIAL FORCES**

- 1 (1st) SF bde (5 SF bn)
- 1 (2nd) SF bde (7 SF bn)
- 1 (3rd) SF bde (4 SF bn)

**MANOEUVRE****Reconnaissance**

- 3 (2nd, 3rd & 4th Armd) mech bde (2 armd recce bn, 2 lt mech bn, 1 arty bn, 1 (Canon) AT gp)
- 25 mot recce regt

**Light**

- 1 (1st) inf corps (1 (1st Armd) mech bde (2 armd recce bn, 2 lt mech bn, 1 arty bn, 1 (Canon) AT gp), 3 (2nd, 3rd & 6th) inf bde (each: 3 inf bn, 1 arty regt, 1 (Canon) AT gp), 1 cbt engr bde (3 engr bn))
- 3 (1st, 4th & 5th) indep lt inf bde (2 lt inf bn, 1 (Canon) AT gp)

92 indep inf bn

25 indep inf coy

**Air Manoeuvre**

- 1 para bde with (1 (GAFE) SF gp, 3 bn, 1 (Canon) AT gp)

**Other**

- 1 (Presidential) gd corps (1 SF gp, 1 mech inf bde (2 inf bn, 1 aslt bn), 1 mne bn (Navy), 1 cbt engr bn, 1 MP bde (3 bn, 1 special ops anti-riot coy))

**COMBAT SUPPORT**

- 1 indep arty regt
- 2 MP bde (3 MP bn)

**EQUIPMENT BY TYPE**

**RECCE** 236: 127 ERC-90F1 *Lynx* (7 trg); 40 M8; 37 MAC-1; 32 VBL

**APC** 718

**APC (T)** 463: 390 DNC-1 (mod AMX-VCI); 40 HWK-11; 33 M5A1 half-track

**APC (W)** 255: 95 BDX; 16 DN-4; 19 DN-5 *Toro*; 2 DN-6; 28 *Pantera* (LAV-100); 26 LAV-150 ST; 25 MOWAG *Roland*; 44 VCR (3 amb; 5 cmd post)

**ARTY** 1,390

**TOWED** 123: **105mm** 123: 40 M101; 40 M-56; 16 M2A1, 14 M3; 13 NORINCO M-90

**MOR** 1,267: **81mm** 1,100: 400 M1; 400 Brandt; 300 SB

**120mm** 167: 75 Brandt; 60 M-65; 32 RT61

**AT**

**MSL** • **SP** 8 *Milan* (VBL)

**RCL** 1,187+

**SP 106mm** M40A1

**106mm** M40A1

**GUNS 37mm** 30 M3

**AD** • **GUNS** • **TOWED** 80: **12.7mm** 40 M55; **20mm** 40 GAI-B01

**ARV** 7: 3 M32 *Recovery Sherman*; 4 VCR ARV

**Navy 60,300**

Two Fleet Commands: Gulf (6 zones), Pacific (11 zones)

**EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS 6****FRIGATES 6**

**FFGHM** 4 *Allende* (US *Knox*) with 1 octuple Mk16 Inchr with ASROC/RGM-84C *Harpoon* ASHM, 1 Mk25 GMLS with RIM-7 *Sea Sparrow* SAM, 2 twin

Mk32 324mm ASTT with Mk46 LWT, 1 127mm gun (capacity 1 MD-902 hel)

**FF 2 Bravo** (US *Bronstein*) with 1 octuple Mk112 Inchr with ASROC†, 2 triple Mk32 324mm ASTT with Mk46 LWT, 1 twin 76mm gun, 1 hel landing platform

**PATROL AND COASTAL COMBATANTS 120**

**PSOH** 4 *Oaxaca* with 1 76mm gun (capacity 1 AS565MB *Panther* hel)

**PCOH** 16:

4 *Durango* with 1 57mm gun (capacity 1 Bo-105 hel)

4 *Holzinger* (capacity 1 MD-902 *Explorer*)

3 *Sierra* with 1 57mm gun (capacity 1 MD-902 *Explorer*)

5 *Uribe* (ESP *Halcon*) (capacity 1 Bo-105 hel)

**PCO** 10 *Leandro Valle* (US *Auk* MSF) with 1 76mm gun

**PCG** 2 *Huracan* (ISR *Aliya*) with 4 single Inchr with *Gabriel* II ASHM, 1 *Phalanx* CIWS

**PCC** 2 *Democrata*

**PBF** 73: 6 *Acuario*; 2 *Acuario B*; 48 *Polaris* (SWE CB90); 17 *Polaris* II (SWE IC 16M)

**PB** 13: 3 *Azteca*; 3 *Cabo* (US *Cape Higgon*); 2 *Punta* (US *Point*); 5 *Tenochtitlan* (Damen Stan 4207)

**AMPHIBIOUS** • **LS** • **LST** 4: 2 *Monte Azules* with 1 hel landing platform; 2 *Papaloapan* (US *Newport*) with 4 76mm guns, 1 hel landing platform

**LOGISTICS AND SUPPORT 50**

**AFD** 5

**AG** 2

**AGOR** 3: 2 *Altair* (ex-US *Robert D. Conrad*); 1 *Humboldt*

**AGS** 8: 4 *Arrecife*; 1 *Onjuku*; 1 *Rio Hondo*; 1 *Rio Tuxpan*; 1 *Moctezuma* II (also used as AXS)

**AK** 2: 1 *Tarasco*; 1 *Rio Suchiate*

**ATF** 4 *Otomi* with 1 76mm gun

**AX** 2 *Huasteco* (also serve as troop transport, supply and hospital ships)

**AXS** 1 *Cuaauhquemoc* with 2 65mm saluting guns

**YTL** 6

**YM** 17

**Naval Aviation 1,250****FORCES BY ROLE****MARITIME PATROL**

5 sqn with Cessna 404 *Titan*; MX-7 *Star Rocket*; Lancair IV-P; T-6C+ *Texan* II

1 sqn with Beech 350ER *King Air*; C-212PM *Aviocar*\*; CN-235-300 MPA *Persuader*

1 sqn with L-90 *Redigo*

**TRANSPORT**

1 sqn with An-32B *Cline*

1 (VIP) sqn with DHC-8 *Dash 8*; Learjet 24; *Turbo Commander* 1000

**TRANSPORT HELICOPTER**

2 sqn with AS555 *Fennec*; AS565MB *Panther*; MD-902

2 sqn with Bo-105 CBS-5

5 sqn with Mi-17-1V/V-5 *Hip*

**TRAINING**

1 sqn with Z-242L

**EQUIPMENT BY TYPE**

**AIRCRAFT** 9 combat capable

**MP** 6 CN-235-300 MPA *Persuader*

**ISR** 4 C-212PM *Aviocar*

**TPT 30: Light 28:** 1 An-32B *Cline*; 5 Beech 350ER *King Air* (4 used for ISR); 4 C-295M; 2 C-295W; 1 Cessna 404 *Titan*; 1 DHC-8 *Dash 8*; 6 Lancair IV-P; 3 Learjet 24; 5 *Turbo Commander* 1000; **PAX 2:** 1 CL-605 *Challenger*; 1 Gulfstream 550

**TRG 40:** 3 L-90TP *Redigo\**; 4 MX-7 *Star Rocket*; 6 T-6C+ *Texan II*; 27 Z-242L

#### HELICOPTERS

**MRH 29:** 2 AS555 *Fennec*; 4 MD-500E; 19 Mi-17-1V *Hip*; 4 Mi-17V-5 *Hip*

**SAR 4 AS565MB Panther**

**TPT 34: Heavy 3 H225M Cougar; Medium 3 UH-60M Black Hawk; Light 28:** 1 AW109SP; 11 Bo-105 CBS-5; 5 MD-902 (SAR role); 1 R-44; 10 S-333

**TRG 4 Schweizer 300C**

### Marines 21,500 (Expanding to 26,560)

#### FORCES BY ROLE

##### SPECIAL FORCES

3 SF unit

##### MANOEUVRE

###### Light

32 inf bn(-)

###### Air Manoeuvre

1 AB bn

###### Amphibious

2 amph bde (4 inf bn, 1 amph bn, 1 arty gp)

###### Other

1 (Presidential) gd bn (included in army above)

##### COMBAT SERVICE SUPPORT

2 CSS bn

##### EQUIPMENT BY TYPE

**APC (W) 29:** 3 BTR-60 (APC-60); 26 BTR-70 (APC-70)

**ARTY 122**

**TOWED 105mm 16 M-56**

**MRL 122mm 6 Firos-25**

**MOR 100 60mm/81mm**

**AT • RCL 106mm M40A1**

**AD • SAM • MANPAD 5+ 9K38 Iгла (SA-18 Grouse)**

### Air Force 8,500

#### FORCES BY ROLE

##### FIGHTER

1 sqn with F-5E/F *Tiger II*

##### GROUND ATTACK/ISR

4 sqn with PC-7\*

1 sqn with PC-7\*/PC-9M

##### ISR/AEW

1 sqn with Beech 350ER *King Air*; EMB-145AEW *Erieye*; EMB-145RS; SA-2-37B; SA-227-BC *Metro III* (C-26B)

##### TRANSPORT

1 sqn with C-295M; PC-6B

1 sqn with B-727; Beech 90

1 sqn with C-27J *Spartan*; C-130E/K-30 *Hercules*; L-100-30 6 (liaison) sqn with Cessna 182/206

1 (anti-narcotic spraying) sqn with Bell 206; Cessna T206H;

1 (Presidential) gp with AS332L *Super Puma*; AW109SP; B-737; B-757; Gulfstream III; H225; Learjet 35A; Learjet 36; *Turbo Commander* 680

1 (VIP) gp with B-737; Beech 200 *King Air*; Beech 350i *King Air*; Cessna 500 *Citation*; CL-605 *Challenger*; Gulfstream 150/450/550; S-70A-24

#### TRAINING

1 sqn with Cessna 182

1 sqn with PC-7\*; T-6C+ *Texan II*

1 sqn with Beech F33C *Bonanza*; Grob G120TP; SF-260EU

#### TRANSPORT HELICOPTER

4 sqn with Bell 206B; Bell 212; Bell 407GX

1 sqn with MD-530MF/MG

1 sqn with Mi-8T *Hip*; Mi-17 *Hip*

1 sqn with H225M *Super Cougar*; Bell 412EP *Twin Huey*; S-70A-24 *Black Hawk*

#### ISR UAV

1 unit with *Hermes 450*; S4 *Ehécatl*

#### EQUIPMENT BY TYPE

##### AIRCRAFT 74 combat capable

**FTR 8:** 6 F-5E *Tiger II*; 2 F-5F *Tiger II*

**ISR 6:** 2 SA-2-37A; 4 SA-227-BC *Metro III* (C-26B)

**ELINT 8:** 6 Beech 350ER *King Air*; 2 EMB-145RS

**AEW&C 1 EMB-145AEW Erieye**

**TPT 111: Medium 9:** 4 C-27J *Spartan*; 2 C-130E *Hercules*;

2 C-130K-30 *Hercules*; 1 L-100-30; **Light 89:** 2 Beech 90

*King Air*; 1 Beech 200 *King Air*; 1 Beech 350i *King Air*; 6

C-295M; 59 Cessna 182; 3 Cessna 206; 8 Cessna T206H; 1

Cessna 500 *Citation*; 2 Learjet 35A; 1 Learjet 36; 1 Learjet

45XP; 3 PC-6B; 1 *Turbo Commander* 680; **PAX 13:** 4 B-727;

2 B-737; 1 B-757; 1 CL-605 *Challenger*; 2 Gulfstream III; 1

Gulfstream 150; 1 Gulfstream 450; 1 Gulfstream 550

**TRG 135:** 4 Beech F33C *Bonanza*; 25 Grob G120TP; 54 PC-

7\*; 1 PC-9M\*; 4 PT-17; 25 SF-260EU; 22 T-6C+ *Texan II*

#### HELICOPTERS

**MRH 32:** 1 Bell 407GX; 12 Bell 412EP *Twin Huey*; 19 Mi-17 *Hip H*

**ISR 14:** 5 MD-530MF; 9 MD-530MG

**TPT 108: Heavy 11 H225M Super Cougar; Medium 13:**

3 AS332L *Super Puma*; 2 H225 (VIP); 2 Mi-8T *Hip*; 6

S-70A-24 *Black Hawk*; **Light 84:** 6 AW109SP; 45 Bell 206;

13 Bell 206B *Jet Ranger II*; 7 Bell 206L; 13 Bell 212

**UAV • ISR 8: Medium 3 Hermes 450; Light 5 S4 Ehécatl**

**MSL • AAM • IR AIM-9J Sidewinder**

### Paramilitary 62,900

#### Federal Police 41,000 (Incl 5,000 Gendarmerie)

Public Security Secretariat

##### EQUIPMENT BY TYPE

##### AIRCRAFT

**TPT 13: Light 7:** 2 CN-235M; 2 Cessna 182 *Skylane*; 1

Cessna 500 *Citation*; 2 *Turbo Commander* 695; **PAX 6:** 4

B-727; 1 *Falcon* 20; 1 Gulfstream II

##### HELICOPTERS

**MRH 3 Mi-17 Hip H**

**TPT 27: Medium 13:** 1 SA330J *Puma*; 6 UH-60L *Black Hawk*;

6 UH-60M *Black Hawk*; **Light 14:** 2 AS350B

*Ecureuil*; 1 AS355 *Ecureuil II*; 6 Bell 206B; 5 H120 *Colibri*

**UAV • ISR 12: Medium 2 Hermes 900; Light 10 S4**

*Ehécatl*

**Federal Ministerial Police 4,500****EQUIPMENT BY TYPE****HELICOPTERS**

**TPT • Light** 25: 18 Bell 205 (UH-1H); 7 Bell 212  
**UAV • ISR • Heavy** 2 *Dominator* XP

**Rural Defense Militia 17,400****FORCES BY ROLE****MANOEUVRE Light**

13 inf unit  
 13 (horsed) cav unit

**Cyber**

It was announced that two Cyberspace Operations centres would be created by 2018, one for the army and one for the navy, to address and better coordinate defence work on cyber security and in cyberspace. Key documentation includes the 2013–18 National Defence Sector Programme, the 2013–18 National Development Programme and the 2014–18 National Security Programme.

**DEPLOYMENT****HAITI**

UN • MINUSTAH 2

**WESTERN SAHARA**

UN • MINURSO 2 obs

**Nicaragua NIC**

Nicaraguan Gold Cordoba Co		2014	2015	2016
<b>GDP</b>	Co	306bn	336bn	
	US\$	11.8bn	12.3bn	
<b>per capita</b>	US\$	1,905	1,965	
<b>Growth</b>	%	4.7	4.0	
<b>Inflation</b>	%	6.0	5.4	
<b>Def bdgt</b>	Co	2.15bn	1.95bn	2.08bn
	US\$	83m	72m	
<b>FMA (US)</b>	US\$	0.4m		
<b>US\$1=Co</b>		25.96	27.26	

**Population** 5,907,881

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	14.6%	5.4%	5.7%	4.5%	16.4%	2.2%
<b>Female</b>	14.0%	5.3%	5.7%	4.7%	18.7%	2.7%

**Capabilities**

Nicaragua's armed forces are postured to provide assistance to border- and internal-security operations, with a central reserve focused on a single mechanised brigade, though there is increasing focus on disaster relief, coastal security and counter-narcotics activities. Most equipment is of Cold War vintage and, although there has been some recent modernisation and refurbishment, there has been little in the way of procurement. Recently reported plans to acquire

T-72 tanks to replace the army's T-55s currently in service would be a major improvement in armoured capability, though current requirements are for fixed- and rotary-wing aircraft and coastal-patrol vessels. Training relationships exist with Russia as well as regional states, where there is also cooperation in the fight against transnational narcotics trafficking and other organised crime.

**ACTIVE 12,000 (Army 10,000 Navy 800 Air 1,200)**

**ORGANISATIONS BY SERVICE****Army €10,000****FORCES BY ROLE****SPECIAL FORCES**

1 SF bde (2 SF bn)

**MANOEUVRE****Mechanised**

1 mech inf bde (1 armd recce bn, 1 tk bn, 1 mech inf bn,  
 1 arty bn, 1 MRL bn, 1 AT coy)

**Light**

1 regional comd (3 lt inf bn)  
 4 regional comd (2 lt inf bn)  
 2 indep lt inf bn

**Other**

1 comd regt (1 inf bn, 1 sy bn, 1 int unit, 1 sigs bn)

**COMBAT SUPPORT**

1 engr bn

**COMBAT SERVICE SUPPORT**

1 med bn  
 1 tpt regt

**EQUIPMENT BY TYPE**

**MBT** 62 T-55 (65 more in store)

**LT TK** (10 PT-76 in store)

**RECCE** 20 BRDM-2

**AIFV** BMP-1

**APC (W)** 86+: 41 BTR-152 (61 more in store); 45 BTR-60 (15 more in store); Some BTR-70M

**ARTY** 766

**TOWED** 12: **122mm** 12 D-30; (**152mm** 30 D-20 in store)

**MRL** 151: **107mm** 33 Type-63; **122mm** 118: 18 BM-21; 100 GRAD 1P (BM-21P) (single-tube rocket launcher, man portable)

**MOR** 603: **82mm** 579; **120mm** 24 M-43; (**160mm** 4 M-160 in store)

**AT****MSL**

SP 12 BRDM-2 with 9K11 *Malyutka* (AT-3 *Sagger*)

**MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*)

**RCL** **82mm** B-10

**GUNS** 281: **57mm** 174 ZIS-2; (90 more in store); **76mm** 83 ZIS-3; **100mm** 24 M-1944

**AD • SAM • MANPAD** 9K36 *Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1* (SA-16 *Gimlet*); 9K32 *Strela-2* (SA-7 *Grail*)‡

**AEV** T-54/T-55

**VLB** TMM-3

**Navy €800****EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS • PB** 8: 3

*Dabur*; 4 Rodman 101, 1 *Zhuk*



## Marines

### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

1 mne bn

## Air Force 1,200

### FORCES BY ROLE

#### TRANSPORT

1 sqn with An-26 *Curl*; Beech 90 *King Air*; Cessna U206; Cessna 404 *Titan* (VIP)

#### TRAINING

1 unit with Cessna 172; PA-18 *Super Cub*; PA-28 *Cherokee*

#### TRANSPORT HELICOPTER

1 sqn with Mi-17 *Hip H* (armed)

#### AIR DEFENCE

1 gp with ZU-23

### EQUIPMENT BY TYPE

#### AIRCRAFT

TPT • **Light** 9: 3 An-26 *Curl*; 1 Beech 90 *King Air*; 1 Cessna 172; 1 Cessna U206; 1 Cessna 404 *Titan* (VIP); 2 PA-28 *Cherokee*

TRG 2 PA-18 *Super Cub*

#### HELICOPTERS

MRH 7 Mi-17 *Hip H* (armed)†

TPT • **Medium** 2 Mi-171E

AD • **GUNS** 23mm 18 ZU-23

MSL • **ASM** 9M17 *Skorpion* (AT-2 *Swatter*)

## Panama PAN

Panamanian Balboa B		2014	2015	2016
<b>GDP</b>	B	43.8bn	47.5bn	
	US\$	43.8bn	47.5bn	
<b>per capita</b>	US\$	11,146	11,850	
<b>Growth</b>	%	6.2	6.0	
<b>Inflation</b>	%	2.6	1.0	
<b>Def bdgt [a]</b>	B	717m	654m	
	US\$	717m	654m	
<b>FMA (US)</b>	US\$	2m	2m	2m
<b>US\$1=B</b>		1.00	1.00	

[a] Public-security expenditure

**Population** 3,657,024

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	13.8%	4.5%	4.2%	4.0%	20.1%	3.7%
<b>Female</b>	13.2%	4.4%	4.1%	3.9%	19.8%	4.3%

## Capabilities

Panama's armed forces were abolished in 1990. A police force and an air/naval coast-guard organisation were retained for low-level security activities. This is focused on transport aircraft and small patrol craft, with some interceptor vessels for interdiction operations, and some light-armoured and other urban vehicles. Disaster relief, internal security and combating narcotics trafficking and other transnational organised crime are key priorities. In a bid to

improve information gathering on the activity of transnational narcotics gangs, there are moves to create a broader information-gathering and -sharing network involving the local community. There have been some exercises with neighbouring countries, such as Colombia.

## Paramilitary 12,000

## ORGANISATIONS BY SERVICE

### Paramilitary 12,000

#### National Police Force 11,000

No hvy mil eqpt, small arms only

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF unit (reported)

##### MANOEUVRE

###### Other

1 (presidential) gd bn (-)

8 paramilitary coy

18 police coy

##### COMBAT SUPPORT

1 MP bn

### National Aeronaval Service €1,000

#### FORCES BY ROLE

##### TRANSPORT

1 sqn with C-212M *Aviocar*; Cessna 210; PA-31 *Navajo*; PA-34 *Seneca*

1 (Presidential) flt with ERJ-135BJ; S-76C

##### TRAINING

1 unit with Cessna 152; Cessna 172; T-35D *Pillan*

##### TRANSPORT HELICOPTER

1 sqn with AW139; Bell 205; Bell 205 (UH-1H *Iroquois*); Bell 212; Bell 407; Bell 412EP; H145; MD-500E

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 22

PCO 1 *Independencia* (ex-US *Balsam*)

PCC 2 *Saettia*

PB 19: 3 *Chiriqui* (ex-US PB MkIV); 1 *Escudo de Veraguas*;

1 *Naos*; 2 *Panama*; 2 *Panquiaco* (UK *Vosper* 31.5m); 5 3

*De Noviembre* (ex-US *Point*), 1 *Taboga*; 4 *Type-200*

##### AMPHIBIOUS • LANDING CRAFT • LCU 1 *General Estaban Huertas*

##### LOGISTICS AND SUPPORT • AG 2

##### AIRCRAFT

TPT • **Light** 12: 5 C-212M *Aviocar*; 1 Cessna 152, 1 Cessna 172; 1 Cessna 210; 1 ERJ-135BJ; 1 PA-31 *Navajo*; 2 PA-34 *Seneca*

TRG 6 T-35D *Pillan*

##### HELICOPTERS

MRH 8: 6 AW139; 1 Bell 412EP; 1 MD-500E

TPT • **Light** 21: 2 Bell 205; 13 Bell 205 (UH-1H *Iroquois*);

2 Bell 212; 2 Bell 407; 1 H145; 1 S-76C

## Paraguay PRY

Paraguayan Guarani Pg		2014	2015	2016
GDP	Pg	138tr	147tr	
	US\$	30.2bn	29.1bn	
<i>per capita</i>	US\$	4,379	4,142	
Growth	%	4.4	3.0	
Inflation	%	5.0	3.3	
Def bdtg	Pg	1.4tr	1.63tr	
	US\$	307m	322m	
US\$1=Pg		4,575.11	5,049.96	

Population 6,783,272

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.0%	5.0%	5.1%	4.5%	19.3%	3.2%
Female	12.6%	5.0%	5.1%	4.5%	19.1%	3.6%

## Capabilities

The armed forces are small by regional standards and the equipment inventory for all services is ageing, and largely obsolete. There are reported aspirations to acquire KT-1P turboprop aircraft from neighbouring Peru, as well as UAVs and additional air-defence radars to combat drug trafficking. Though landlocked, the country supports a small force of river-patrol craft, reflecting the importance of its river systems, and the navy has also contributed a small force of personnel – along with army personnel and troops from the air force's airborne formation – to the National Anti-Drug Secretariat's Joint Special Forces Battalion, a unit organised for counter-narcotics missions. The services train regularly and participate in UN peacekeeping missions on a limited scale.

**ACTIVE 10,650 (Army 7,600 Navy 1,950 Air 1,100)**

**Paramilitary 14,800**

*Conscript liability* 12 months, Navy 2 years

**RESERVE 164,500 (Joint 164,500)**

## ORGANISATIONS BY SERVICE

**Army 6,100; 1,500 conscript (total 7,600)**

Much of the Paraguayan army is maintained in a cadre state during peacetime; the nominal inf and cav divs are effectively only at coy strength. Active gp/regt are usually coy sized.

### FORCES BY ROLE

#### MANOEUVRE

##### Light

3 inf corps (total: 6 inf div (-), 3 cav div (-), 6 arty bty)

##### Other

1 (Presidential) gd regt (1 SF bn, 1 inf bn, 1 sy bn, 1 log gp)

#### COMBAT SUPPORT

1 arty bde with (2 arty gp, 1 ADA gp)

1 engr bde with (1 engr regt, 3 construction regt)

1 sigs bn

## Reserves

### MANOEUVRE

#### Light

14 inf regt (cadre)

4 cav regt (cadre)

### EQUIPMENT BY TYPE

MBT 3 M4A3 *Sherman*

RECCE 28 EE-9 *Cascavel*

APC • APC (W) 12 EE-11 *Urutu*

ARTY 99

TOWED 105mm 19 M101

MOR 81mm 80

AD • GUNS 22:

SP 20mm 3 M9 half track

TOWED 19: 40mm 13 M1A1, 6 L/60

**Navy 1,100; 850 conscript (total 1,950)**

### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 22

PCR 3: 1 *Itaipú*; 1 *Nanawat*; 1 *Paraguay†* with 2 twin 120mm gun, 3 76mm gun

PBR 19: 1 *Capitan Cabral*; 2 *Capitan Ortiz* (ROC *Hai Ou*); 2 *Novatec*; 6 Type-701; 3 Croq 15; 5 others

AMPHIBIOUS • LANDING CRAFT • LCVP 3

LOGISTICS AND SUPPORT 5

YAC 1

YGS 1

YTL 3

## Naval Aviation 100

### FORCES BY ROLE

#### TRANSPORT

1 (liaison) sqn with Cessna 150; Cessna 210 *Centurion*; Cessna 310; Cessna 401

#### TRANSPORT HELICOPTER

1 sqn with AS350 *Ecureuil* (HB350 *Esquilo*)

### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 6: 2 Cessna 150; 1 Cessna 210 *Centurion*; 2 Cessna 310; 1 Cessna 401

HELICOPTERS • TPT • Light 2 AS350 *Ecureuil* (HB350 *Esquilo*)

**Marines 700; 200 conscript (total 900)**

### FORCES BY ROLE

#### MANOEUVRE

##### Amphibious

3 mne bn(-)

ARTY • TOWED 105mm 2 M101

**Air Force 900; 200 conscript (total 1,100)**

### FORCES BY ROLE

#### GROUND ATTACK/ISR

1 sqn with EMB-312 *Tucano\**

#### TRANSPORT

1 gp with C-212-200/400 *Aviocar*; DHC-6 *Twin Otter*

1 VIP gp with Beech 58 *Baron*; Bell 427; Cessna U206

*Stationair*; Cessna 208B *Grand Caravan*; Cessna 210

*Centurion*; Cessna 402B; PA-32R *Saratoga* (EMB-721C

*Sertanejo*); PZL-104 *Wilga* 80

#### TRAINING

1 sqn with T-25 *Universal*; T-35A/B *Pillan*

**TRANSPORT HELICOPTER**

1 gp with AS350 *Ecureuil* (HB350 *Esquilo*); Bell 205 (UH-1H *Iroquois*)

**EQUIPMENT BY TYPE**

**AIRCRAFT** 6 combat capable

**TPT • Light** 18: 1 Beech 58 *Baron*; 4 C-212-200 *Aviocar*; 1 C-212-400 *Aviocar*; 2 Cessna 208B *Grand Caravan*; 1 Cessna 210 *Centurion*; 1 Cessna 310; 2 Cessna 402B; 2 Cessna U206 *Stationair*; 1 DHC-6 *Twin Otter*; 1 PA-32R *Saratoga* (EMB-721C *Sertanejo*); 2 PZL-104 *Wilga* 80  
**TRG** 22: 6 EMB-312 *Tucano\**; 6 T-25 *Universal*; 7 T-35A *Pillan*; 3 T-35B *Pillan*

**HELICOPTERS • TPT • Light** 10: 3 AS350 *Ecureuil* (HB350 *Esquilo*); 6 Bell 205 (UH-1H *Iroquois*); 1 Bell 427 (VIP)

**Paramilitary 14,800**

**Special Police Service** 10,800; 4,000 conscript (total 14,800)

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 3; 1 obs

**CÔTE D'IVOIRE**

UN • UNOCI 2; 2 obs

**CYPRUS**

UN • UNFICYP 14

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 17 obs

**HAITI**

UN • MINUSTAH 84; 1 engr coy

**SOUTH SUDAN**

UN • UNMISS 2 obs

**WESTERN SAHARA**

UN • MINURSO 1 obs

**Peru PER**

Peruvian Nuevo Sol NS		2014	2015	2016
GDP	NS	575bn	603bn	
	US\$	203bn	180bn	
<i>per capita</i>	US\$	6,449	5,638	
Growth	%	2.4	2.4	
Inflation	%	3.2	3.2	
Def bdgt	NS	7.24bn	7.61bn	7.13bn
	US\$	2.55bn	2.27bn	
FMA (US)	US\$	3m	2m	1m
US\$1=NS		2.84	3.35	

Population 30,444,999

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.7%	4.7%	4.8%	4.1%	18.5%	3.3%
Female	13.2%	4.6%	4.8%	4.3%	20.1%	3.7%

**Capabilities**

The armed forces remain primarily orientated towards internal security, following operations against Shining Path leftist guerrillas, and against narcotics traffickers and other challenges like illegal mining. The VRAEM region, encompassing the Apurimac, Ene and Mantaro rivers and strongly associated with coca production, is of particular focus as part of a 2013–16 national programme and saw a no-fly zone established there in early 2015. The SIVAN monitoring-and-surveillance system, intended to cover Peru's Amazon border regions, received government approval in late 2014 and will be supported by an Earth-observation satellite due for launch in 2016. Some modernisation of conventional equipment has also been possible in recent years, but a substantial proportion of the inventories of all three services remain unmodernised, and no replacement has been found so far for the army's ageing T-55 main battle tanks. The armed forces continue to train regularly, and participate in multinational exercises and UN deployments.

**ACTIVE 81,000** (Army 47,500 Navy 24,000 Air 9,500)  
**Paramilitary 77,000**

**RESERVE 188,000** (Army 188,000)

**ORGANISATIONS BY SERVICE****Army 47,500**

4 mil region

**FORCES BY ROLE****SPECIAL FORCES**

- 1 (1st) SF bde (4 cdo bn, 1 airmob arty gp, 1 MP Coy, 1 cbt spt bn)
- 1 (3rd) SF bde (3 cdo bn, 1 airmob arty gp, 1 MP coy)
- 1 SF gp (regional troops)

**MANOEUVRE****Armoured**

- 1 (3rd) armd bde (2 tk bn, 1 armd inf bn, 1 arty gp, 1 AT coy, 1 AD gp, 1 engr bn, 1 cbt spt bn)
- 1 (9th) armd bde (forming - 1 tk bn)

**Mechanised**

- 1 (3rd) armd cav bde (3 mech cav bn, 1 mot inf bn, 1 arty gp, 1 AD gp, 1 engr bn, 1 cbt spt bn)
- 1 (1st) cav bde (4 mech cav bn, 1 MP coy, 1 cbt spt bn)
- Light**
- 2 (2nd & 31st) mot inf bde (3 mot inf bn, 1 arty gp, 1 MP coy, 1 log bn)
- 3 (1st, 7th & 32nd) inf bde (3 inf bn, 1 MP coy, 1 cbt spt bn)

**Mountain**

- 1 (4th) mtn bde (1 armd regt, 3 mot inf bn, 1 arty gp, 1 MP coy, 1 cbt spt bn)
- 1 (5th) mtn bde (1 armd regt, 2 mot inf bn, 3 jungle coy, 1 arty gp, 1 MP coy, 1 cbt spt bn)

**Jungle**

- 1 (5th) jungle inf bde (1 SF gp, 3 jungle bn, 3 jungle coy, 1 jungle arty gp, 1 AT coy, 1 AD gp, 1 jungle engr bn)
- 1 (6th) jungle inf bde (4 jungle bn, 1 engr bn, 1 MP coy, 1 cbt spt bn)

**Other**

1 (18th) armd trg bde (1 mech cav regt, 1 armd regt, 2 tk bn, 1 armd inf bn, 1 engr bn, 1 MP coy, 1 cbt spt bn)

**Aviation**

1 (1st) avn bde (1 atk hel/recce hel bn, 1 avn bn, 2 aslt hel/tpt hel bn)

**COMBAT SUPPORT**

1 (1st) arty bde (4 arty gp, 2 AD gp, 1 sigs gp)  
1 (3rd) arty bde (4 arty gp, 1 AD gp, 1 sigs gp)  
1 AD gp (regional troops)  
1 (22nd) engr bde (3 engr bn, 1 demining coy)

**EQUIPMENT BY TYPE**

**MBT** 165 T-55; (75+ in store)

**LT TK** 96 AMX-13

**RECCE** 95: 30 BRDM-2; 15 Fiat 6616; 50 M9A1

**APC** 299

**APC (T)** 120 M113A1

**APC (W)** 179: 150 UR-416; 25 Fiat 6614; 4 *Repontec*

**ARTY** 1,011

**SP 155mm** 12 M109A2

**TOWED** 290

**105mm** 152: 44 M101; 24 M2A1; 60 M-56; 24 Model 56 pack howitzer; **122mm**; 36 D-30; **130mm** 36 M-46; **155mm** 66: 36 M114, 30 Model 50

**MRL 122mm** 35: 22 BM-21 *Grad*; 13 Type-90B

**MOR** 674+

**SP 107mm** 24 M106A1

**TOWED** 650+ **81mm/107mm** 350; **120mm** 300+ Brandt/Expal Model L

**AT**

**MSL**

**SP** 22 M1165A2 HMMWV with 9K135 *Kornet E* (AT-14 *Spriggan*)

**MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); HJ-73C; 9K135 *Kornet E* (AT-14 *Spriggan*); *Spike-ER*

**RCL 106mm** M40A1

**AIRCRAFT**

**TPT • Light** 16: 2 An-28 *Cash*; 3 An-32B *Cline*; 1 Beech 350 *King Air*; 1 Beech 1900D; 4 Cessna 152; 1 Cessna 208 *Caravan I*; 2 Cessna U206 *Stationair*; 1 PA-31T *Cheyenne II*; 1 PA-34 *Seneca*

**TRG** 4 IL-103

**HELICOPTERS**

**MRH** 8 Mi-17 *Hip H*

**TPT** 24: **Heavy** (3 Mi-26T *Halo* in store); **Medium** 11 Mi-171Sh; **Light** 13: 2 AW109K2; 9 PZL Mi-2 *Hoplite*; 2 R-44

**TRG** 5 F-28F

**AD**

**SAM • MANPAD** 9K36 *Strela-3* (SA-14 *Gremlin*); 9K310 *Igla-1* (SA-16 *Gimlet*); 9K32 *Strela-2* (SA-7 *Grail*)‡

**GUNS** 165

**SP 23mm** 35 ZSU-23-4

**TOWED 23mm** 130: 80 ZU-23-2; 50 ZU-23

**ARV** M578

**Navy 24,000 (incl 1,000 Coast Guard)**

Commands: Pacific, Lake Titicaca, Amazon River

**EQUIPMENT BY TYPE**

**SUBMARINES • TACTICAL • SSK** 6:

6 *Angamos* (GER T-209/1200 – 2 in refit/reserve) with 8 single 533mm TT with A-185 HWT

**PRINCIPAL SURFACE COMBATANTS 8**

**CRUISERS • CG** 1 *Almirante Grau* (NLD *De Ruyter*) with 8 single Inchr with *Otomat* Mk2 AShM, 4 twin 152mm guns

**FRIGATES • FFGHM** 7:

4 *Aguirre* (ITA *Lupo*) with 8 single Inchr with *Otomat* Mk2 AShM (undergoing upgrade to MM-40 *Exocet* Block III AShM from 2014), 1 octuple Mk29 Inchr with RIM-7P *Sea Sparrow* SAM, 2 triple 324mm ASTT with A244 LWT, 1 127mm gun (capacity 1 Bell 212 (AB-212)/SH-3D *Sea King*)

3 *Carvajal* (mod ITA *Lupo*) with 8 single Inchr with *Otomat* Mk2 AShM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple 324mm ASTT with A244 LWT, 1 127mm gun (capacity 1 Bell 212 (AB-212)/SH-3D *Sea King*)

**PATROL AND COASTAL COMBATANTS 14**

**CORVETTES • FSG** 6 *Velarde* (FRA PR-72 64m) with 4 single Inchr with MM-38 *Exocet* AShM, 1 76mm gun

**PCR** 5:

2 *Amazonas* with 1 76mm gun

1 *Manuel Clavero* (1 additional vessel undergoing acceptance trials)

2 *Marañon* with 2 76mm guns

**PBR** 3 *Punta Malpelo*

**AMPHIBIOUS**

**LANDING SHIPS • LST** 2 *Paita* (capacity 395 troops) (US *Terrebonne Parish*)

**LANDING CRAFT • LCAC** 7 *Griffon* 2000TD (capacity 22 troops)

**LOGISTICS AND SUPPORT 34**

**AFD** 3

**AG** 1 *Rio Napo*

**AGOR** 1 *Humboldt*

**AGSC** 5: 1 *Carrasco*; 2 *Van Straelen*; 1 *La Macha*, 1 *Stiglich* (river survey vessel for the upper Amazon)

**AH** 4 (river hospital craft)

**AO** 2 *Noguera*

**AOR** 2: 1 *Mollendo*; 1 *Tacna*

**AOT** 2 *Bayovar*

**ATF** 1

**AW** 1 *Caloyeras*

**AXS** 1 *Marte*

**YDT** 1 *Unanue*

**YPT** 1 *San Lorenzo*

**YTL** 10

**Naval Aviation €800****FORCES BY ROLE****MARITIME PATROL**

1 sqn with Beech 200T; Bell 212 ASW (AB-212 ASW); F-27 *Friendship*; Fokker 60; SH-3D *Sea King*

**TRANSPORT**

1 flt with An-32B *Cline*; Cessna 206; Fokker 50

**TRAINING**

1 sqn with F-28F; T-34C *Turbo Mentor*

**TRANSPORT HELICOPTER**

1 (liaison) sqn with Bell 206B *Jet Ranger II*; Mi-8 *Hip*

**EQUIPMENT BY TYPE****AIRCRAFT**

MP 8: 4 Beech 200T; 4 Fokker 60  
 ELINT 1 F-27 *Friendship*  
 TPT • **Light** 6: 3 An-32B *Cline*; 1 Cessna 206; 2 Fokker 50  
 TRG 5 T-34C *Turbo Mentor*

**HELICOPTERS**

ASW 5: 2 Bell 212 ASW (AB-212 ASW); 3 SH-3D *Sea King*  
 MRH 3 Bell 412SP  
 TPT 11: **Medium** 8: 2 Mi-8 *Hip*; 6 UH-3H *Sea King*;  
**Light** 3 Bell 206B *Jet Ranger II*  
 TRG 5 F-28F

MSL • ASHM AM-39 *Exocet*

**Marines 4,000****FORCES BY ROLE****SPECIAL FORCES**

3 cdo gp

**MANOEUVRE****Light**

2 inf bn

1 inf gp

**Amphibious**

1 mne bde (1 SF gp, 1 recce bn, 2 inf bn, 1 amph bn, 1 arty gp)

**Jungle**

1 jungle inf bn

**EQUIPMENT BY TYPE**

APC (W) 33+: 16 BMR-600; 2 LAV II; V-100 *Commando*;  
 15 V-200 *Chaimite*

**ARTY 18+**

TOWED 122mm D-30

MOR 18+: 81mm some; 120mm ε18

AT • **RCL 84mm** *Carl Gustav*; **106mm** M40A1

AD • **GUNS 20mm** SP (twin)

**Air Force 9,500**

Divided into five regions – North, Lima, South, Central and Amazon.

**FORCES BY ROLE****FIGHTER**

1 sqn with MiG-29S/SE *Fulcrum C*; MiG-29UB *Fulcrum B*

**FIGHTER/GROUND ATTACK**

1 sqn with *Mirage* 2000E/ED (2000P/DP)

2 sqn with A-37B *Dragonfly*

1 sqn with Su-25A *Frogfoot A+*; Su-25UB *Frogfoot B+*

**ISR**

1 (photo-survey) sqn with Learjet 36A; SA-227-BC *Metro III* (C-26B)

**TRANSPORT**

1 sqn with B-737; An-32 *Cline*

1 sqn with DHC-6 *Twin Otter*; DHC-6-400 *Twin Otter*;  
 PC-6 *Turbo Porter*

1 sqn with L-100-20

**TRAINING**

2 (drug interdiction) sqn with EMB-312 *Tucano*

1 sqn with MB-339A\*

1 sqn with Z-242

1 hel sqn with Schweizer 300C

**ATTACK HELICOPTER**

1 sqn with Mi-25/Mi-35P *Hind*

**TRANSPORT HELICOPTER**

1 sqn with Mi-17 *Hip H*

1 sqn with Bell 206 *Jet Ranger*; Bell 212 (AB-212); Bell 412  
*Twin Huey*

1 sqn with Bo-105C/LS

**AIR DEFENCE**

6 bn with S-125 *Pechora* (SA-3 *Goa*)

**EQUIPMENT BY TYPE****AIRCRAFT 78 combat capable**

FTR 20: 9 MiG-29S *Fulcrum C*; 3 MiG-29SE *Fulcrum C*; 6 MiG-29SMP *Fulcrum*; 2 MiG-29UBM *Fulcrum B*

FGA 12: 2 *Mirage* 2000ED (2000DP); 10 *Mirage* 2000E (2000P) (some†)

ATK 36: 18 A-37B *Dragonfly*; 10 Su-25A *Frogfoot A+*; 8 Su-25UB *Frogfoot B+*

ISR 6: 2 Learjet 36A; 4 SA-227-BC *Metro III* (C-26B)

TPT 29: **Medium** 4: 2 C-27J *Spartan*; 2 L-100-20; **Light** 20: 4 An-32 *Cline*; 3 DHC-6 *Twin Otter*; 12 DHC-6-400 *Twin Otter*; 1 PC-6 *Turbo-Porter*; **PAX** 4 B-737

TRG 54: 19 EMB-312 *Tucano*; 5 KT-1P; 10 MB-339A\*; 6 T-41A/D *Mescalero*; 14 Z-242

**HELICOPTERS**

ATK 18: 16 Mi-25 *Hind D*; 2 Mi-35P *Hind E*

MRH 21: 2 Bell 412 *Twin Huey*; 19 Mi-17 *Hip H*

TPT • **Light** 21: 8 Bell 206 *Jet Ranger*; 6 Bell 212 (AB-212); 1 Bo-105C; 6 Bo-105LS

TRG 4 Schweizer 300C

**AD • SAM**

TOWED S-125 *Pechora* (SA-3 *Goa*);

MANPAD *Javelin*

**MSL**

AAM • **IR** R-3 (AA-2 *Atoll*)†; R-60 (AA-8 *Aphid*)†; R-73 (AA-11 *Archer*); R-550 *Magic*; **IR/SARH** R-27 (AA-10 *Alamo*); **ARH** R-77 (AA-12 *Adder*)

ASM AS-30; Kh-29L (AS-14A *Kedge*)

ARM Kh-58 (AS-11 *Kilter*)

**Paramilitary 77,000****National Police 77,000 (100,000 reported)****EQUIPMENT BY TYPE**

APC (W) 104: 4 BMR-600; 100 MOWAG *Roland*

**General Police 43,000****Security Police 21,000****Technical Police 13,000****Coast Guard 1,000**

Personnel included as part of Navy

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 36**

PSOH 1 *Carvajal* (mod ITA *Lupo*) with 1 127mm gun (capacity 1 Bell 212 (AB-212)/SH-3D *Sea King*)

PCC 5 *Rio Nepena*

PB 10: 6 *Chicama* (US *Dauntless*); 1 *Río Chira*; 3 *Río Santa*



**PBR 20:** 1 *Río Viru*; 8 *Parachique*; 10 *Zorritos*; 1 other  
**LOGISTICS AND SUPPORT • AH 1** *Puno*  
**AIRCRAFT**

**TPT • Light 3:** 1 DHC-6 *Twin Otter*; 2 F-27 *Friendship*

### Rondas Campesinas

Peasant self-defence force. Perhaps 7,000 rondas 'gp', up to pl strength, some with small arms. Deployed mainly in emergency zone.

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 4; 5 obs

### CÔTE D'IVOIRE

UN • UNOCI 1 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 2; 13 obs

### HAITI

UN • MINUSTAH 162; 1 inf coy

### LIBERIA

UN • UNMIL 2; 2 obs

### SOUTH SUDAN

UN • UNMISS 2; 2 obs

### SUDAN

UN • UNAMID 1; 2 obs

UN • UNISFA 1 obs

Suriname SUR				
Suriname Dollar srd		2014	2015	2016
GDP	srd	17.2bn	16.7bn	
	US\$	5.21bn	5.05bn	
<i>per capita</i>	US\$	9,427	9,052	
Growth	%	1.8	1.5	
Inflation	%	3.4	3.8	
Def exp	srd	€172m		
	US\$	€52m		
US\$1=srd		3.30	3.30	

Population 579,633

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	13.1%	4.7%	4.2%	4.4%	21.5%	2.5%
Female	12.6%	4.5%	4.0%	4.2%	21.0%	3.3%

## Capabilities

The fundamental role of the nation's small armed forces is assuring sovereignty and territorial integrity, but amid limited capability to defend against a well-armed and concerted attack, in practice their main activities are related to border security and tackling transnational criminal activity. Ties with larger countries, particularly Brazil, China and India, have been crucial to the supply of more

costly equipment, including a limited number of armoured vehicles and helicopters, as well as training activity, which is also delivered through participation in multinational exercises like the *Tradewinds* series.

**ACTIVE 1,840** (Army 1,400 Navy 240 Air 200)

### Paramilitary 100

(All services form part of the army)

## ORGANISATIONS BY SERVICE

### Army 1,400

#### FORCES BY ROLE

##### MANOEUVRE

###### Mechanised

1 mech cav sqn

###### Light

1 inf bn (4 coy)

##### COMBAT SUPPORT

1 MP bn (coy)

#### EQUIPMENT BY TYPE

RECCE 6 EE-9 *Cascavel*

APC (W) 15 EE-11 *Urutu*

ARTY • MOR 81mm 6

AT • RCL 106mm M40A1

### Navy €240

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 10 PB 5: 3

Rodman 101t; 2 others

PBR 5 Rodman 55

### Air Force €200

#### EQUIPMENT BY TYPE

AIRCRAFT 3 combat capable

MP 1 C-212-400 *Aviocar\**

TPT • Light 2: 1 BN-2 *Defender\**; 1 Cessna 182

TRG 1 PC-7 *Turbo Trainer\**

HELICOPTERS • MRH 3 SA316B *Alouette III (Chetak)*

### Paramilitary €100

#### Coast Guard €100

Formed in November 2013; 3 Coast Guard stations to be formed; HQ at Paramaribo

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 3: 1

OCEA FPB 98; 2 OCEA FPB 72 MkII

## Trinidad and Tobago TTO

Trinidad and Tobago		2014	2015	2016
Dollar TT\$				
GDP	TT\$	185bn	177bn	
	US\$	28.9bn	27.7bn	
<i>per capita</i>	US\$	21,375	20,380	
Growth	%	0.8	1.0	
Inflation	%	7.0	8.1	
Def exp	TT\$	2.39bn		
	US\$	373m		
Def bdgt	TT\$	2.81bn	2.84bn	5.7bn
	US\$	438m	443m	
US\$1=TT\$		6.41	6.41	

Population 1,222,363

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	9.9%	3.1%	3.4%	4.4%	25.5%	4.3%
Female	9.5%	2.9%	3.2%	4.1%	24.0%	5.6%

### Capabilities

The Trinidad and Tobago Defence Force remains focused on providing border and maritime security, and counter-narcotics tasks. In support of the country's ongoing fight with crime, the army is intended to play a greater, more integrated role. The army's receipt of light utility vehicles from China in 2015 provides an indicator of the closer diplomatic and military ties between the countries, which has included other procurement and training provisions. Renewed efforts to re-equip the coast guard have resulted in an order for 12 new patrol vessels, of three different classes, from Dutch firm Damen. Trinidad and Tobago was one of the first regional states to publish a cyber strategy, in 2012, which noted potential defence vulnerabilities arising from compromised critical national infrastructure.

### ACTIVE 4,050 (Army 3,000 Coast Guard 1,050)

(All services form the Trinidad and Tobago Defence Force)

## ORGANISATIONS BY SERVICE

### Army €3,000

#### FORCES BY ROLE

##### SPECIAL FORCES

1 SF unit

##### MANOEUVRE

Light

2 inf bn

##### COMBAT SUPPORT

1 engr bn

##### COMBAT SERVICE SUPPORT

1 log bn

#### EQUIPMENT BY TYPE

ARTY • MOR 81mm 6 L16A1

AT • RCL 84mm €24 *Carl Gustav*

### Coast Guard 1,050

#### FORCES BY ROLE

##### COMMAND

1 mne HQ

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 20

PCO 1 *Nelson* (UK Island)

PB 19: 2 *Gasper Grande*; 1 *Matelot*; 4 *Plymouth*; 4 *Point*; 6 *Scarlet Ibis* (Austal 30m); 2 *Wasp*; (1 *Cascadura* (SWE *Karlskrona* 40m) non-operational)

### Air Wing 50

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT • Light 2 SA-227 *Metro III* (C-26)

##### HELICOPTERS

MRH 2 AW139

TPT • Light 1 S-76

## Uruguay URY

Uruguayan Peso pU		2014	2015	2016
GDP	pU	1.34tr	1.49tr	
	US\$	57.5bn	55bn	
<i>per capita</i>	US\$	16,882	16,092	
Growth	%	3.5	2.5	
Inflation	%	8.9	8.4	
Def bdgt [a]	pU	9.75bn	14bn	14.8bn
	US\$	419m	517m	
US\$1=pU		23.25	27.15	

[a] Excludes interior-ministry funding

Population 3,341,893

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	10.5%	4.1%	4.0%	3.7%	20.4%	5.6%
Female	10.2%	4.0%	3.9%	3.6%	21.6%	8.4%

### Capabilities

Along with the basic aim of assuring sovereignty and territorial integrity, the armed forces have in recent years taken on peacekeeping missions, most notably in Haiti, as well as domestic disaster-relief missions. Much of the equipment inventory is second-hand and there is little capacity for independent power projection. Brazil has offered a shipment of additional M41 light tanks in the form of a donation. The air force is focused on a counter-insurgency role, but ambitions to purchase a light fighter aircraft continue to be stymied by a lack of funds. Whilst the acquisition of air-defence radars may have improved the military's ability to monitor domestic airspace, the lack of any intercept capability will continue to limit the ability to respond to contingencies. The armed forces train regularly, and on a joint basis, as well as participating in multinational exercises and deployments – notably on UN missions.

**ACTIVE 24,650 (Army 16,250 Navy 5,400 Air 3,000)**  
Paramilitary 800

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**ORGANISATIONS BY SERVICE**


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**Army 16,250**

Uruguayan units are sub-standard size, mostly around 30%. Div are at most bde size, while bn are of reinforced coy strength. Regts are also coy size, some bn size, with the largest formation being the 2nd armd cav regt.

**FORCES BY ROLE****COMMAND**

4 mil region/div HQ

**MANOEUVRE****Mechanised**

2 armd regt

1 armd cav regt

5 mech cav regt

8 mech inf regt

**Light**

1 mot inf bn

5 inf bn

**Air Manoeuvre**

1 para bn

**COMBAT SUPPORT**

1 (strategic reserve) arty regt

5 fd arty gp

1 AD gp

1 (1st) engr bde (2 engr bn)

4 cbt engr bn

**EQUIPMENT BY TYPE**

**MBT** 15 *Tiran-5*

**LT TK** 38: 16 M24 *Chaffee*; 22 M41A1UR

**RECCE** 110: 15 EE-9 *Cascavel*; 48 GAZ-39371 *Vodnik*; 47 OT-93;

**AIFV** 18 BMP-1

**APC** 283

**APC (T)** 29: 24 M113A1UR; 3 M-93 (MT-LB); 2 PTS

**APC (W)** 254: 54 *Condor*; 53 OT-64: 147 MOWAG *Piranha*

**ARTY** 185

**SP 122mm** 6 2S1

**TOWED** 44: **105mm** 36: 28 M101A1; 8 M102; **155mm** 8 M114A1

**MOR** 135: **81mm** 91: 35 M1, 56 LN; **120mm** 44 SL

**AT**

**MSL • MANPATS** *Milan*

**RCL** 69: **106mm** 69 M40A1

**UAV • ISR • Light** 1 *Charrua*

**AD • GUNS • TOWED** 14: **20mm** 14: 6 M167 *Vulcan*; 8

TCM-20 (w/Elta M-2016 radar)

**AEV** MT-LB

**Navy 5,400 (incl 1,800 Prefectura Naval Coast Guard)**

HQ at Montevideo

**EQUIPMENT BY TYPE**

**PRINCIPAL SURFACE COMBATANTS • FRIGATES** 2

**FF** 2 *Uruguay* (PRT *Joao Belo*) with 2 triple Mk32 324mm

ASTT with Mk46 LWT, 2 100mm gun

**PATROL AND COASTAL COMBATANTS** 15

**PB** 15: 2 *Colonia* (US *Cape*); 1 *Paysandu*; 9 Type-44 (coast guard); 3 PS (coast guard)

**MINE WARFARE • MINE COUNTERMEASURES** 3

**MSO** 3 *Temerario* (*Kondor II*)

**AMPHIBIOUS** 3: 2 LCVP; 1 LCM

**LOGISTICS AND SUPPORT** 10

**ABU** 2

**AG** 2: 1 *Artigas* (GER *Freiburg*, general spt ship with replenishment capabilities); 1 *Maldonado* (also used as patrol craft)

**AGS** 1 *Helgoland*

**AGSC** 1 *Trieste*

**ARS** 1 *Vanguardia*

**AXS** 2: 1 *Capitan Miranda*; 1 *Bonanza*

**YTB** 1

**Naval Aviation 210****FORCES BY ROLE****ANTI-SUBMARINE WARFARE**

1 flt with Beech 200T\*; *Jetstream* Mk2

**SEARCH & RESCUE/TRANSPORT HELICOPTER**

1 sqn with AS350B2 *Ecureuil* (*Esquilo*); Bo-105M

**TRANSPORT/TRAINING**

1 flt with T-34C *Turbo Mentor*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 2 combat capable

**MP** 2 *Jetstream* Mk2

**ISR** 2 Beech 200T\*

**TRG** 2 T-34C *Turbo Mentor*

**HELICOPTERS**

**MRH** 6 Bo-105M

**TPT • Light** 1 AS350B2 *Ecureuil* (*Esquilo*)

**Naval Infantry 450****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 mne bn(-)

**Air Force 3,000**

Flying hours 120 hrs/year

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with A-37B *Dragonfly*

1 sqn with IA-58B *Pucará*

**ISR**

1 flt with EMB-110 *Bandeirante*

**TRANSPORT**

1 sqn with C-130B *Hercules*; C-212 *Aviocar*; EMB-110C

*Bandeirante*; EMB-120 *Brasilia*

1 (liaison) sqn with Cessna 206H; T-41D

1 (liaison) flt with Cessna 206H

**TRAINING**

1 sqn with PC-7U *Turbo Trainer*

1 sqn with Beech 58 *Baron* (UB-58); SF-260EU

**TRANSPORT HELICOPTER**

1 sqn with AS365 *Dauphin*; Bell 205 (UH-1H *Iroquois*);

Bell 212

**EQUIPMENT BY TYPE**

**AIRCRAFT** 18 combat capable

**ATK** 18: 13 A-37B *Dragonfly*; 5 IA-58B *Pucará*

**ISR** 1 EMB-110 *Bandeirante*

**TPT 22: Medium** 2 C-130B *Hercules*; **Light** 20: 2 Beech 58 *Baron* (UB-58); 5 C-212 *Aviocar*; 9 Cessna 206H; 1 Cessna 210; 2 EMB-110C *Bandeirante*; 1 EMB-120 *Brasilia*  
**TRG 21:** 5 PC-7U *Turbo Trainer*; 12 SF-260EU; 4 T-41D *Mescalero*

#### HELICOPTERS

**MRH** 2 AS365N2 *Dauphin II*  
**TPT • Light** 10: 6 Bell 205 (UH-1H *Iroquois*); 4 Bell 212

#### Paramilitary 800

**Guardia de Coraceros 350** (under Interior Ministry)

**Guardia de Granaderos 450**

#### DEPLOYMENT

##### CÔTE D'IVOIRE

UN • UNOCI 2 obs

##### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUC 1,182; 18 obs; 1 inf bn; 1 mne coy; 1 hel flt

##### EGYPT

MFO 58; 1 engr/tpt unit

##### HAITI

UN • MINUSTAH 254; 1 inf bn HQ; 1 inf coy

##### INDIA/PAKISTAN

UN • UNMOGIP 2 obs

### Venezuela VEN

Venezuelan Bolivar Fuerte Bs		2014	2015	2016
GDP	Bs	3.15tr	5.69tr	
	US\$	206bn	132bn	
<i>per capita</i>	US\$	6,772	4,263	
Growth	%	-4.0	-10.0	
Inflation	%	62.2	159.1	
Def bdgt	Bs	72.2bn	52bn	
	US\$ [a]	4.73bn	1.21bn	

US\$1=Bs 15.27 43.14

[a] US dollar figures should be treated with caution due to high levels of currency volatility as well as wide differentials between official and parallel exchange rates

Population 29,275,460

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	14.2%	4.7%	4.7%	4.0%	19.2%	2.7%
Female	13.6%	4.6%	4.7%	4.0%	20.2%	3.4%

### Capabilities

The armed forces, including the National Guard, are tasked with protecting the sovereignty of the state, assuring territorial integrity and assisting with internal-security and counter-narcotics operations. President Nicolas Mad-

uro is focused on improving domestic security, including using the army to suppress anti-government protests. A series of contracts with Russia and China have overhauled ageing army, marine and air-force inventories; Venezuela now possesses one of the region's most capable air and air-defence capabilities and is seeking to acquire an additional squadron of Su-30MKVs. Severe economic difficulties are likely to limit purchases to equipment available on soft loans, and have arguably contributed to flare-ups in long-standing disputes with neighbours Colombia and Guyana, leading to troop deployments near both borders.

**ACTIVE 115,000** (Army 63,000 Navy 17,500 Air 11,500 National Guard 23,000) **Paramilitary 150,000**

*Conscript liability* 30 months selective, varies by region for all services

**RESERVE 8,000** (Army 8,000)

#### ORGANISATIONS BY SERVICE

##### Space

##### EQUIPMENT BY TYPE

**SATELLITES • COMMUNICATIONS** 1 *Venesat-1*

##### Army €63,000

##### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

1 (4th) armd div (1 armd bde, 1 lt armd bde, 1 AB bde, 1 arty bde)

###### Mechanised

1 (9th) mot cav div (1 mot cav bde, 1 ranger bde, 1 sy bde)

###### Light

1 (1st) inf div (1 SF bn, 1 armd bde, 1 mech inf bde, 1 ranger bde, 1 inf bde, 1 arty unit, 1 spt unit)

1 (2nd) inf div (1 mech inf bde, 1 inf bde, 1 mtn inf bde)

1 (3rd) inf div (1 inf bde, 1 ranger bde, 1 sigs bde, 1 MP bde)

###### Jungle

1 (5th) inf div (1 SF bn, 1 cav sqn, 2 jungle inf bde, 1 engr bn)

###### Aviation

1 avn comd (1 tpt avn bn, 1 atk hel bn, 1 ISR avn bn)

##### COMBAT SUPPORT

1 cbt engr corps (3 engr regt)

##### COMBAT SERVICE SUPPORT

1 log comd (2 log regt)

##### Reserve Organisations 8,000

##### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

1 armd bn

###### Light

4 inf bn

1 ranger bn

##### COMBAT SUPPORT

1 arty bn

2 engr regt

**EQUIPMENT BY TYPE**

**MBT** 173: 81 AMX-30V; 92 T-72B1  
**LT TK** 109: 31 AMX-13; 78 *Scorpion* 90  
**RECCE** 441: 42 *Dragoon* 300 Lfv2; 10 TPz-1 *Fuchs* (CBRN); 79 V-100/-150; 310 UR-53AR50 *Tiuna*  
**AIFV** 237: 123 BMP-3 (incl variants); 114 BTR-80A (incl variants)  
**APC** 81

**APC (T)** 45: 25 AMX-VCI; 12 VCI-PC; 8 VACI-TB

**APC (W)** 36 *Dragoon* 300

**ARTY** 515+

**SP** 60: **152mm** 48 2S19 (replacing Mk F3s); **155mm** 12 Mk F3

**TOWED** 92: **105mm** 80: 40 M101A1; 40 Model 56 pack howitzer; **155mm** 12 M114A1

**MRL** 56: **122mm** 24 BM-21; **160mm** 20 LAR SP (LAR-160); **300mm** 12 9A52 *Smerch*

**GUN/MOR** **120mm** 13 2S23 NONA-SVK

**MOR** 294+: **81mm** 165; **120mm** 108: 60 Brandt; 48 2S12

**SP** 21+: **81mm** 21 *Dragoon* 300PM; AMX-VTT

**AT**

**MSL** • **MANPATS** IMI MAPATS

**RCL** **106mm** 175 M40A1

**GUNS** **76mm** 75 M18 *Hellcat*

**RADAR** • **LAND RASIT** (veh, arty)**AIRCRAFT**

**TPT** • **Light** 28: 1 Beech 90 *King Air*; 1 Beech 200 *King Air*; 1 Beech 300 *King Air*; 1 Cessna 172; 6 Cessna 182 *Skylane*; 2 Cessna 206; 2 Cessna 207 *Stationair*; 1 IAI-201 *Arava*; 2 IAI-202 *Arava*; 11 M-28 *Skytruck*

**HELICOPTERS**

**ATK** 10 Mi-35M2 *Hind*

**MRH** 33: 10 Bell 412EP; 2 Bell 412SP; 21 Mi-17V-5 *Hip H*

**TPT** 9: **Heavy** 3 Mi-26T2 *Halo*; **Medium** 2 AS-61D; **Light**

4: 3 Bell 206B *Jet Ranger*, 1 Bell 206L3 *Long Ranger II*

**ARV** 5: 3 AMX-30D; 2 *Dragoon* 300RV; *Samson*

**VLB** *Leguan*

**Navy** €14,300; €3,200 conscript (total €17,500)**EQUIPMENT BY TYPE****SUBMARINES** • **TACTICAL** • **SSK** 2:

2 *Sabalo* (GER T-209/1300) with 8 single 533mm TT with SST-4 HWT

**PRINCIPAL SURFACE COMBATANTS** • **FRIGATES** 6

**FFGHM** 6 *Mariscal Sucre* (ITA mod *Lupo*) with 8 single Inchr with *Otomat* Mk2 AShM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple 324mm ASTT with A244 LWT, 1 127mm gun (capacity 1 Bell 212 (AB-212) hel)

**PATROL AND COASTAL COMBATANTS** 10

**PSOH** 4 *Guaiqueri* with 1 *Millennium* CIWS, 1 76mm gun

**PBG** 3 *Federación* (UK Vosper 37m) with 2 single Inchr with *Otomat* Mk2 AShM

**PB** 3 *Constitucion* (UK Vosper 37m) with 1 76mm gun; 1 *Fernando Gomez de Saa* (Damen 4207)

**AMPHIBIOUS**

**LANDING SHIPS** • **LST** 4 *Capana* (capacity 12 tanks; 200 troops) (FSU *Alligator*)

**LANDING CRAFT** 3:

**LCU** 2 *Margarita* (river comd)

**LCAC** 1 *Griffon* 2000TD

**LOGISTICS AND SUPPORT** 10

**AGOR** 1 *Punta Brava*

**AGS** 2

**AKL** 4 *Los Frailes*

**AORH** 1 *Ciudad Bolivar*

**ATF** 1

**AXS** 1 *Simon Bolivar*

**Naval Aviation** 500**FORCES BY ROLE****ANTI-SUBMARINE WARFARE**

1 sqn with Bell 212 (AB-212)

**MARITIME PATROL**

1 flt with C-212-200 MPA

**TRANSPORT**

1 sqn with Beech 200 *King Air*; C-212 *Aviocar*; *Turbo Commander* 980C

**TRAINING**

1 hel sqn with Bell 206B *Jet Ranger II*; TH-57A *Sea Ranger*

**TRANSPORT HELICOPTER**

1 sqn with Bell 412EP *Twin Huey*; Mi-17V-5 *Hip H*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 3 combat capable

**MP** 3 C-212-200 MPA\*

**TPT** • **Light** 7: 1 Beech C90 *King Air*; 1 Beech 200 *King Air*; 4 C-212 *Aviocar*; 1 *Turbo Commander* 980C

**HELICOPTERS**

**ASW** 5 Bell 212 ASW (AB-212 ASW)

**MRH** 12: 6 Bell 412EP *Twin Huey*; 6 Mi-17V-5 *Hip*

**TPT** • **Light** 1 Bell 206B *Jet Ranger II* (trg)

**TRG** 1 TH-57A *Sea Ranger*

**Marines** €7,000**FORCES BY ROLE****COMMAND**

1 div HQ

**SPECIAL FORCES**

1 spec ops bde

**MANOEUVRE**

**Amphibious**

1 (rvn) mne bde

2 (landing) mne bde

**COMBAT SUPPORT**

1 arty gp (1 arty bty, 1 MRL bty, 1 mor bty)

1 cbt engr bn

1 MP bde

1 sigs bn

**COMBAT SERVICE SUPPORT**

1 log bn

**EQUIPMENT BY TYPE**

**LT TK** 5+ VN-16

**AIFV** 15+: 10 VN-1; 5+ VN-18

**APC (W)** 37 EE-11 *Urutu*

**AAV** 11 LVTP-7

**ARTY** 30

**TOWED** **105mm** 18 M-56

**MOR** **120mm** 12 Brandt

**AT** • **RCL** **84mm** M3 *Carl Gustav*; **106mm** M40A1

**AEV** 1 AAVR7



**AMPHIBIOUS • LANDING CRAFT • 1 LCM; 1 LCU; 12 LCVP**

**PATROL AND COASTAL COMBATANTS • PBR 23:**  
18 *Constancia*; 2 *Manauere*; 3 *Terepaima* (*Cougar*)

### Coast Guard 1,000

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 22

**PSOH** 3 *Guaicamacuto* with 1 *Millennium* CIWS, 1 76 mm gun (capacity 1 Bell 212 (AB-212) hel) (1 additional vessel in build)

**PB** 19: 12 *Gavion*; 1 *Pagalo* (Damen Stan 2606); 4 *Petrel* (*US Point*); 2 *Protector*

##### LOGISTICS AND SUPPORT 5

**AG** 2 *Los Tanques* (salvage ship)

**AKSL** 1

**AP** 2

### Air Force 11,500

Flying hours 155 hrs/year

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

1 sqn with F-5 *Freedom Fighter* (VF-5)

2 sqn with F-16A/B *Fighting Falcon*

4 sqn with Su-30MKV

1 sqn with K-8W *Karakorum\**

##### GROUND ATTACK/ISR

1 sqn with K-8W *Karakorum\**

1 sqn with EMB-312 *Tucano\**; OV-10A *Bronco*

##### ELECTRONIC WARFARE

1 sqn with *Falcon* 20DC; SA-227 *Metro III* (C-26B)

##### TRANSPORT

1 sqn with Y-8; C-130H *Hercules*; KC-137

1 sqn with A319CJ; B-737

4 sqn with Cessna T206H; Cessna 750

1 sqn with Cessna 500/550/551; *Falcon* 20F; *Falcon* 900

1 sqn with G-222; Short 360 *Sherpa*

##### TRAINING

1 sqn with Cessna 182N; SF-260E

2 sqn with DA40NG; DA42VI

1 sqn with EMB-312 *Tucano\**

##### TRANSPORT HELICOPTER

1 VIP sqn with AS532UL *Cougar*; Mi-172

3 sqn with AS332B *Super Puma*; AS532 *Cougar*

2 sqn with Mi-17 *Hip H*

#### EQUIPMENT BY TYPE

##### AIRCRAFT 94 combat capable

**FTR** 31: 5 F-5 *Freedom Fighter* (VF-5), 4 F-5B *Freedom Fighter* (NF-5B); 1 CF-5D *Freedom Fighter* (VF-5D); 17 F-16A *Fighting Falcon*; 4 F-16B *Fighting Falcon*

**FGA** 23 Su-30MKV

**ATK** 7 OV-10A *Bronco*

**EW** 4: 2 *Falcon* 20DC; 2 SA-227 *Metro III* (C-26B)

**TKR** 1 KC-137

**TPT** 74: **Medium** 14: 5 C-130H *Hercules* (some in store); 1 G-222; 8 Y-8; **Light** 55: 6 Beech 200 *King Air*; 2 Beech 350 *King Air*; 10 Cessna 182N *Skylane*; 12 Cessna 206 *Stationair*; 4 Cessna 208B *Caravan*; 1 Cessna 500 *Citation I*; 3 Cessna 550 *Citation II*; 1 Cessna 551; 1 Cessna 750 *Citation X*; 2 Do-228-212; 11 Quad City *Challenger II*; 2 Short 360 *Sherpa*;

**PAX** 5: 1 A319CJ; 1 B-737; 1 *Falcon* 20F; 2 *Falcon* 900

**TRG** 75: 24 DA40NG; 6 DA42VI; 18 EMB-312 *Tucano\**; 15 K-8W *Karakorum\**; 12 SF-260E

#### HELICOPTERS

**MRH** 8 Mi-17 (Mi-17VS) *Hip H*

**TPT • Medium** 15: 3 AS332B *Super Puma*; 8 AS532 *Cougar*; 2 AS532UL *Cougar*; 2 Mi-172 (VIP)

#### MSL

**AAM • IR** AIM-9L/P *Sidewinder*; R-73 (AA-11 *Archer*); PL-5E; *Python* 4; R-27T/ET (AA-10B/D *Alamo*); **SARH**

R-27R/ER (AA-10A/C *Alamo*); **ARH** R-77 (AA-12 *Adder*)

**ASM** Kh-29L/T (AS-14A/B *Kedge*); Kh-31A (AS-17B *Krypton*); Kh-59M (AS-18 *Kazoo*)

**AShM** AM-39 *Exocet*

**ARM** Kh-31P (AS-17A *Krypton*)

### Air Defence Command (CODAI)

Joint service command with personnel drawn from other services

#### FORCES BY ROLE

##### COMBAT SERVICE SUPPORT

1 log bde (5 log gp)

##### AIR DEFENCE

5 AD bde

#### EQUIPMENT BY TYPE

##### AD

##### SAM

**SP** S-300VM; *Buk*-M2E (SA-17 *Grizzly*)

**TOWED** S-125 *Pechora*-2M (SA-26)

**MANPAD** 9K338 *Igla*-S (SA-24 *Grinch*); **ADAMS**; *Mistral*; RBS-70

##### GUNS 440+

**SP 40mm** 12+: 6+ *AMX*-13 *Rafaga*; 6 M-42

**TOWED** 428+: **20mm**: 114 TCM-20; **23mm** €200 ZU-23-2; **35mm**; **40mm** 114+: 114+ L/70; Some M1

#### RADARS • LAND *Flycatcher*

### National Guard (Fuerzas Armadas de Cooperacion) 23,000

(Internal sy, customs) 9 regional comd

#### EQUIPMENT BY TYPE

**APC (W)** 44: 24 Fiat 6614; 20 UR-416

**ARTY • MOR** 50 **81mm**

**PATROL AND COASTAL COMBATANTS • PB** 34: 12

*Protector*; 12 *Punta*; 10 *Rio Orinoco II*

##### AIRCRAFT

**TPT • Light** 34: 1 Beech 55 *Baron*; 1 Beech 80 *Queen*

*Air*; 1 Beech 90 *King Air*; 1 Beech 200C *Super King Air*;

3 Cessna 152 *Aerobat*; 2 Cessna 172; 2 Cessna 402C; 4

Cessna U206 *Stationair*; 6 DA42 MPP; 1 IAI-201 *Arava*; 12 M-28 *Skytruck*

**TRG** 3: 1 PZL 106 *Kruk*; 2 PLZ M2-6 *Isquierka*

##### HELICOPTERS

**MRH** 13: 8 Bell 412EP; 5 Mi-17V-5 *Hip H*

**TPT • Light** 20: 9 AS355F *Ecureuil II*; 4 AW109; 6 Bell

206B/L *Jet Ranger/Long Ranger*; 1 Bell 212 (AB 212);

**TRG** 5 F-280C

### Paramilitary €150,000

### Bolivarian National Militia €150,000

Table 14 **Selected Arms Procurements and Deliveries, Latin America and the Caribbean**

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Argentina (ARG)</b>								
VN1	APC (W)	110	n.k.	PRC/ARG	NORINCO/Tandanor-CINAR	2015	n.k.	To go to binational <i>Southern Cross</i> force and the army's 10th Infantry Bde
M-56	Arty (105mm Towed)	24	n.k.	ITA	Oto Melara	2013	2014	Ten delivered in 2014
IA-63 <i>Pampa III</i>	Trg ac	18	n.k.	ARG	FAdeA	2010	n.k.	Production halted due to economic dislocation
<b>Bolivia (BOL)</b>								
AS332 <i>Super Puma</i>	Med tpt hel	6	n.k.	Int'l	Airbus Group (Airbus Helicopters)	2014	2014	Deliveries ongoing
<b>Brazil (BRZ)</b>								
VBTP-MR <i>Guarani</i>	APC (W)	188	€R600m (€US\$157m)	BRZ/ITA	IVECO Latin America	2009	2012	To replace EE-9 <i>Cascavel</i> and EE-11 <i>Urutu</i> . Delivery to be complete by 2030. Order for 60 placed in late 2014
AAV-7A1	AAV	26	R117m (US\$50m)	US	FMC	2014	n.k.	-
ASTROS II Mk6	MRL (127mm SP)	40	R246m (US\$126m)	BRZ	Avibras	2012	2014	For army and marines; second order placed in 2014. Deliveries ongoing
SN-BR (Submarino Nuclear Brasileiro)	SSN	1	See notes	FRA/BRZ	DCNS/Odebrecht (Itaguaí Construções Navais)	2009	n.k.	Part of €6.7bn (US\$8.3bn) PROSUB naval programme. Contract covers work on the non-nuclear sections of the submarine. Budgetary problems have caused delays and ISD is now expected later than planned 2025 date
<i>Scorpene</i> -class	SSK	4	See notes	FRA/BRZ	DCNS/Odebrecht (Itaguaí Construções Navais)	2009	2018	Part of €6.7bn (US\$8.3bn) PROSUB naval programme. To be built by Itaguaí Construções Navais (JV between DCNS and Odebrecht). Delivery to be completed 2022
<i>Macaé</i> -class (NAPA 500)	PCC	7	n.k.	FRA & BRZ	CMN (INACE) & EISA	2006	2009	First two built by INACE with assistance from CMN; five more ordered to be built by EISA. Third of class to be delivered in 2016
<i>Gripen</i> E/F	FGA ac	36	US\$4.78bn	SWE	Saab	2014	2019	28 E and eight F. The latter are to be manufactured in BRZ
C-295M (SC-105)	SAR ac	3	US\$200m	Int'l	Airbus Group (Airbus Defence & Space)	2014	2017	SAR configuration
KC-390	Tkr/Tpt ac	28	US\$3.25bn	BRZ	Embraer	2014	2018	First ac rolled out Oct 2014. Entry into service delayed until 2018
AS365K <i>Panther</i>	MRH hel	34	R376m (US\$215m)	Int'l	Airbus Group (Airbus Helicopters)	2009	2011	To be manufactured in BRZ by Helibras. Final delivery due 2021
H225M	Hvy tpt hel	50	US\$2bn	Int'l	Airbus Group (Airbus Helicopters)	2008	2010	First three built in FRA. Remainder being manufactured in BRZ by Helibras. 18 delivered as of late 2015
<i>Pantsir</i> -S1 (SA-22 <i>Greyhound</i> )	AD	12	n.k.	RUS	KBP Instrument Design Bureau	n.k.	2016	Deliveries expected to begin in first half of 2016

Table 14 Selected Arms Procurements and Deliveries, Latin America and the Caribbean

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<i>A-Darter</i>	AAM	n.k.	n.k.	BRZ/RSA	Denel Dynamics	2007	n.k.	Co-funded project between BRZ and RSA. BRZ production contract yet to be signed
<b>Chile (CHL)</b>								
<i>Piloto Pardo-class</i>	PSO	4	n.k.	CHL/GER	ASMAR	2005	2008	Fassmer OPV 80 design. First two in service with coast guard. Third vessel commissioned late 2014
KC-130R	Tkr	2	n.k.	US	Government surplus	n.k.	2015	First ac delivered mid-2015
<b>Colombia (COL)</b>								
<i>20 de Julio-class</i>	PSO	1	n.k.	COL	COTECMAR	2014	n.k.	Order for third of class
<b>Ecuador (ECU)</b>								
Damen Stan 5009	PCC	2	n.k.	NLD	Damen Schelde Naval Shipbuilding	2014	n.k.	For coast guard
<b>Honduras (HND)</b>								
EMB-314 <i>Super Tucano</i>	Trg ac	2	n.k.	BRZ	Embraer	2014	n.k.	Order includes upgrade of six <i>Tucanos</i> currently in service
<b>Jamaica (JAM)</b>								
Bushmaster	PPV	12	n.k.	FRA	Thales (Thales Australia)	2013	2015	All APC variants; deliveries ongoing
<b>Mexico (MEX)</b>								
<i>Oliver Hazard Perry-class</i>	FFH	2	Donation	USA	Government surplus	2014	n.k.	-
<i>Oaxaca-class</i>	PSOH	4	NP2.4bn (US\$180m)	MEX	ASTIMAR	2014	2016	Second batch of four. First vessel of batch launched Nov 2015
T-6C+ <i>Texan II</i>	Trg ac	77	n.k.	US	Textron	2012	2012	Series of orders; 60 for air force and 17 for navy. Deliveries ongoing
UH-60M <i>Black Hawk</i>	Med tpt hel	18	US\$203.5m	US	Lockheed Martin (Sikorsky)	2014	n.k.	For air force
<b>Peru (PER)</b>								
LAV II	APC (W)	32	US\$67m	US	General Dynamics (GDLS Canada)	2014	2015	For marines. Replacing the BMR-600s, which are to be transferred to the national police
<i>Makassar-class</i>	LPD	2	n.k.	ROK	Dae Sun Shipbuilding & Engineering	2012	2015	Construction of first vessel commenced Jul 2013
DHC-6-400 <i>Twin Otter</i>	Lt tpt ac	3	NS98.4m (US\$31m)	CAN	Viking Air	2015	n.k.	For navy
C-27J <i>Spartan</i>	Med tpt ac	2	€100m (US\$122m)	ITA	Finmeccanica (Alenia Aermacchi)	2015	2016	Second order for two

Table 14 **Selected Arms Procurements and Deliveries, Latin America and the Caribbean**

Designation	Type	Quantity (Current)	Contract Value	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
KT-1P	Trg ac	20	US\$200m	ROK	KAI	2012	2014	Ten KT-1 and ten KA-1 variants. First four manufactured in ROK; remainder in PER. All ROK-made ac delivered; PER-made ac deliveries ongoing
Mi-171Sh <i>Terminator</i>	Med tpt hel	56	n.k.	RUS	Russian Helicopters (Ulan-Ude)	2013	2014	Deliveries ongoing
SH-2G <i>Super Seasprite</i>	ASW hel	5	US\$80m	NZL	Government surplus	2014	n.k.	For navy. Ex-RNZAF SH-2Gs to be refurbished and modified in CAN
PeruSat 1	Satellite	1	US\$206m	Int'l	Airbus Group (Airbus Defence & Space)	2014	2016	-
<b>Venezuela (VEN)</b>								
VN16	Lt Tk	25	n.k.	PRC	NORINCO	2012	2015	Export version of Type-05 (ZTD-05). For marines. Deliveries ongoing
VN1	AIFV	40	n.k.	PRC	NORINCO	2012	2014	Export version of Type-09 (ZBL-09). For marines. Deliveries ongoing
VN18	AIFV	25	n.k.	PRC	NORINCO	2012	2015	Export version of Type-05 (ZBD-05). For marines. Deliveries ongoing
<i>Guaica-macuto</i> -class	PSOH	4	n.k.	ESP	Navantia	2005	2010	For coast guard. Fourth vessel, <i>Comandante Eterno Hugo Chávez</i> , launched Jul 2014
Do-228	Lt tpt ac	10	n.k.	CHE	RUAG	2013	2014	Eight Do-228NG and two second-hand Do-228-212. Deliveries ongoing
L-15	Trg ac	24	n.k.	PRC	AVIC (Hongdu)	2014	n.k.	-
S-300VM	SAM	n.k.	n.k.	RUS	Almaz-Antey	n.k.	2013	Deliveries ongoing

## Chapter Nine

# Sub-Saharan Africa

Security and defence affairs in Sub-Saharan Africa have again been dominated by complex challenges arising from long-standing security, stability and development issues. While there continues to be an upward economic trajectory, these issues in combination impede progress in many areas, and their effect is to highlight the fragility of progress on the continent. Ebola was one example of how quickly a crisis could unfold and affect regional security dynamics; the challenge from Islamists in Mali was another. Both examples also highlight the increasingly transnational dimension to the continent's security crises.

Perhaps the most prominent instance of how issues either directly related to security, or with the potential to become so, can rapidly display transnational dimensions is Boko Haram, now active not just in northeastern Nigeria but also in neighbouring states. To this can be added continuing instability in the Sahel, largely fuelled by a nexus of criminal-terrorist activity that crosses porous borders, and similar concerns in East Africa, particularly in Somalia. There are also other slow-burning conflicts that display transnational dimensions, such as the continuing activity of – and so far unsuccessful attempt to counter – the Lord's Resistance Army (LRA) in north-central Africa.

The activity of groups such as these has a profound and enduring effect on the societies in which they operate; not just with the instability and destruction that they create, but also because of the way they operate – frequently pillaging for supplies, terrorising local communities and forcefully 'enlisting' child soldiers. Recent reports in 2015, including by UNICEF, again highlighted the continuing use of children in conflict in locations ranging from the Central African Republic (CAR) and the Democratic Republic of the Congo (DRC) to South Sudan and Mali, among others.

Furthermore, the disarmament, demobilisation and reintegration (DDR) of combatants into society following war is a complex task. The challenges facing young male and female combatants, including psychosocial adjustment, require sensitive and

long-term support within DDR initiatives; such programmes require funds that states still engaged in conflict, and with fragile economies, may find hard to allocate. This makes even more important the support of local and foreign non-governmental organisations (NGOs), as well as foreign governments and multilateral organisations.

### External military support

Security dynamics on the continent are changing, and so is the nature of foreign military support. For years, counter-terrorism imperatives have driven sustained but low-key training and support programmes; and there is still substantial foreign military activity on the continent designed to tackle the threat from extremism.

This counter-extremism impulse has also driven more recent international missions. In August 2014, France changed its continental deployments, deepening the level of its military engagement and coordination with regional armed forces through its anti-terrorist *Opération Barkhane*. The intent was to create a more unified French force structure able to operate across the Sahel, in a situation where criminal and extremist groups were increasingly able to move across borders.

But there is now greater sensitivity to the argument that it is in foreign governments' interest to bolster local capacity and institutional resilience, so that local forces can eventually take on these missions. Indeed, with international assistance either in the form of financial backing, material support or training, local and regional forces are increasingly taking part in initiatives designed to address continental security concerns. These activities range from peacekeeping deployments to, more recently, military deployments (including combat missions) aimed at tackling crises.

Several foreign nations conduct long-term training partnerships with African armed forces. This can take the form of combat, logistics or engineering training, or leadership support to commissioned and non-commissioned ranks to improve professionalism. Foreign governments and NGOs have long supported security-sector reform, as well as DDR programmes.



The European Union, for instance, had eight military or civil–military missions across the continent in mid-2015. Importantly, many of these missions are responsible for more than just military or security support. Some include gender-sensitivity training for the armed forces or provide support to the judiciary and broader government institutions, including finance and justice ministries.

This may help longer-term development of more capable, resilient and accountable security forces, perhaps also increasing local governments' ability to exert greater control over potentially ungoverned space. But some assistance is required more rapidly, and this is often focused on the capacity deficits that still hamper some African armed forces in terms of logistics, maintenance, airlift, intelligence, surveillance and reconnaissance, command-and-control, and mission funding. This is particularly true for armed forces not traditionally required to deploy and sustain operations at distance. Support like this, which is in many cases enabling operations on the continent, is helping those African states who wish to do more for the continent's security.

The ability to respond rapidly to crises is central to the African Standby Force (ASF) and African Capacity for Immediate Response to Crises (ACIRC) initiatives. However, some states are taking more concrete steps to come together to address either enduring or transnational crises. An early example was the initiative – now led by the African Union (AU) – to tackle the LRA; another has been the AU mission in Somalia (AMISOM). A more recent instance is the Multinational Joint Task Force (MNJTF) against Boko Haram in the area bordering Nigeria, Niger and Cameroon; the United Nations Force Intervention Brigade in the eastern DRC is another case in point. Meanwhile, there were in 2015 welcome developments in the speed of response, in political terms, to the continent's two short-lived coup attempts: in Burundi in May and Burkina Faso in September. Both attempts failed; they were also quickly condemned by the AU and regional governments.

But with so much conflict and instability on the continent driven by marginalisation, inequality and state fragility, governments and their international supporters will need to be mindful of some long-term trends that could further challenge Africa in the next 30 years. One will be coping with the challenge of increasing urbanisation, and meeting the infrastructure, healthcare, educational and employment requirements of expanding populations.

Another is simply that countries will keep growing: recent figures from UNICEF indicate that 37% of all children under 18 in the world will live in Africa by 2050. This presents a substantial challenge to African states, which will need to grow their economies to support the continent's burgeoning population.

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## DEFENCE ECONOMICS

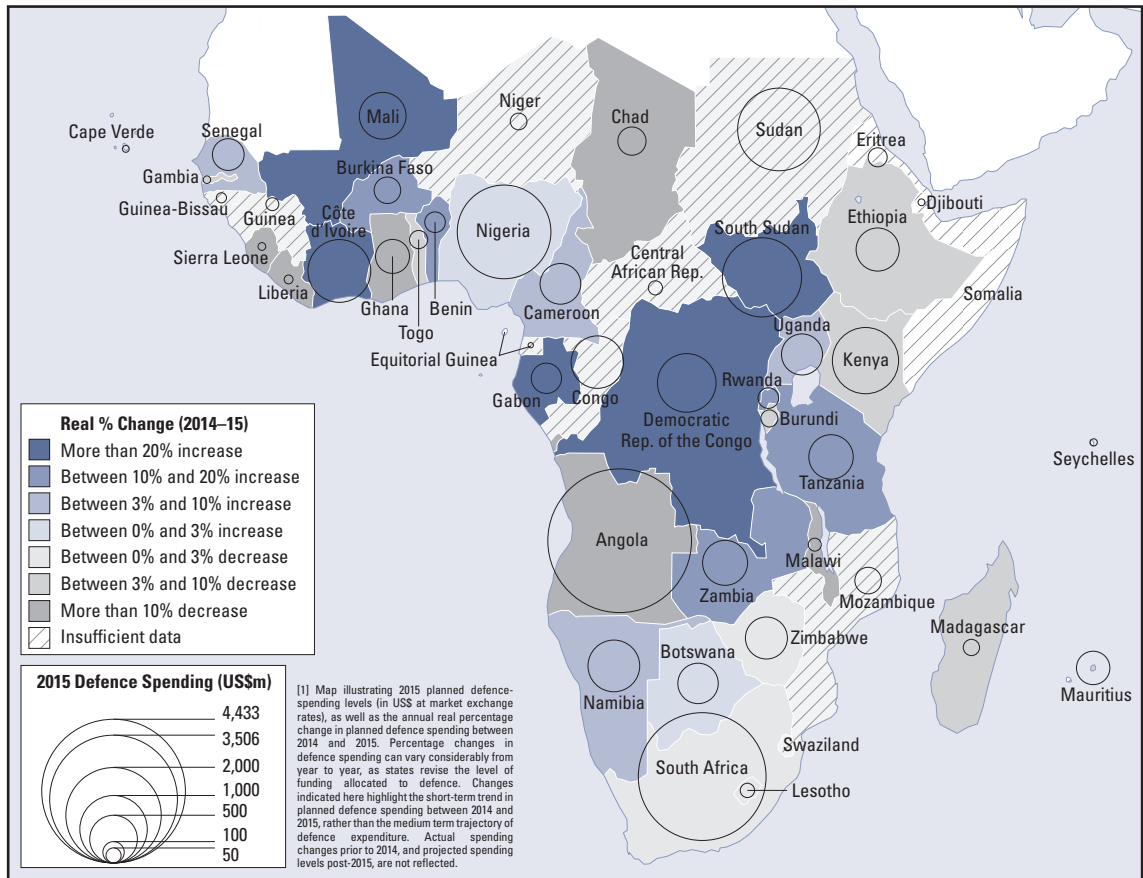
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### Macroeconomics

Sub-Saharan Africa experienced steady rates of economic expansion between 2009 and 2014, reflecting a minor slowdown from the high growth of the mid-2000s. In 2015, however, there was a more marked slowdown, resulting from lower oil and other commodity prices, as well as from continued insecurity and conflict on the continent. Although domestic demand buoyed many national economies, internal and external trade was relatively subdued. In 2014, the World Bank recorded a growth rate of 4.6% for the region. In June 2015, it was still forecasting a 4.2% expansion for the current year. Four months later, however, the bank cut its regional growth forecast for 2015 to 3.7%, although both the Bank and the IMF were more hopeful about future growth, which the IMF predicted would pick up to 4.3% in 2016.

The picture is even more mixed than it first appears. Continuing low oil prices will help some states, such as oil importers, but will negatively affect the region's big oil producers (such as Angola and Nigeria) with considerable budgetary effect. In the near to medium term, growth is subject to several risks; the IMF has listed these as 'large fiscal deficits in some countries; uneven global recovery; and domestic security-related risks'. In the longer term, more fundamental factors need to be addressed. Infrastructure investment – vital for future expansion – could be increased still further, as could measures to extend the benefits of economic growth to all sectors of society; after all, as was noted by the UN in its 2015 report on the Millennium Development Goals, more than 40% of the population in sub-Saharan Africa still lives in extreme poverty.

Additionally, in planning the health, education and infrastructure investment required to fuel future growth, regional capitals will need to grow resilient economies – economies that are not simply able to cope with external economic headwinds or changing security priorities, but are also – as noted above – capable of responding to the demands of a rapidly



Map 8 **Sub-Saharan Africa Regional Defence Spending**<sup>1</sup>

growing youth population. According to the UN Population Fund, 'in 15 countries in Sub-Saharan Africa, half the population is under age 18'. Nigeria alone will, according to UNICEF, 'account for almost 1 in 10 births globally' by 2050.

### Defence spending

Along with ongoing financial and material demands for operations against non-state groups, and for various continental military missions, the above socio-economic factors are likely to increase the pressure to produce effective, responsive and well-equipped security forces. In East Africa, continuing security concerns and operational costs have led to increased defence-budget allocations. In Kenya, for instance, approved budgetary allocations (excluding national-intelligence funding) have risen by some 17%, from Sh78.9 billion (US\$820m) in 2014/15 to Sh92.3 billion (US\$920m) in 2015/16. This will help fund operational commitments to the AMISOM mission in Somalia and more general tasks designed to address the

threat to Kenya's internal security from al-Shabaab. In Uganda – which is also involved in Somalia as well as in operations against the LRA – maintaining national security and defence was a key message of the FY2015/16 budget presentation. Further professionalisation of the armed forces was one focus of the coming year, while particular stress will be placed 'on the acquisition of modern weaponry, strengthening intelligence capacity, training and welfare'. The allocation announced for 2015/16 was Ush1.63 trillion (US\$362m), a 40% nominal increase over 2014/15. This was in part enabled by a considerable uptick in external financing relative to the previous year, when donors withdrew funding due to a dispute over discriminatory legislation subsequently annulled by the Ugandan courts.

In other parts of the region, however, lower growth and diminished fiscal revenues stemming from the end of the global commodities 'super-cycle' have started to adversely impact real-term defence spending. In Nigeria, a major oil producer and the

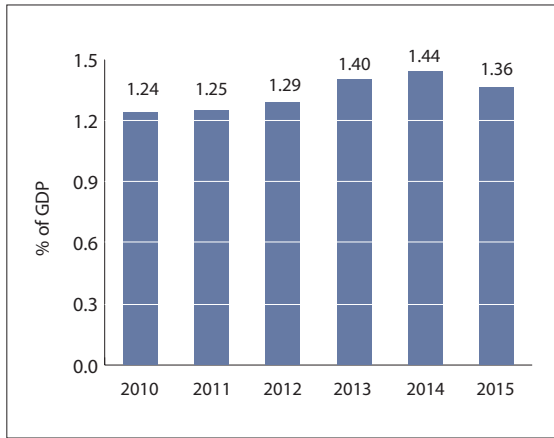


Figure 23 **Sub-Saharan Africa Regional Defence Expenditure** as % of GDP

region’s largest economy, growth rates have dipped below expectations. According to the IMF, real GDP growth will be nearly 2.5% below expectations, at 5%. Inflation has also remained high, at around 8–9% over the past three years. This has meant that, while the total N375bn (US\$1.88bn) in defence allocations in the 2015 Appropriation Act were up 7% in nominal terms from the N350bn (US\$2.2bn) allocated in 2014, defence outlays fell in real terms in 2015, even as the military ramped up its fight against Boko Haram.

Similarly, further south in Angola, the halving of oil prices to less than US\$50 per barrel at the beginning of 2015 caused Luanda to remove some

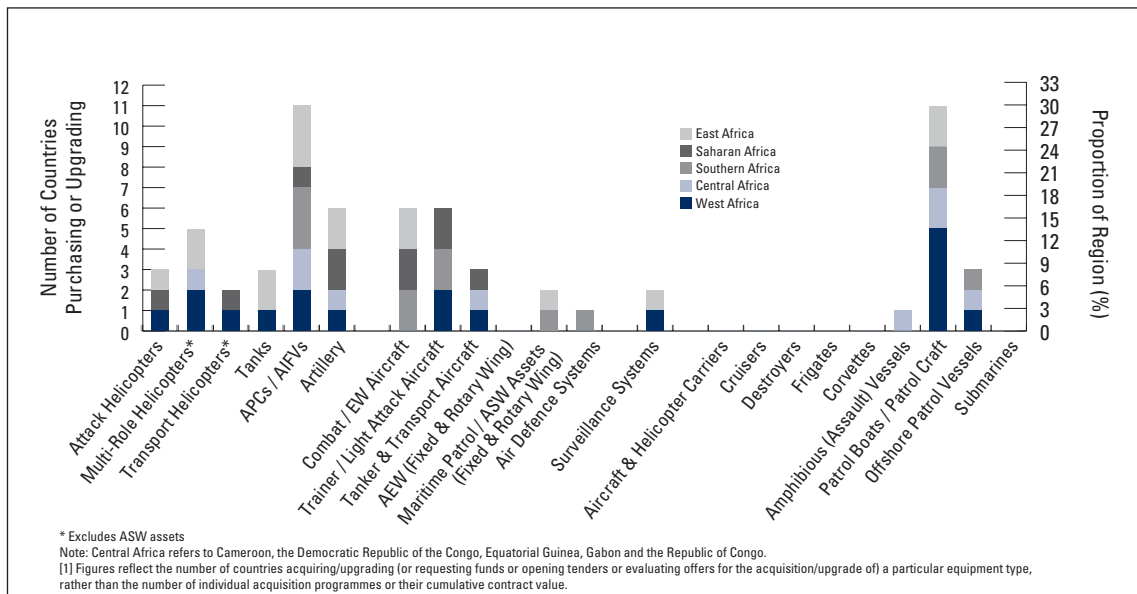
US\$14bn in projected revenue from its 2015 budget as it reduced its assumed oil-price estimate from US\$81 per barrel to US\$40 per barrel instead. Oil accounts for nearly half of Angolan GDP, more than two-thirds of government revenue and some 98% of export earnings. Therefore, the trajectory of Angolan defence outlays has seen a sharp correction relative to the rapid build-up after 2013, declining in 2015 by 21% (in nominal terms) from the levels budgeted in 2014.

In recent years, Nigeria, Angola and South Africa (see p. 428) have together accounted for more than half of sub-Saharan African spending totals, so a decline in real-term expenditure in all three states is estimated to have driven a 0.5% real-term fall in overall 2015 regional outlays.

**Procurement**

Regional procurements in 2015 broadly reflected the pattern of recent years. As shown in Figure 24, armoured vehicles and patrol boats have been the most common acquisition/upgrade priorities across the region since 2011, followed by purchases/upgrades of combat and trainer aircraft, multi-role helicopters and artillery. Funding allocated towards the procurement of new assets remained relatively limited. West and East African states were relatively more active in the land-systems arena, while states in the Sahel made up a significant segment of the region’s market for small trainer, light attack and combat aircraft. Major

Figure 24 **Sub-Saharan Africa Selected Procurement & Upgrade Priorities Since 2011<sup>1</sup>**



procurement activity remains generally low in sub-Saharan Africa, with each equipment category in Figure 24 part of the procurement programmes of just 7% of states in the region, a proportion considerably lower than other emerging markets such as Latin America (17%), the Middle East and North Africa (24%) and Asia (38%). Meanwhile, local defence ministries and industrial concerns continued to develop domestic products. Many of these were in land systems – such as protected patrol vehicles – but patrol boats were also produced and, in the case of South Africa, more advanced systems such as Denel’s A-Darter air-to-air missile.

International relationships are also important. Brazil has become a more influential supplier on the continent in recent years, especially in the aerospace domain. Embraer’s EMB-314 *Super Tucano* recorded yet more export success to Africa in 2015; it is now on the order books or inventories of Angola, Ghana, Mali and Senegal, while Mozambique reportedly received the EMB-312 *Tucano*. China also continues to expand its long-standing position as a supplier of defence and security equipment to African states (see map, p. 21). It has previously focused on land equipment, with sales often comprising Chinese variants of established Soviet-era designs. However, in recent years there have been purchases of newer equipment from Beijing, including equipment of indigenous Chinese design. A significant development in 2015 came to light when imagery emerged of an armed Chinese-origin CH-3 unmanned aerial vehicle, reportedly used by Nigerian forces during operations against Boko Haram.

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## SOUTH AFRICA

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### Funding and operational challenges

South Africa’s defence and national-security priorities are on ensuring a stable environment for the country, which brings with it a focus on security within the Southern African Development Community (SADC) and surrounding waters, as well as in adjacent countries. In terms of continental security, South Africa has played a leading role in the development of the ASF concept and the establishment of the ACIRC, requiring some commitment to wider regional engagement. Ultimately, however, concern over the security situation in its immediate region has been the principal factor driving South Africa’s recent military deployments.

### Foreign engagements

The South African National Defence Force (SANDF) has undertaken increasing missions abroad in the past 15 years. Although the first South African contingent deployed in 1999 to the UN mission in the DRC – a SADC member – significant SANDF forces were also sent there in 2003 (*Operation Mistral*). Since 2013, South Africa has been a principal combat contributor to the UN’s Force Intervention Brigade in the eastern DRC.

Other regional deployments have been to areas adjacent to SADC from which Pretoria feared instability might radiate, such as *Operation Curriculum* in Burundi from 2001–09 and the 2013 intervention in the CAR (*Operation Vimbezela*). Deployments offshore included participation in AU peace and stability operations in the Comoros islands (*Operation Triton*), followed in 2011 by *Operation Copper* in the Mozambique Channel, a vital sea route for South Africa. More broadly, the commitment of a battalion (*Operation Cordite*) to AU and AU–UN missions in Darfur and Sudan, and staff officers (*Operation Espresso*) to the AU and UN missions in Eritrea and Ethiopia are part of the wider commitment to African stability. So too were recent diplomatic efforts in the 2011 Côte d’Ivoire and Libya crises.

However, current funding levels mean that Pretoria’s commitment to African security and stability missions presents the SANDF with critical challenges. Despite ambitions to deploy, the SANDF faces significant difficulty in generating the troops and key capabilities, such as airlift, required to play an effective role. The 2013 intervention in the CAR underlined this situation. Once the deployment was decided, it became clear that the army lacked sufficient troops to deploy more than a single combat team supported by a special-forces group. This provision proved inadequate when Séléka rebels attacked the capital city of Bangui, the CAR army disintegrated and the multinational force from Central African states proved ineffectual during the major combat phase. With a dearth of long-range airlift, South Africa was unable to quickly reinforce or extract its personnel. Thirteen troops were killed in close and hard fighting around Bangui, and the incident subsequently provoked debate within South Africa about the state of the armed forces.

In June 2015, the SANDF’s participation in UNAMID faced a potential complication when Sudan’s President Omar al-Bashir attended the AU summit in South Africa. Pretoria faced calls to arrest Bashir under an International Criminal Court

warrant, and media in South Africa quoted soldiers in Darfur to the effect that Sudanese army units were overtly deploying near their bases in that period. However, the SANDF officially denied that its troops were at risk.

### The SANDF

The problems of underfunding and shortfalls in strength and capability were underlined in the 2014 Defence Review, and have been highlighted by service chiefs, ministers of defence and parliament's Joint Standing Committee on Defence.

The SANDF has been stretched by operational commitments over the past two decades, and while it can still respond effectively to minor contingencies, it would find it difficult to mount and sustain a major operation of, for instance, a brigade or half-brigade in size with supporting air and naval elements. The army has struggled to find two additional companies for border protection, and helicopter-crew shortages meant the air force could not respond immediately to major bushfires in Cape Town in early 2015. The navy has been unable to maintain a continuous one-ship patrol in the Mozambique Channel, due to a combination of issues relating to high operational tempo, funding and refit scheduling.

Losses of experienced personnel continue, although at a slower pace than in previous years. Importantly, the defence force still has no workable exit mechanism for personnel over age for their rank, meaning many stay on in the service rather than opting for retirement.

However, there are positive signs. Regional security deployments are developing a new generation of young officers and NCOs with extensive soldiering experience. This will stand the army, and to a lesser extent the air force, in good stead. There are already, for example, numerous majors and lieutenant-colonels who have been on up to eight external deployments. The navy has similarly benefited from the patrols in the Mozambique Channel.

### Army

The army's greatest immediate challenge is that it lacks the units to meet its operational commitments. At a conservative estimate, allowing for rotation, its DRC, Darfur and border-patrol commitments require at least 14 infantry battalions and a contingency reserve. However, it has only 13 of these, plus a parachute battalion, and some are under-strength. The shortfall is made up by drawing on the reserves.

But, as the defence review highlighted, these are a dwindling asset, with numbers continuing to fall in the past ten years, particularly in ageing leadership cadres.

While a short-term ACIRC deployment is probably practicable, and troops are earmarked for an ACIRC combat group, any extended deployment would force the army back into a self-destructive '1-in-3' cycle (where one of every three units is on deployment at any one time). An extended deployment would also result in most units being stripped of key personnel and serviceable equipment to meet the demands of the deploying unit. There has been no full-brigade exercise for more than a decade and, with personnel training underfunded, the experience gained from peacekeeping deployments and exercises in preparation for the ASF cannot offset this problem.

The amount of old equipment presents another challenge, aggravated by limited funds for maintenance, leaving most units with only partial equipment sets. Much prime mission equipment, such as *Ratel* and *Casspir* armoured vehicles, is around 30 years old. Some, such as the *Olifant* tank, is even older. Moreover, generating adequate numbers of maintenance staff is also a problem; it was reported in 2015 that Cuban mechanics were servicing and repairing some South African vehicles.

A major equipment project (*Project Hoefyster*) under way is the acquisition of 238 *Badger* armoured vehicles as a partial replacement for the *Ratel*. The effectiveness of this project is, however, undermined by the concurrent failure to acquire new tactical logistic vehicles (*Project Vistula*) to replace the force's *Samil* trucks. This is also holding up the replacement of the *Casspir* fleet (*Project Sapula*) and support-equipment projects based on the new truck family.

Meanwhile, a project for light armoured reconnaissance vehicles (*Project Alula*) remains unfunded, as does one to replace the upgraded 1950s-vintage *Centurion* tanks (*Project Aorta*). In the absence of any funding certainty, longer-term plans for army organisation and equipment – such as implementation of the Army Vision 2020 force redesign, replacement of the *Rooikat* armoured vehicle and re-equipping anti-aircraft artillery and engineers – remain tentative.

### Navy

The South African Navy has modern frigate and submarine forces, but has too few ships overall. Its main challenge lies in a fleet design based on



the assumption of the 1998 defence review that the navy would not operate outside South African waters. That was overturned in 2011 when it was instructed to patrol the Mozambique Channel and to deploy the support ship SAS *Drakensberg* to West Africa as a floating contingency base during the Côte d'Ivoire crisis that year. Suddenly, navy ships were conducting operations 2,000–4,000km from their bases. Four frigates and a single support ship now look inadequate, and the remainder of the fleet comprises only seven small strike craft and minehunters, which are all 35–40 years old. Other challenges include the low numbers of combat officers and technical personnel; reported capacity issues and skill shortages at the dockyard; and inadequate funding to refit the frigates.

More positively, the *Valour*-class frigates and the *Heroine*-class hunter-killer submarines have proven effective in service, and the Mozambique Channel patrols have dramatically driven down maritime crime in the area. The refit issue aside, operational readiness remains reasonable, not least as a result of biannual exercises. These take place with the navies of Germany (*Exercise Good Hope*); Argentina, Brazil and Uruguay (*Exercise Atlasur*, alternately in South American and South African waters); Brazil and India (*Exercise Ibsamar*); and France (*Exercise Tulipe*, alternately in South African waters and around Réunion island).

While there is no sign of a fleet expansion, some fleet-renewal projects are under way. Those funded include three offshore-patrol vessels (OPVs), three inshore-patrol vessels (*Project Biro*), a hydrographic survey ship (*Project Hotel*) and various small craft (*Project Carol*). The navy has also received some funding for planned frigate and submarine upgrades.

Meanwhile, it is likely that the naval dockyard will be transferred from the defence department's arms-procurement agency Armscor back to the navy, with defence company Denel contracted to operate the facility. The hope is that Denel will be able to bring in enough outside work to keep the dockyard fully functional.

### *Air force*

The South African Air Force (SAAF) received new combat and training aircraft and utility helicopters under 1999 acquisition packages, but tight funding makes it impossible to train sufficient crews for them or to ensure adequate flying hours for the crews of other aircraft types. Readiness is down from the levels

of the 1990s and early 2000s. Even moderately regular exercises with other SADC air forces, most recently in Angola and Botswana, cannot offset this problem.

The SAAF remains able to respond to small contingencies, for instance quickly deploying four *Gripen* combat aircraft to Kinshasa and two *Rooivalk* attack helicopters to Gemena in the DRC in 2013 after the attack on South African troops in the CAR. But a major deployment or a major rescue operation, such as during the floods in Mozambique in 2000, would likely stretch its capabilities, as would any major airlift. Even the ability to handle small contingencies might prove problematic, with the present deployment of three *Rooivalk* and five *Oryx* helicopters in the DRC, for instance, tying up most of the experienced helicopter crews in the rotation cycle to support three-month tours.

The force also faces obsolescence of its C-130 *Hercules* and C-47TP transport fleet, lacks any dedicated maritime-patrol or surveillance aircraft and has only four *Super Lynx* helicopters for the navy's four frigates. The lives of its C-130s are being extended and there is funding for some light transport aircraft (*Project Kiepie*). However, the planned acquisition of eight Airbus A400Ms was cancelled in 2009, leaving the air force with no plan to develop the capability to quickly deploy forces – even combat aircraft or helicopters – to the periphery of the SADC region. There is no funding for maritime-patrol aircraft, and there appear to be no plans for helicopters to operate from the navy's future OPVs.

Nevertheless, the air force will soon begin receiving the Denel A-Darter air-to-air missile (AAM) and is funding initial development of a beyond-visual-range AAM. The defence ministry's interest in expanding the *Rooivalk* fleet is less certain. However, the helicopter's capability – and that of the *Super Lynx* – may be enhanced by the procurement of the *Mokopa* air-to-surface missile that is being produced by Denel for export. There is also a chance that the requirement for long-range VIP aircraft can be turned into an opportunity to acquire a multi-role type that could carry troops and provide refuelling.

### **Defence Review**

The 2014 Defence Review considered the likely role of the SANDF over the next 30 years and the resultant capability requirements. The fundamental assumption is that South Africa must play a regional and continental security role to help establish a stable environment. The resulting force planning objective

was to produce a defence force able to sustain three long-term, combat-group peace operations; maintain a naval presence on both sides of the continent; and conduct three smaller, shorter-term operations. In addition, it should be able to undertake a brigade-level intervention. This should all be achieved by 2033.

Immediate priorities are to develop the capacity to secure South Africa's borders, airspace and maritime zones, and to expand and enhance special-forces capability by 2023. After that, the focus is to shift to expanding the force so that by 2028 it is able to handle existing peace-support mission commitments and to develop a special-operations capability with parachute, air-landing and sea-landing forces. This will be the basis for an intervention capacity. The forces required to maintain a conventional deterrent capability are accorded lower priority, though it is accepted that changing circumstances could require a reordering of priorities. The review did not discuss force structure beyond an outline largely matching the army's future concept of three divisions – mechanised, motorised and contingency (airborne, air-landed and sea-landed troops) – with matching air-force and navy capabilities.

Nonetheless, full implementation of the review will require expansion of the regular army and its reserves, considerable fleet expansion for the navy and some expansion of air-force combat elements. It will mean a new generation of capabilities, including heavy/long-range airlift, inflight refuelling, airborne radars, and sealift and amphibious capability. It will also require additional resources.

### Defence economics

Defence-funding levels in South Africa have generally lagged behind inflation since the cuts of the 1990s. The defence budget now hovers around 1.1% of GDP and is under further pressure from an under-performing economy. The situation has been exacerbated by the fact that ever-expanding operational commitments are seldom accompanied by funding increments. For example, the Mozambique Channel patrol and the transfer of border patrols from the police to the SANDF were not initially accompanied by higher defence allocations. Even now these are only partially funded, with training and maintenance budgets bearing the brunt of the shortfall.

This combination of underfunding and over-commitment means the SANDF over-utilises core units and equipment to meet current operational commitments, with the risks of capability erosion this entails. The army's armoured corps is one of the

Table 15 **South African Defence Budget by Programme, 2014–18**

Programme/Year	2014/15	2015/16	2016/17	2017/18
Administration	4,499.7	4,827.2	5,081.1	5,329.7
Force Employment	3,487.0	3,603.2	3,761.2	3,928.6
Landward Defence	14,241.9	14,805.3	15,612.8	16,024.8
Air Defence	7,176.6	7,049.2	6,804.2	8,223.9
Maritime Defence	3,678.5	3,717.2	4,761.1	4,800.7
Military Health Support	3,849.1	3,932.9	4,179.1	4,535.7
Defence Intelligence	813.7	827.5	872.9	915.1
General Support	5,110.5	5,817.0	6,046.3	6,355.2
	<b>42,856.9</b>	<b>44,579.4</b>	<b>47,118.7</b>	<b>50,113.5</b>

Source: South African Defence Budget 2015

worst hit. Due to diminished resource levels it spends some 95% of its budget on personnel costs, leaving little for investment, maintenance or training. While this is an extreme case, personnel costs consume a significant proportion of the overall defence budget, despite the army being under-strength for its level of responsibilities.

The underfunding issue has long been recognised, and in 2009 the Joint Standing Committee on Defence called for the budget to be increased to 1.7% of GDP as an interim measure, warning that the SANDF was in a 'downward spiral of becoming inadequate to fulfil its constitutional mandate'. The current minister of defence and her predecessor have both called for a budget of 2% of GDP; if sustained, this would enable the SANDF to rebuild itself over a period of 20 years or so. Indeed, on the funding issue, Minister of Defence and Military Veterans Nosiviwe Mapisa-Nqakula has been clear. In a March 2014 briefing on the defence review, she said: 'Current funding levels are inadequate and below the international norm of approximately 2% for a developing country at peace. It can be argued that, although South Africa is a developing country at peace, its responsibilities on the continent justifies that defence expenditure be set at slightly above 2% of GDP.'

The defence review, based on an assumption that South Africa will continue and even expand its regional security role, set out the cost of the defence capabilities needed to address these requirements. It envisages the budget peaking at 2.4% of 2013 GDP during the build-up phase to meet the required capability milestones laid down in the review. Although the cabinet, ruling party and parliament all approved and endorsed the recommendations, additional funds have not so far been allocated.

## Angola ANG

New Angolan Kwanza		2014	2015	2016
AOA				
GDP	AOA	12.7tr	12.2tr	
	US\$	129bn	102bn	
<i>per capita</i>	US\$	5,304	4,062	
Growth	%	4.8	3.5	
Inflation	%	7.3	10.3	
Def bdgt	AOA	673bn	531bn	
	US\$	6.85bn	4.43bn	
US\$1=AOA		98.30	119.86	

Population 19,625,353

Ethnic groups: Ovimbundu 37%; Kimbundu 25%; Bakongo 13%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	21.9%	5.8%	4.7%	3.8%	13.0%	1.4%
Female	21.0%	5.6%	4.5%	3.7%	12.9%	1.6%

## Capabilities

The armed forces' role is to ensure sovereignty and territorial integrity, though the continuing activity of secessionist groups in the northern province of Cabinda remains a challenge. On paper the army and air force constitute a significant force, but equipment availability and serviceability remain questionable. Force health and education have been investment priorities, although growing defence ties with China might result in equipment recapitalisation. There are plans to modernise the armed forces, particularly maritime-security capability in light of security concerns in the Gulf of Guinea, but these ambitions have been hit by the fall in the oil price: this led to the halt of negotiations with Brazil regarding patrol-boat acquisitions. The armed forces train regularly, and in the past year have participated in multinational exercises with the US Navy and others.

**ACTIVE 107,000** (Army 100,000 Navy 1,000 Air 6,000) Paramilitary 10,000

## ORGANISATIONS BY SERVICE

### Army 100,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

1 tk bde

###### Light

1 SF bde

1 (1st) div (1 mot inf bde, 2 inf bde)

1 (2nd) div (3 mot inf bde, 3 inf bde, 1 arty regt)

1 (3rd) div (2 mot inf bde, 3 inf bde)

1 (4th) div (1 tk regt, 5 mot inf bde, 2 inf bde, 1 engr bde)

1 (5th) div (2 inf bde)

1 (6th) div (3 inf bde, 1 engr bde)

#### COMBAT SUPPORT

Some engr units

#### COMBAT SERVICE SUPPORT

Some log units

#### EQUIPMENT BY TYPE†

MBT 300: ε200 T-54/T-55; 50 T-62; 50 T-72

LT TK 10 PT-76

RECCE 600 BRDM-2

AIFV 250+: 250 BMP-1/BMP-2; BMD-3

APC (T) 8 MT-LB

APC (W) ε170 BTR-152/BTR-60/BTR-80

ARTY 1,408+

SP 16+: 122mm 2S1; 152mm 4 2S3; 203mm 12 2S7

TOWED 552: 122mm 500 D-30; 130mm 48 M-46; 152mm 4 D-20

MRL 90+: 122mm 90; 50 BM-21; 40 RM-70; 240mm BM-24

MOR 750: 82mm 250; 120mm 500

#### AT

MSL • MANPATS 9K11 (AT-3 *Sagger*)

RCL 500: 400 82mm B-10/107mm B-11 †; 106mm 100†

GUNS • SP 100mm SU-100†

AD • SAM • MANPAD 500 9K32 *Strela-2* (SA-7 *Grail*) †;

9K36 *Strela-3* (SA-14 *Grenlin*); 9K310 *Igla-1* (SA-16 *Ginlet*)

GUNS • TOWED 450+: 14.5mm ZPU-4; 23mm ZU-23-2;

37mm M-1939; 57mm S-60

ARV T-54/T-55

MW Bozena

## Navy ε1,000

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 22

PCO 2 *Ngola Kiluange* with 1 hel landing platform

(Ministry of Fisheries)

PCC 5 *Rei Bula Matadi* (Ministry of Fisheries)

PBF 5 PVC-170

PB 10: 4 *Mandume*; 5 *Comandante Imperial Santana* (Ministry of Fisheries); 1 *Damen 2810* (Ministry of Fisheries)

### Coastal Defence

#### EQUIPMENT BY TYPE

MSL • AShM 4K44 *Utyos* (SS-C-1B *Sepal* - at Luanda)

## Air Force/Air Defence 6,000

### FORCES BY ROLE

#### FIGHTER

1 sqn with MiG-21bis/MF *Fishbed*

1 sqn with Su-27/Su-27UB *Flanker*

#### FIGHTER/GROUND ATTACK

1 sqn with MiG-23BN/ML/UB *Flogger*

1 sqn with Su-22 *Fitter D*

1 sqn with Su-25 *Frogfoot*

#### MARITIME PATROL

1 sqn with F-27-200 MPA; C-212 *Aviocar*

#### TRANSPORT

3 sqn with An-12 *Cub*; An-26 *Curl*; An-32 *Cline*; An-

72 *Coaler*; BN-2A *Islander*; C-212 *Aviocar*; Do-28D

*Skyservant*; EMB-135BJ *Legacy* 600 (VIP); Il-76TD *Candid*

#### TRAINING

1 sqn with Cessna 172K/R

1 sqn with EMB-312 *Tucano*

1 sqn with L-29 *Delfin*; L-39 *Albatros*

1 sqn with PC-7 *Turbo Trainer*; PC-9\*

1 sqn with Z-142

#### ATTACK HELICOPTER

2 sqn with Mi-24/Mi-35 *Hind*; SA342M *Gazelle* (with HOT)

#### TRANSPORT HELICOPTER

2 sqn with AS565; SA316 *Alouette* III (IAR-316) (trg)

1 sqn with Bell 212

1 sqn with Mi-8 *Hip*; Mi-17 *Hip* H

**AIR DEFENCE**

5 bn/10 bty with S-125 *Pechora* (SA-3 *Goa*); 9K35 *Strela-10* (SA-13 *Gopher*)†; 2K12 *Kub* (SA-6 *Gainful*); 9K33 *Osa* (SA-8 *Gecko*); 9K31 *Strela-1* (SA-9 *Gaskin*); S-75M *Volkhov* (SA-2 *Guideline*)

**EQUIPMENT BY TYPE†****AIRCRAFT** 83 combat capable

**FTR** 24: 6 Su-27/Su-27UB *Flanker*; 18 MiG-23ML *Flogger*  
**FGA** 42+: 20 MiG-21bis/MF *Fishbed*; 8 MiG-23BN/UB *Flogger*; 13 Su-22 *Fitter D*; 1+ Su-24 *Fencer*  
**ATK** 10: 8 Su-25 *Frogfoot*; 2 Su-25UB *Frogfoot*  
**ELINT** 1 B-707  
**TPT** 61: **Heavy** 4 Il-76TD *Candid*; **Medium** 6 An-12 *Cub*; **Light** 51: 12 An-26 *Curl*; 2 An-32 *Cline*; 8 An-72 *Coaler*; 8 BN-2A *Islander*; 3 C-212-200 *Aviocar*; 4 C-212-300M *Aviocar*; 5 Cessna 172K; 6 Cessna 172R; 1 Do-28D *Skyseroant*; 1 EMB-135BJ *Legacy* 600 (VIP); 1 Yak-40  
**TRG** 39: 13 EMB-312 *Tucano*; 3 EMB-314 *Super Tucano*\* (3 more on order); 6 L-29 *Delfin*; 2 L-39C *Albatros*; 5 PC-7 *Turbo Trainer*; 4 PC-9\*; 6 Z-142

**HELICOPTERS**

**ATK** 44: 22 Mi-24 *Hind*; 22 Mi-35 *Hind*  
**MRH** 25: 8 AS565 *Panther*; 9 SA316 *Alouette* III (IAR-316) (incl trg); 8 SA342M *Gazelle*  
**MRH/TPT** 27 Mi-8 *Hip*/Mi-17 *Hip H*  
**TPT** • **Light** 8 Bell 212

**AD • SAM** 122

**SP** 70: 10 9K35 *Strela-10* (SA-13 *Gopher*)†; 25 2K12 *Kub* (SA-6 *Gainful*); 15 9K33 *Osa* (SA-8 *Gecko*); 20 9K31 *Strela-1* (SA-9 *Gaskin*)  
**TOWED** 52: 40 S-75M *Volkhov* (SA-2 *Guideline*)†; 12 S-125 *Pechora* (SA-3 *Goa*)

**MSL**

**ASM** AT-2 *Swatter*; HOT  
**ARM** Kh-28 (AS-9 *Kyle*)  
**AAM** • **IR** R-3 (AA-2 *Atoll*)†; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR/SARH** R-23/24 (AA-7 *Apex*)†; R-27 (AA-10 *Alamo*)

**Paramilitary 10,000****Rapid-Reaction Police 10,000**

<b>Benin BEN</b>				
CFA Franc BCEAO fr		2014	2015	2016
<b>GDP</b>	fr	4.29tr	4.54tr	
	US\$	8.69bn	7.7bn	
<b>per capita</b>	US\$	820	709	
<b>Growth</b>	%	5.4	5.5	
<b>Inflation</b>	%	-1.1	0.5	
<b>Def bdgt</b>	fr	n.k.	53.8bn	
	US\$	n.k.	91m	
<b>US\$1=fr</b>		493.66	589.88	

Population 10,448,647

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	22.2%	5.6%	4.7%	3.9%	12.8%	1.1%
<b>Female</b>	21.3%	5.4%	4.5%	3.8%	13.1%	1.7%

**Capabilities**

The country's small armed forces are mainly focused on border and internal security, and combating illicit trafficking. However, maritime security remains an area of concern, in light of continuing piracy in the Gulf of Guinea. Benin's small navy has been trying to bolster its anti-piracy capability by acquiring further high-speed craft. The air force has a limited number of light transport aircraft and helicopters for intra-theatre airlift, and is also developing a surveillance role. The army and national police have received training from US personnel to enhance their border-surveillance capacity. France is heavily involved in training assistance; in 2015 this included medical and combat training for the army and diver training for the navy.

**ACTIVE 6,950 (Army 6,500 Navy 200 Air 250)****Paramilitary 2,500**

Conscript liability 18 months (selective)

**ORGANISATIONS BY SERVICE****Army 6,500****FORCES BY ROLE****MANOEUVRE****Armoured**

2 armd sqn

**Light**

1 (rapid reaction) mot inf bn

8 inf bn

**Air Manoeuvr**

1 AB bn

**COMBAT SUPPORT**

2 arty bn

1 engr bn

1 sigs bn

**COMBAT SERVICE SUPPORT**

1 log bn

1 spt bn

**EQUIPMENT BY TYPE****LT TK** 18 PT-76†**RECCE** 34: 3 AML-90; 14 BRDM-2; 7 M8; 10 VBL**APC** 32**APC (T)** 22 M113**PPV** 10 *Casspir* NG**ARTY** 16+**TOWED 105mm** 16: 12 L118 Light Gun; 4 M101**MOR 81mm** some **120mm** some**Navy €200****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS****PB** 5: 2 *Matelot Brice Kpomasse* (ex-PRC); 3 FPB 98**Air Force 250****EQUIPMENT BY TYPE****AIRCRAFT****TPT** 4: **Light** 1 DHC-6 *Twin Otter*†; **PAX** 3: 2 B-727; 1

HS-748†

TRG 2 LH-10 *Ellipse***HELICOPTERS**TPT • Light 5: 4 AW109BA; 1 AS350B *Ecureuil*†**Paramilitary 2,500****Gendarmerie 2,500****FORCES BY ROLE****MANOEUVRE****OTHER**

4 (mobile) paramilitary coy

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 3; 1 obs

**CÔTE D'IVOIRE**

UN • UNOCI 376; 9 obs; 1 inf bn(-)

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 456; 8 obs; 1 inf bn(-)

**LIBERIA**

UN • UNMIL 1; 2 obs

**MALI**

UN • MINUSMA 256; 1 mech inf coy

**SOUTH SUDAN**

UN • UNMISS 2; 1 obs

**SUDAN**

UN • UNISFA 2 obs

**Botswana BWA**

Botswana Pula P		2014	2015	2016
GDP	P	142bn	152bn	
	US\$	15.2bn	13.1bn	
<i>per capita</i>	US\$	7,233	6,150	
Growth	%	4.4	2.6	
Inflation	%	3.9	4.0	
Def bdgt [a]	P	3.8bn	4.09bn	
	US\$	407m	351m	
FMA (US)	US\$	0.2m		
US\$1=P		9.33	11.65	

[a] Defence, justice and security budget

Population 2,182,719

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	16.6%	5.4%	5.2%	5.0%	16.9%	1.6%
Female	16.0%	5.4%	5.4%	5.1%	14.9%	2.4%

**Capabilities**

Key tasks for the Botswana Defence Force include ensuring territorial integrity, coupled with domestic tasks such as anti-poaching, and there is a history of involvement in peacekeeping operations. The army is also developing

a limited mechanised capability and the air force, whose training was boosted by the arrival of PC-7 MkII training aircraft in 2013, provides tactical airlift. The forces train regularly and in the past year Botswana hosted the SADC exercise *Blue Okavango*, focusing on disaster relief, and the US AFRICOM-sponsored *Africa Endeavour* communications-interoperability training programme. Growing relations with Beijing have seen some military personnel travel to China for training. The operations centre for the SADC Standby Force is located in Gaborone.

**ACTIVE 9,000 (Army 8,500 Air 500) Paramilitary 1,500****ORGANISATIONS BY SERVICE****Army 8,500****FORCES BY ROLE****MANOEUVRE****Armoured**

1 armd bde(-)

**Light**

2 inf bde (1 armd recce regt, 4 inf bn, 1 cdo unit, 2 ADA regt, 1 engr regt, 1 log bn)

**COMBAT SUPPORT**

1 arty bde

1 AD bde(-)

1 engr coy

1 sigs coy

**COMBAT SERVICE SUPPORT**

1 log gp

**EQUIPMENT BY TYPE**LT TK 55: ε30 SK-105 *Kuerassier*; 25 *Scorpion*

RECCE 72+: RAM-V-1; ε8 RAM-V-2; 64 VBL

APC 156

APC (T) 6 FV 103 *Spartan*APC (W) 150: 50 BTR-60; 50 LAV-150 *Commando* (some with 90mm gun); 50 MOWAG *Piranha III***ARTY 78**

TOWED 30: 105mm 18: 12 L118 Light Gun; 6 Model 56 pack howitzer; 155mm 12 Soltam

MRL 122mm 20 APRA-40

MOR 28: 81mm 22; 120mm 6 M-43

**AT****MSL**

SP V-150 TOW

MANPATS TOW

RCL 84mm *Carl Gustav***AD**SAM • MANPAD *Javelin*; 9K310 *Igla-1* (SA-16 *Gimlet*); 9K32 *Strela-2* (SA-7 *Grail*)†GUNS • TOWED 20mm 7 M167 *Vulcan*ARV *Greif*; M578**Air Wing 500****FORCES BY ROLE****FIGHTER/GROUND ATTACK**1 sqn with F-5A *Freedom Fighter*; F-5D *Tiger II***ISR**1 sqn with O-2 *Skymaster*



**TRANSPORT**

2 sqn with BD-700 *Global Express*; BN-2A/B *Defender*\*; Beech 200 *Super King Air* (VIP); C-130B *Hercules*; C-212-300 *Aviocar*; CN-235M-100; Do-328-110 (VIP)

**TRAINING**

1 sqn with PC-7 MkII *Turbo Trainer*\*

**TRANSPORT HELICOPTER**

1 sqn with AS350B *Ecureuil*; Bell 412EP/SP *Twin Huey*

**EQUIPMENT BY TYPE****AIRCRAFT** 33 combat capable

FTR 14: 9 F-5A *Freedom Fighter*; 5 F-5D *Tiger II*

ISR 5 O-2 *Skymaster*

TPT 20: **Medium** 3 C-130B *Hercules*; **Light** 16: 4 BN-2 *Defender*\*; 6 BN-2B *Defender*\*; 1 Beech 200 *King Air* (VIP); 2 C-212-300 *Aviocar*; 2 CN-235M-100; 1 Do-328-110 (VIP); PAX 1 BD700 *Global Express*

TRG 5 PC-7 MkII *Turbo Trainer*\*

**HELICOPTERS**

MRH 7: 2 Bell 412EP *Twin Huey*; 5 Bell 412SP *Twin Huey*

TPT • **Light** 8 AS350B *Ecureuil*

**Paramilitary 1,500**

**Police Mobile Unit 1,500** (org in territorial coy)

**Burkina Faso BFA**

CFA Franc BCEAO fr		2014	2015	2016
GDP	fr	6.17tr	6.56tr	
	US\$	12.5bn	11.3bn	
<i>per capita</i>	US\$	717	631	
Growth	%	4.0	5.0	
Inflation	%	-0.3	0.7	
Def bdgt	fr	78.4bn	87.5bn	
	US\$	159m	151m	
US\$1=fr		493.53	579.45	

Population 18,931,686

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	22.6%	5.5%	4.6%	3.8%	12.3%	0.9%
Female	22.6%	5.4%	4.6%	3.7%	12.4%	1.5%

**Capabilities**

Burkina Faso has seen significant unrest in 2015, one year on from the toppling of long-serving leader Blaise Comptore. There was an attempted coup in September by elements of the Presidential Security Regiment (RSP), which remained loyal to the ex-president. The coup failed and the RSP were later disbanded by President Kafando. The security institutions will come under renewed scrutiny after these events. The armed forces have struggled with funding issues, which is reflected in the equipment inventory. The army is structured around light-infantry units, while the air force has only a small number of fixed-wing aircraft and helicopters suitable for counter-insurgency operations. The army has provided personnel for a range of UN peacekeeping operations, including in Mali. Training and

support for the armed forces and gendarmerie have been provided by the US and France, among others.

**ACTIVE 11,200** (Army 6,400 Air 600 Gendarmerie 4,200) Paramilitary 250

**ORGANISATIONS BY SERVICE****Army 6,400**

Three military regions. In 2011, several regiments were disbanded and merged into other formations, including the new 24th and 34th *régiments interarmes*.

**FORCES BY ROLE****MANOEUVRE****Mechanised**

1 cbd arms regt

**Light**

1 cbd arms regt

6 inf regt

**Air Manoeuvre**

1 AB regt (1 CT coy)

**COMBAT SUPPORT**

1 arty bn (2 arty tp)

1 engr bn

**EQUIPMENT BY TYPE**

RECCE 91+: 19 AML-60/AML-90; 8+ *Bastion Patsas*; 24 EE-9 *Cascavel*; 30 *Ferret*; 2 M20; 8 M8

APC 44+

APC (W) 13+: 13 M3 Panhard; Some *Bastion* APC

PPV 31 *Puma* M26-15

ARTY 50+

TOWED 14: 105mm 8 M101; 122mm 6

MRL 9: 107mm  $\epsilon$ 4 Type-63; 122mm 5 APRA-40

MOR 27+: 81mm Brandt; 82mm 15; 120mm 12

AT • RCL 75mm Type-52 (M20); 84mm *Carl Gustav*

AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS • TOWED 42: 14.5mm 30 ZPU; 20mm 12 TCM-20

**Air Force 600****FORCES BY ROLE****GROUND ATTACK/TRAINING**

1 sqn with SF-260WL *Warrior*\*; Embraer EMB-314 *Super Tucano*\*

**TRANSPORT**

1 sqn with AT-802 *Air Tractor*; B-727 (VIP); Beech 200 *King Air*; CN-235-220; PA-34 *Seneca*

**ATTACK/TRANSPORT HELICOPTER**

1 sqn with AS350 *Ecureuil*; Mi-8 *Hip*; Mi-17 *Hip H*; Mi-35 *Hind*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 5 combat capable

ISR 1 DA42M (reported)

TPT 9: **Light** 8: 1 AT-802 *Air Tractor*; 2 Beech 200 *King Air*; 1 CN-235-220; 1 PA-34 *Seneca*; 3 *Tetras*; PAX 1 B-727 (VIP)

TRG 5: 3 EMB-314 *Super Tucano*\*; 2 SF-260WL *Warrior*\*

**HELICOPTERS**

ATK 2 Mi-35 *Hind*

MRH 2 Mi-17 *Hip H*  
TPT 2 *Medium* 1 Mi-8 *Hip*; *Light* 1 AS350 *Ecuireuil*

## Gendarmerie 4,200

## Paramilitary 250

**People's Militia (R)** 45,000 reservists (trained)

**Security Company** 250

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 1

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 1; 7 obs

### MALI

UN • MINUSMA 1,714; 2 inf bn

### SUDAN

UN • UNAMID 806; 5 obs; 1 inf bn

UN • UNISFA 1 obs

## FOREIGN FORCES

France *Operation Barkhane* 220

Burundi BDI				
Burundi Franc fr		2014	2015	2016
GDP	fr	4.79tr	4.79tr	
	US\$	3.09bn	2.97bn	
<i>per capita</i>	US\$	336	315	
Growth	%	4.7	-7.2	
Inflation	%	4.4	7.4	
Def bdgt	fr	96.2bn	100bn	
	US\$	62m	62m	
US\$1=fr		1,546.61	1,611.44	

Population 10,742,276

Ethnic groups: Hutu 85%; Tutsi 14%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	22.9%	5.2%	4.4%	3.8%	12.3%	1.1%
Female	22.7%	5.2%	4.4%	3.8%	12.6%	1.5%

## Capabilities

During a tense year in Burundi, the cohesiveness of the armed forces and the wider security and intelligence machinery was tested by the attempted coup against incumbent President Nkurunziza in May. The attempt was defeated and Nkurunziza secured a controversial third term in office. Since unrest began in early 2015, scores have been killed, and thousands fled with tensions remaining by year end amid allegations of excessive force by the security services. Previous military training activity with

international partners largely stalled in 2015 as a result of this situation. Notwithstanding the effect of the coup attempt on the armed forces, they have benefited from this training support as well as their recent deployments, including to the UN mission in the CAR and to AMISOM's mission in Somalia, where they gained valuable combat experience and specialist military skills.

**ACTIVE 20,000 (Army 20,000) Paramilitary 31,000**

DDR efforts continue, while activities directed at professionalising the security forces have taken place, some sponsored by BNUB, the UN mission.

## ORGANISATIONS BY SERVICE

### Army 20,000

#### FORCES BY ROLE

##### MANOEUVRE

**Mechanised**

2 lt armd bn (sqn)

**Light**

7 inf bn

Some indep inf coy

#### COMBAT SUPPORT

1 arty bn

1 AD bn 1 engr bn

#### Reserves

#### FORCES BY ROLE

##### MANOEUVRE

**Light**

10 inf bn (reported)

#### EQUIPMENT BY TYPE

**RECCE** 55: 6 AML-60; 12 AML-90; 30 BRDM-2; 7 S52

*Shorland*

**APC** 97

**APC (W)** 60: 20 BTR-40; 10 BTR-80; 9 M3 Panhard; 15

Type-92; 6 *Walid*

**PPV** 37: 15 *Cougar* 4x4; 12 RG-31 *Nyala*; 10 RG-33L

**ARTY** 120

**TOWED 122mm** 18 D-30

**MRL 122mm** 12 BM-21

**MOR** 90: **82mm** 15 M-43; **120mm** ε75

**AT**

**MSL** • **MANPATS** *Milan* (reported)

**RCL 75mm** Type-52 (M20)

**AD**

**SAM** • **MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡

**GUNS** • **TOWED 150+**: **14.5mm** 15 ZPU-4; 135+ **23mm**

ZU-23/37mm Type-55 (M-1939)

### Naval detachment 50

#### EQUIPMENT BY TYPE

**AMPHIBIOUS** • **LCT** 2

**LOGISTICS AND SUPPORT** • **AG** 2

### Air Wing 200

#### EQUIPMENT BY TYPE

**AIRCRAFT** 1 combat capable

TPT 4: **Light** 2 Cessna 150L‡; **PAX** 2 DC-3

TRG 1 SF-260W *Warrior\**  
**HELICOPTERS**  
 ATK 2 Mi-24 *Hind*  
 MRH 2 SA342L *Gazelle*  
 TPT • **Medium** (2 Mi-8 *Hip* non-op)

## Paramilitary €31,000

**General Administration of State Security**  
 €1,000

**Local Defence Militia** €30,000

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 856; 9 obs; 1 inf bn

### SOMALIA

AU • AMISOM 5,450; 6 inf bn

### SUDAN

UN • UNAMID 1; 5 obs

Cameroon CMR				
CFA Franc BEAC fr		2014	2015	2016
GDP	fr	15.7tr	16.8tr	
	US\$	31.8bn	28.5bn	
per capita	US\$	1,410	1,234	
Growth	%	5.7	5.3	
Inflation	%	1.9	2.0	
Def bdgt	fr	199bn	209bn	
	US\$	402m	355m	
US\$1=fr		493.63	589.57	

Population 23,739,218

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	21.6%	5.2%	4.6%	4.1%	13.2%	1.5%
Female	21.2%	5.2%	4.5%	4.0%	13.2%	1.7%

## Capabilities

The armed forces' immediate concerns are the actions of Boko Haram and maritime piracy. During 2015 there were further attacks by Boko Haram in the northern area of the country bordering Nigeria. The army is by far the largest of the three services and consists mostly of light infantry. While significant elements of its equipment inventory are ageing, it has in recent years acquired infantry fighting vehicles and other armour from China. The army has contributed personnel to UN peacekeeping operations but active security and combat operations on domestic territory is a departure and will require further training and capability-development assistance. France has long engaged in training support for the armed forces and gendarmerie. The US in late 2015 deployed personnel to support ISR flights, while a contract was also issued to provide *Scan Eagle* UAVs to Cameroon to enhance surveillance capacity.

**ACTIVE 14,200** (Army 12,500 Navy 1,300 Air 400)  
 Paramilitary 9,000

## ORGANISATIONS BY SERVICE

### Army 12,500

3 Mil Regions

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 rapid reaction bde (1 armd recce bn, 1 AB bn, 1 amph bn)

3 mot inf bde (3 mot inf bn, 1 spt bn)

1 mot inf bde (2 mot inf bn, 1 spt bn)

3 (rapid reaction) inf bn

###### Air Manoeuvre

1 cdo/AB bn

###### Other

1 (Presidential Guard) gd bn

#### COMBAT SUPPORT

1 arty regt (5 arty bty)

1 AD regt (6 AD bty)

3 engr regt

#### EQUIPMENT BY TYPE

RECCE 70: 31 AML-90; 6 AMX-10RC; 15 *Ferret*; 8 M8; 5

RAM-2000; 5 VBL

AIFV 30: 8 LAV-150 *Commando* with 20mm gun; 14 LAV-150 *Commando* with 90mm gun; 8 Type-07P

#### APC 39

APC (T) 12 M3 half-track

APC (W) 21 LAV-150 *Commando*

PPV 6 *Cougar* 4x4

#### ARTY 106+

SP 155mm 18 ATMOS 2000

TOWED 52: 105mm 20 M101; 130mm 24: 12 M-1982

(reported); 12 Type-59 (M-46); 155mm 8 I1

MRL 122mm 20 BM-21

MOR 16+: 81mm (some SP); 120mm 16 Brandt

#### AT

MSL 49

SP 24 TOW (on Jeeps)

MANPATS 25 *Milan*

RCL 53: 106mm 40 M40A2; 75mm 13 Type-52 (M20)

RL 89mm LRAC

GUNS • SP 105mm 12 PTL-02 mod (Cara 105)

AD • GUNS • TOWED 54: 14.5mm 18 Type-58 (ZPU-2);

35mm 18 GDF-002; 37mm 18 Type-63

### Navy €1,300

HQ located at Douala

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 17

PCC 4: 1 *Bakassi* (FRA P-48); 1 *Dipikar* (ex-FRA *Flamant*);

2 Polytechnologies 60m with 1 76mm gun

PB 11: 2 Aresa 2400; 2 Aresa 3200; 2 Rodman 101; 4

Rodman 46; 1 *Quartier Maître Alfred Motto*

PBR 2 Swift-38

##### AMPHIBIOUS • LANDING CRAFT 2

LCM 1 Aresa 2300

LCU 2 *Yunnan*

## Fusiliers Marin

### FORCES BY ROLE

#### MANOEUVRE

Amphibious  
3 mne bn

## Air Force 300–400

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with MB-326K; *Alpha Jet*\*†

#### TRANSPORT

1 sqn with C-130H/H-30 *Hercules*; DHC-4 *Caribou*; DHC-5D *Buffalo*; IAI-201 *Arava*; PA-23 *Aztec*

1 VIP unit with AS332 *Super Puma*; AS365 *Dauphin* 2; Bell 206B *Jet Ranger*; Gulfstream III

#### TRAINING

1 unit with *Tetras*

#### ATTACK HELICOPTER

1 sqn with SA342 *Gazelle* (with HOT)

#### TRANSPORT HELICOPTER

1 sqn with Bell 206L-3; Bell 412; SA319 *Alouette* III

### EQUIPMENT BY TYPE

#### AIRCRAFT 9 combat capable

ATK 5: 1 MB-326K *Impala* I; 4 MB-326K *Impala* II  
TPT 20: **Medium** 3: 2 C-130H *Hercules*; 1 C-130H-30 *Hercules*; **Light** 16: 1 CN-235; 1 DHC-4 *Caribou*; 1 DHC-5D *Buffalo*; 1 IAI-201 *Arava*; 2 J.300 *Joker*; 1 MA60; 2 PA-23 *Aztec*; 7 *Tetras*; **PAX** 1 Gulfstream III  
TRG 4 *Alpha Jet*\*†

#### HELICOPTERS

MRH 13: 1 AS365 *Dauphin* 2; 1 Bell 412 *Twin Huey*; 2 Mi-17 *Hip H*; 2 SA319 *Alouette* III; 4 SA342 *Gazelle* (with HOT); 3 Z-9

TPT 7: **Medium** 4: 2 AS332 *Super Puma*; 2 SA330J *Puma*; **Light** 3: 2 Bell 206B *Jet Ranger*; 1 Bell 206L3 *Long Ranger*

## Fusiliers de l'Air

### FORCES BY ROLE

#### MANOEUVRE

Other  
1 sy bn

## Paramilitary 9,000

### Gendarmerie 9,000

### FORCES BY ROLE

#### MANOEUVRE

Reconnaissance  
3 (regional spt) paramilitary gp

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 967; 5 obs; 1 inf bn

### CÔTE D'IVOIRE

UN • UNOCI 1 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 2; 3 obs

## FOREIGN FORCES

United States 300

## Cape Verde CPV

Cape Verde Escudo E		2014	2015	2016
GDP	E	154bn	163bn	
	US\$	1.86bn	1.64bn	
<i>per capita</i>	US\$	3,584	3,127	
Growth	%	1.8	3.5	
Inflation	%	-0.2	1.0	
Def bdgt	E	992m	995m	
	US\$	12m	10m	
US\$1=E		82.97	99.17	

Population 545,993

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	15.1%	5.3%	5.2%	4.8%	16.2%	1.9%
Female	15.0%	5.3%	5.2%	4.8%	18.0%	3.2%

## Capabilities

Maritime security, counter-narcotics operations and patrolling the littoral waters of the archipelago are the main tasks of Cape Verde's small armed forces. There is some training support in maritime security from international partners.

**ACTIVE 1,200 (Army 1,000 Coast Guard 100 Air 100)**

*Conscript liability* Selective conscription

## ORGANISATIONS BY SERVICE

### Army 1,000

#### FORCES BY ROLE

#### MANOEUVRE

Light  
2 inf bn (gp)

#### COMBAT SUPPORT

1 engr bn

#### EQUIPMENT BY TYPE

RECCE 10 BRDM-2

ARTY • MOR 18: 82mm 12; 120mm 6 M-1943

AD

SAM • MANPAD 9K32 *Strela* (SA-7 *Grail*)‡

GUNS • TOWED 30: 14.5mm 18 ZPU-1; 23mm 12 ZU-23

### Coast Guard €100

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 5

PCC 2: 1 *Guardião*; 1 *Kondor I*

PB 2: 1 *Espadarte*; 1 *Tainha* (PRC-27m)

PBF 1 *Archangel*

### Air Force up to 100

#### FORCES BY ROLE

#### MARITIME PATROL

1 sqn with C-212 *Aviocar*; Do-228

**EQUIPMENT BY TYPE**

**AIRCRAFT** • TPT • **Light** 5: 1 C-212 *Aviocar*; 1 Do-228; 3 An-26 *Curlt*

**Central African Republic CAR**

CFA Franc BEAC fr		2014	2015	2016
GDP	fr	852bn	955bn	
	US\$	1.73bn	1.62bn	
<i>per capita</i>	US\$	367	339	
Growth	%	1.0	5.5	
Inflation	%	11.6	5.7	
Def exp	fr	€35.6bn		
	US\$	€72m		
US\$1=fr		493.42	587.84	

**Population** 5,391,539

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	20.3%	5.3%	4.8%	4.2%	13.6%	1.4%
Female	20.1%	5.2%	4.7%	4.2%	14.0%	2.1%

**Capabilities**

Effective military and security organisations still remain largely absent in the wake of the violence of 2013. Some equipment remains, but inventory numbers are difficult to verify. July 2014 saw hostilities cease between armed factions (though criminal violence and banditry persists) and May 2015 saw the Bangui Forum on National Reconciliation agree principles governing disarmament, demobilisation, reintegration and repatriation (DDRR). Reform of the security forces was seen as a longer-term objective, but the provision of adequate international funding for the DDRR proposals was, said a UNDP document in October, vital in the near term, as was development of improved vetting and better security and defence infrastructure. Agreement was also reached to stop child-soldier recruitment. An EU mission began in early 2015 to advise the authorities on higher defence-management functions and systematic reform of the armed forces. France, in late 2015, said that it would gradually draw down its deployed forces.

**ACTIVE 7,150 (Army 7,000 Air 150) Paramilitary 1,000**

*Conscript liability* Selective conscription 2 years; reserve obligation thereafter, term n.k.

**ORGANISATIONS BY SERVICE****Army €7,000****EQUIPMENT BY TYPE**

**MBT** 3 T-55+

**RECCE** 9: 8 *Ferrett*; 1 BRDM-2

**AIFV** 18 *Ratel*

**APC (W)** 39+: 4 BTR-152+; 25+ TPK 4.20 VSC ACMAT+; 10+ VAB+

**ARTY** • **MOR** 12+: **81mm+**; **120mm** 12 M-1943+

**AT** • **RCL** 106mm 14 M40+

**PATROL AND COASTAL COMBATANTS** • **PBR** 9+

**Air Force 150****EQUIPMENT BY TYPE**

**AIRCRAFT** • TPT 7: **Medium** 1 C-130A *Hercules*; **Light** 6: 3 BN-2 *Islander*; 1 Cessna 172RJ *Skyhawk*; 2 J.300 *Joker*

**HELICOPTERS** • TPT • **Light** 1 AS350 *Ecureuil*

**FOREIGN FORCES**

MINUSCA unless stated

**Austria** EUMAM RCA 5

**Bangladesh** 903; 11 obs; 1 inf bn; 1 sigs coy; 1 med coy

**Benin** 3; 1 obs

**Bhutan** 2; 2 obs

**Bolivia** 3

**Brazil** 3; 1 obs

**Burkina Faso** 1

**Burundi** 856; 9 obs; 1 inf bn

**Cambodia** 217; 6 obs; 1 engr coy

**Cameroon** 967; 5 obs; 1 inf bn

**Congo** 760; 5 obs; 1 inf bn

**Czech Republic** 2 obs

**Democratic Republic of the Congo** 809; 1 inf bn

**Egypt** 265; 2 obs; 1 engr coy; 1 tpt coy

**France** 8 • *Operation Sangaris* 900; 1 mech BG; 1 hel det with 2 AS555 *Fennec*; 2 SA300 *Puma* • EUMAM RCA 20

**Gabon** 436; 1 obs; 1 inf bn

**Gambia** 2; 2 obs

**Georgia** EUMAM RCA 5

**Ghana** 2; 3 obs

**Guatemala** 2; 2 obs

**Hungary** 2; 2 obs

**Indonesia** 210; 6 obs; 1 engr coy

**Jordan** 3; 3 obs

**Kenya** 8; 6 obs

**Mauritania** 6; 5 obs

**Morocco** 754; 2 obs; 1 inf bn

**Nepal** 61; 3 obs; 1 MP pl

**Niger** 133; 2 obs; 1 sigs coy

**Pakistan** 1,124; 10 obs; 1 inf bn; 1 hel sqn; 1 engr coy

**Paraguay** 3; 1 obs

**Peru** 4; 5 obs

**Poland** EUMAM RCA 2

**Portugal** EUMAM RCA 8

**Rwanda** 780; 10 obs; 1 inf bn

**Serbia** EUMAM RCA 4

**Senegal** 1; 1 obs

**Serbia** 70; 2 obs; 1 med coy

**Spain** EUMAM RCA 22

**Sri Lanka** 127; 5 obs; 1 hel sqn

**Sweden** EUMAM RCA 2

**Tanzania** 1

**United States** 6

**Vietnam** 3

**Yemen** 6 obs

**Zambia** 531; 8 mil obs; 1 inf bn



## Chad CHA

CFA Franc BEAC fr		2014	2015	2016
GDP	fr	6.88tr	6.89tr	
	US\$	13.9bn	11.7bn	
<i>per capita</i>	US\$	1,236	1,011	
Growth	%	6.9	6.9	
Inflation	%	1.7	4.3	
Def bdgt	fr	135bn	101bn	
	US\$	273m	171m	
FMA (US)	US\$	0.2m		
US\$1=fr		493.63	589.88	

Population 11,631,456

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	22.4%	5.7%	4.4%	3.6%	10.8%	1.2%
Female	21.8%	5.8%	4.9%	4.2%	13.3%	1.7%

## Capabilities

Chad's two most pressing security concerns are instability in Western Africa and the Sahel, and counter-insurgency operations against Boko Haram. The country is part of the 'G5 Sahel' nations, and has encouraged African armed forces to take ownership of regional security. The capability of the country's small air force was strengthened by the acquisition of second-hand Su-25 *Frogfoot* aircraft from Ukraine and intra-theatre airlift has also been improved with the purchase of two C-27J *Spartans*. Its ground forces are combat experienced, partnering with French forces in Mali at the start of the *Serval* operation in 2013. They also benefit from international training assistance, and Chad was the host for the *Flintlock 2015* exercise.

**ACTIVE 30,350 (Army 25,000 Air 350 Republican Guard 5,000) Paramilitary 9,500**

*Conscript liability* Conscription authorised

## ORGANISATIONS BY SERVICE

### Army **€25,000**

7 Mil Regions

### FORCES BY ROLE

#### MANOEUVRE

**Armoured**

1 armd bn

**Light**

7 inf bn

#### COMBAT SUPPORT

1 arty bn

1 engr bn

1 sigs bn

#### COMBAT SERVICE SUPPORT

1 log gp

### EQUIPMENT BY TYPE

MBT 60 T-55

RECCE 309+: 132 AML-60/AML-90; 22 *Bastion Patsas*; €100 BRDM-2; 20 EE-9 *Cascavel*; 4 ERC-90F *Sagaie*; 31+ RAM-2000

AIFV 92: 83 BMP-1; 9 LAV-150 *Commando* (with 90mm gun)  
APC • APC (W) 95: 24 BTR-80; 8 BTR-3E; €20 BTR-60; €10 Carat *Black Scorpion*; 25 VAB-VTT; 8 WZ-523

### ARTY 26+

SP 122mm 10 2S1

TOWED 105mm 5 M2

MRL 11+: 107mm some Type-63; 122mm 11: 6 BM-21

*Grad*; 5 Type-81

MOR 81mm some; 120mm AM-50

### AT

MSL • MANPATS *Eryx*; *Milan*

RCL 106mm M40A1

GUN • SP 105mm 30 PTL-02 *Assaulter*

### AD

#### SAM

SP 2K12 *Kub* (SA-6 *Gainful*)

MANPAD 9K310 *Igla-1* (SA-16 *Gimlet*)

GUNS • TOWED 14.5mm ZPU-1/ZPU-2/ZPU-4; 23mm ZU-23

## Air Force 350

### FORCES BY ROLE

#### GROUND ATTACK

1 unit with PC-7; PC-9\*; SF-260WL *Warrior\**; Su-25 *Frogfoot*

#### TRANSPORT

1 sqn with An-26 *Curl*; C-130H-30 *Hercules*; Mi-17 *Hip H*; Mi-171

1 (Presidential) Flt with B-737BBJ; Beech 1900; DC-9-87; Gulfstream II

#### ATTACK HELICOPTER

1 sqn with AS550C *Fennec*; Mi-24V *Hind*; SA316 *Alouette III*

### EQUIPMENT BY TYPE

AIRCRAFT 14 combat capable

FTR 1 MiG-29 *Fulcrum*

ATK 10: 8 Su-25 *Frogfoot*; 2 Su-25UB *Frogfoot B*

TPT 10: **Medium** 3: 2 C-27J *Spartan*; 1 C-130H-30

*Hercules*; **Light** 4: 3 An-26 *Curl*; 1 Beech 1900; **PAX** 3: 1 B-737BBJ; 1 DC-9-87; 1 Gulfstream II

TRG 4: 2 PC-7 (only 1\*); 1 PC-9 *Turbo Trainer\**; 1 SF-260WL *Warrior\**

#### HELICOPTERS

ATK 3 Mi-24V *Hind*

MRH 11: 6 AS550C *Fennec*; 3 Mi-17 *Hip H*; 2 SA316 *Alouette III*

TPT • **Medium** 2 Mi-171

## Paramilitary 9,500 active

### Republican Guard 5,000

### Gendarmerie 4,500

## DEPLOYMENT

### CÔTE D'IVOIRE

UN • UNOCI 4 obs

### MALI

UN • MINUSMA 1,108; 1 SF coy; 2 inf bn

## FOREIGN FORCES

**Belgium** *Operation Barkhane 2*

**France** *Operation Barkhane* 1,250; 1 mech inf BG; 1 air unit with 4 *Rafale* F3; 1 C-130H *Hercules*; 1 C-160 *Transall*; 1 C-135FR; 1 hel det with 2 H225 *Caracal*; 2 SA330 *Puma*

## Congo, Republic of COG

CFA Franc BEAC fr		2014	2015	2016
GDP	fr	6.69tr	5.23tr	
	US\$	13.6bn	8.87bn	
<i>per capita</i>	US\$	3,171	2,031	
Growth	%	6.8	1.0	
Inflation	%	0.9	0.9	
Def bdgt	fr	349bn		
	US\$	706m		
US\$1=fr		493.63	589.56	

Population 4,755,097

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	20.8%	4.6%	4.2%	3.6%	15.6%	1.3%
Female	20.5%	4.5%	4.2%	4.0%	15.0%	1.7%

## Capabilities

There was political tension in Congo in late 2015, after the president won a controversial third term in office following the passage of constitutional change allowing this. Congo's armed forces are small, utilise aged equipment, and have low levels of training and limited overall capability. They have struggled to recover from the brief but devastating civil war in the late 1990s. Though the defence budget is not insignificant in relation to those of its neighbours, the air force is effectively grounded for lack of spares and serviceable equipment, and the navy is little more than a riverine force despite the need for maritime security on the country's small coastline.

**ACTIVE 10,000** (Army 8,000 Navy 800 Air 1,200)

Paramilitary 2,000

## ORGANISATIONS BY SERVICE

### Army 8,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

2 armd bn

###### Light

2 inf bn (gp) each with (1 lt tk tp, 1 arty bty)

1 inf bn

###### Air Manoeuvr

1 cdo/AB bn

#### COMBAT SUPPORT

1 arty gp (with MRL)

1 engr bn

#### EQUIPMENT BY TYPE†

MBT 40: 25 T-54/T-55; 15 Type-59; (some T-34 in store)

LT TK 13: 3 PT-76; 10 Type-62

RECCE 25 BRDM-1/BRDM-2

APC 120+

APC (W) 68+: 20 BTR-152; 30 BTR-60; 18 *Mamba*; M3 Panhard

PPV 52: 15 *Fox*; 37 *Marauder*

ARTY 66+

SP 122mm 3 2S1

TOWED 25+: 100mm 10 M-1944; 122mm 10 D-30;

130mm 5 M-46; 152mm D-20

MRL 10+: 122mm 10 BM-21; 122mm BM-14; 140mm BM-16

MOR 28+: 82mm; 120mm 28 M-43

AT • RCL 57mm M18

GUNS 57mm 5 ZIS-2 (M-1943)

AD • GUNS 28+

SP 23mm ZSU-23-4

TOWED 14.5mm ZPU-2/ZPU-4; 37mm 28 M-1939;

57mm S-60; 100mm KS-19

### Navy €800

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 8

PCC 4 *Février*

PBR 4

### Air Force 1,200

#### FORCES BY ROLE

FIGHTER/GROUND ATTACK

1 sqn with *Mirage* F-1AZ

TRANSPORT

1 sqn with An-24 *Coke*; An-32 *Cline*; CN-235M-100

ATTACK/TRANSPORT HELICOPTER

1 sqn with Mi-8 *Hip*; Mi-35P *Hind*

#### EQUIPMENT BY TYPE†

AIRCRAFT

FGA 2 *Mirage* F-1AZ

TPT • Light 4: 1 An-24 *Coke*; 2 An-32 *Cline*; 1 CN-235M-100

HELICOPTERS†

ATK (2 Mi-35P *Hind* in store)

TPT • Medium (3 Mi-8 *Hip* in store)

MSL • AAM • IR R-3 (AA-2 *Atoll*)‡

### Paramilitary 2,000 active

#### Gendarmerie 2,000

##### FORCES BY ROLE

MANOEUVRE

Other

20 paramilitary coy

#### Presidential Guard some

##### FORCES BY ROLE

MANOEUVRE

Other

1 paramilitary bn

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 760; 5 obs; 1 inf bn

## Côte D'Ivoire CIV

CFA Franc BCEAO fr		2014	2015	2016
GDP	fr	16.7tr	18.4tr	
	US\$	33.7bn	31.3bn	
<i>per capita</i>	US\$	1,460	1,319	
Growth	%	7.9	8.2	
Inflation	%	0.4	1.6	
Def bdgt [a]	fr	400bn	499bn	
	US\$	810m	846m	
FMA (US)	US\$	0.2m		
US\$1=fr		493.63	589.88	

[a] Defence, order and security expenses

Population 23,295,302

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	19.1%	5.6%	5.0%	4.4%	14.8%	1.6%
Female	18.8%	5.5%	4.9%	4.4%	14.1%	1.7%

## Capabilities

The Ivorian armed forces are an organisation still under construction. The air force has no combat capability and a very limited capacity for transport, and there remain questions as to serviceability. The latter is also an issue for the small naval unit. The army comprises personnel from both sides of the previous conflict, and security-sector-reform initiatives are central to future force health and military effectiveness. The UN was reporting in May that the armed forces 'continued to face institutional gaps in terms of training, discipline and low public confidence' while both the police and gendarmerie faced operational shortcomings. The administration has moved to regulate promotion and salary structures in a bid to aid professionalisation, as well as improving military infrastructure. The country remains the subject of a UN arms embargo, although restrictions on the supply of non-lethal equipment have eased. French forces this year began training activities with Ivorian helicopter pilots and maintenance staff.

**ACTIVE 25,000 (Army 23,000 Navy 1,000 Air 1,000)**

**Paramilitary n.k.**

Moves to restructure and reform the armed forces continue.

## ORGANISATIONS BY SERVICE

**Army** €23,000

### FORCES BY ROLE

#### MANOEUVRE

**Armoured**  
1 armd bn

#### Light

4 inf bn

#### Air Manoeuvre

1 cdo/AB bn

### COMBAT SUPPORT

1 arty bn

1 AD bn

1 engr bn

### COMBAT SERVICE SUPPORT

1 log bn

### EQUIPMENT BY TYPE

**MBT** 10 T-55†

**LT TK** 5 AMX-13

**RECCE** 34: 15 AML-60/AML-90; 13 BRDM-2; 6 ERC-90F4

*Sagaie*

**AIFV** 10 BMP-1/BMP-2†

**APC (W)** 31: 12 M3 Panhard; 13 VAB; 6 BTR-80

**ARTY** 36+

**TOWED** 4+: **105mm** 4 M-1950; **122mm** (reported)

**MRL** **122mm** 6 BM-21

**MOR** 26+: **81mm**; **82mm** 10 M-37; **120mm** 16 AM-50

### AT

**MSL** • **MANPATS** 9K113 *Konkurs* (AT-5 *Spandrel*)

(reported); 9K135 *Kornet* (AT-14 *Spriggan*) (reported)

**RCL** **106mm** €12 M40A1

**AD** • **SAM** • **MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)†

(reported)

**GUNS** 21+

**SP** **20mm** 6 M3 VDAA

**TOWED** 15+: **20mm** 10; **23mm** ZU-23-2; **40mm** 5 L/60

**VLB** MTU

**AIRCRAFT** • **TPT** • **Medium** 1 An-12 *Cub*†

**Navy** €1,000

### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 5

**PB** 3: 2 *L'Emergence*; 1 *Intrepide* † (FRA *Patra*)

**PBR** 2 *Rodman* (fishery protection duties)

### AMPHIBIOUS

**LCM** 2 *Aby* †

### LOGISTICS AND SUPPORT

**YT** 2

**Air Force** €1,000

### EQUIPMENT BY TYPE†

#### AIRCRAFT

**ATK** (2 Su-25 *Frogfoot* in store)

**TPT** • **PAX** 1 B-727

#### HELICOPTERS

**ATK** 1 Mi-24 (reported)

**TPT** • **Medium** 3 SA330L *Puma* (IAR-330L)

**Paramilitary** n.k.

**Republican Guard** n.k.

### EQUIPMENT BY TYPE†

**APC (W)** 4 *Mamba*

**Gendarmerie** n.k.

### EQUIPMENT BY TYPE†

**APC (W)** some VAB

**PATROL AND COASTAL COMBATANTS** • **PB** 1 *Bian*

## DEPLOYMENT

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 1

### MALI

UN • MINUSMA 3

## FOREIGN FORCES

All forces part of UNOCI unless otherwise stated.

**Bangladesh** 1,421; 13 obs; 2 mech inf bn; 1 sigs coy; 1 log coy; 1 fd hospital

**Benin** 376; 9 obs; 1 inf bn(-)

**Bolivia** 3 obs

**Brazil** 3; 4 obs

**Cameroon** 1 obs

**Chad** 4 obs

**China, People's Republic of** 6 obs

**Ecuador** 2 obs

**Egypt** 176; 1 engr coy

**El Salvador** 3 obs

**Ethiopia** 2 obs

**France** 4 • Forces Francaises en Cote d'Ivoire: 600; 1 armd BG; 1 tpt unit with 1 C-160 *Transall*; 1 AS555 *Fennec*

**Gambia** 4 obs

**Ghana** 104; 6 obs; 1 hel sqn

**Guatemala** 4 obs

**Guinea** 1; 1 obs

**India** 9 obs

**Ireland** 2 obs

**Jordan** 10; 8 obs

**Kazakhstan** 2 obs

**Korea, Republic of** 2 obs

**Malawi** 2; 3 obs

**Moldova** 3 obs

**Morocco** 718; 1 inf bn

**Namibia** 2 obs

**Nepal** 1; 3 obs

**Niger** 866; 4 obs; 1 inf bn

**Nigeria** 3 obs

**Pakistan** 290; 12 obs; 2 inf coy; 2 tpt coy

**Paraguay** 2; 2 obs

**Peru** 1 obs

**Poland** 2 obs

**Romania** 6 obs

**Russia** 9 obs

**Senegal** 739; 7 obs; 1 inf bn; 1 hel sqn

**Serbia** 3 obs

**Spain** 1

**Tanzania** 2; 2 obs

**Togo** 471; 7 obs; 1 inf bn

**Tunisia** 3; 7 obs

**Uganda** 2; 5 obs

**Ukraine** 34; 1 hel flt

**Uruguay** 2 obs

**Yemen, Republic of** 9 obs

**Zambia** 2 obs

**Zimbabwe** 3 obs

## Democratic Republic of the Congo DRC

Congolese Franc fr		2014	2015	2016
GDP	fr	33.2tr	36.2tr	
	US\$	35.9bn	39.1bn	
<i>per capita</i>	US\$	453	478	
Growth	%	9.2	8.4	
Inflation	%	1.0	1.0	
Def bdgt	fr	426bn	684bn	825bn
	US\$	461m	738m	
US\$1=fr		925.00	926.81	

Population 79,375,136

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	21.5%	5.8%	5.0%	4.0%	12.5%	1.1%
Female	21.2%	5.7%	4.9%	4.0%	12.8%	1.5%

## Capabilities

The DRC ostensibly retains the largest armed forces in Central Africa. However, given the country's size and the poor level of training, morale and equipment, the DRC armed forces (FARDC) are unable to provide security throughout the country. The DRC has suffered the most protracted conflict since the end of the Cold War. For this reason, much military equipment is in a poor state of repair and the armed forces, which have since incorporated a number of non-state armed groups, struggle with a variety of loyalties. Rebellion by former FARDC troops, dubbed M23, was only ended in December 2013 after an offensive by the FARDC, supported by the UN's Force Intervention Brigade (FIB). Moves to give another rebel group, FDLR, six months to disarm have been met with some criticism in light of the potential for continuing instability in the east. Training will have improved for units operating with the FIB, while external partner training and capacity-building assistance is also commonplace. When conflict finally abates in the east, significant attention to wide-ranging DDR and SSR will be required, to continue the work intermittently undertaken over the past decade.

**ACTIVE €134,250 (Central Staffs €14,000, Army 103,000 Republican Guard 8,000 Navy 6,700 Air 2,550)**

## ORGANISATIONS BY SERVICE

### Army (Forces du Terre) €103,000

The DRC has eleven Military Regions. In 2011, all brigades in North and South Kivu provinces were consolidated into 27 new regiments, the latest in a sequence of reorganisations designed to integrate non-state armed groups. The actual combat effectiveness of many formations is doubtful.

**FORCES BY ROLE****MANOEUVRE****Light**

6 (integrated) inf bde

ε3 inf bde (non-integrated)

27+ inf regt

**COMBAT SUPPORT**

1 arty regt

1 MP bn

**EQUIPMENT BY TYPE†**

(includes Republican Guard eqpt)

**MBT** 149: 12–17 Type-59 †; 32 T-55; 100 T-72AV**LT TK** 40: 10 PT-76; 30 Type-62† (reportedly being refurbished)**RECCE** up to 52: up to 17 AML-60; 14 AML-90; 19 EE-9*Cascavel*; 2 RAM-V-2**AIFV** 20 BMP-1**APC** 144:**APC (T)** 9: 3 BTR-50; 6 MT-LB**APC (W)** 135: 30-70 BTR-60PB; 58 M3 Panhard†; 7 TH 390 *Fahd***ARTY** 720+**SP** 16: **122mm** 6 2S1; **152mm** 10 2S3**TOWED** 119: **122mm** 77 (M-30) M-1938/D-30/Type-60;**130mm** 42 Type-59 (M-46)/Type-59 I**MRL** 57+: **107mm** 12 Type-63; **122mm** 24+; 24 BM-21; someRM-70; **128mm** 6 M-51; **130mm** 3 Type-82; **132mm** 12**MOR** 528+: **81mm** 100; **82mm** 400; **107mm** M30; **120mm**

28: 18; 10 Brandt

**AT****RCL** 57mm M18; **73mm**; **75mm** M20; **106mm** M40A1**GUNS** 85mm 10 Type-56 (D-44)**AD****SAM** • **MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)†**GUNS** • **TOWED** 114: **14.5mm** 12 ZPU-4; **37mm** 52 M-1939; **40mm** ε50 L/60† (probably out of service)**Republican Guard 8,000****FORCES BY ROLE****MANOEUVRE****Armoured**

1 armd regt

**Light**

3 gd bde

**COMBAT SUPPORT**

1 arty regt

**Navy 6,700 (incl infantry and marines)****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 16**PB** 16: 1 *Shanghai* II; ε15 various (all under 15m)**Air Force 2,550****EQUIPMENT BY TYPE****AIRCRAFT** 4 combat capable**ATK** 4 Su-25 *Frogfoot***TPT** 5: **Medium** 1 C-130H *Hercules*; **Light** 2 An-26 *Curl*;**PAX** 2 B-727**HELICOPTERS****ATK** 9: 4 Mi-24 *Hind*; 5 Mi-24V *Hind***TPT** • **Medium** 3: 1 AS332L *Super Puma*; 2 Mi-8 *Hip***Paramilitary****National Police Force**

incl Rapid Intervention Police (National and Provincial forces)

**People's Defence Force****DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 809; 1 inf bn

**FOREIGN FORCES**

All part of MONUSCO unless otherwise specified.

**Algeria** 5 obs**Bangladesh** 1,784; 16 obs; 1 mech inf bn; 2 engr coy; 1 avn coy; 2 hel coy**Belgium** 1; 1 obs**Benin** 456; 8 obs; 1 inf bn**Bolivia** 8 obs**Brazil** 5; 1 obs**Burkina Faso** 1; 7 obs**Cameroon** 2; 3 obs**Canada** (*Operation Crocodile*) 7**China, People's Republic of** 221; 5 obs; 1 engr coy; 1 fd hospital**Cote d'Ivoire** 1**Czech Republic** 3 obs**Egypt** 153; 19 obs; 1 SF coy**France** 5**Ghana** 465; 22 obs; 1 mech inf bn(-)**Guatemala** 151; 1 obs**Guinea** 1 obs**India** 3,351; 30 obs; 3 mech inf bn; 1 inf bn; 1 fd hospital**Indonesia** 176; 15 obs; 1 engr coy**Ireland** 4**Jordan** 10; 13 obs**Kenya** 10; 15 obs**Malawi** 853; 9 obs; 1 inf bn**Malaysia** 7; 8 obs**Mali** 1; 4 obs**Mongolia** 2 obs**Morocco** 840; 3 obs; 1 mech inf bn; 1 fd hospital**Nepal** 1,028; 18 obs; 1 inf bn; 1 engr coy**Niger** 4; 14 obs**Nigeria** 1; 19 obs**Pakistan** 3,443; 44 obs; 3 mech inf bn; 1 inf bn; 1 hel sqn**Paraguay** 17 obs**Peru** 2; 13 obs**Poland** 2 obs**Romania** 22 obs**Russia** 1; 26 obs



Senegal 6; 7 obs

Serbia 8

South Africa (*Operation Mistral*) 1,326; 7 obs; 1 inf bn; 1 atk hel coy; 1 hel coy; 1 engr coy

Sri Lanka 4 obs

Sweden 2 obs

Switzerland 3

Tanzania 1,265; 1 SF coy; 1 inf bn; 1 arty coy

Tunisia 29 obs

Ukraine 253: 11 obs; 2 atk hel sqn; 1 hel sqn

United Kingdom 5

United States 3

Uruguay 1,182; 18 obs; 1 inf bn; 1 mne coy; 1 hel flt

Yemen, Republic of 6 obs

Zambia 2; 17 obs

## Djibouti DJB

Djiboutian Franc fr		2014	2015	2016
GDP	fr	282bn	310bn	
	US\$	1.59bn	1.74bn	
<i>per capita</i>	US\$	1,692	1,805	
Growth	%	6.0	6.5	
Inflation	%	2.9	3.0	
Def exp	fr	€1.72bn		
	US\$	€10m		
FMA (US)	US\$	1m	0.7m	0.7m
US\$1=fr		177.72	177.73	

Population 828,324

Ethnic groups: Somali 60%; Afar 35%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	16.2%	5.3%	5.0%	4.3%	13.5%	1.6%
Female	16.1%	5.6%	6.0%	5.6%	18.9%	2.0%

## Capabilities

The small armed forces of this strategically significant country are almost entirely dominated by the army, which has concentrated on mobility and artillery in its recent equipment purchases, though it lacks armoured-warfare capability. Training support and external security are bolstered by the presence of the US Combined Joint Task Force–Horn of Africa at Camp Lemonnier, as well as a French base with air-combat and transport assets. Other states base forces in Djibouti to participate in counter-piracy missions and Japan opened its first overseas base there in 2010. A growing relationship exists with China, exemplified by a strategic-defence partnership in February 2014 and speculation in 2015 that China might be considering a presence in Djibouti. Despite concerns about the country's ability to self-sustain on operations, Djibouti in 2015 agreed to deploy a second battalion group to AMISOM.

**ACTIVE 10,450 (Army 8,000 Navy 200 Air 250 Gendarmerie 2,000) National Security Force 2,500**

## ORGANISATIONS BY SERVICE

### Army €8,000

#### FORCES BY ROLE

4 military districts (Tadjourah, Dikhil, Ali-Sabieh and Obock)  
MANOEUVRE

##### Mechanised

1 armd regt (1 recce sqn, 3 armd sqn, 1 (anti-smuggling) sy coy)

##### Light

4 inf regt (3–4 inf coy, 1 spt coy)

1 rapid reaction regt (4 inf coy, 1 spt coy)

##### Other

1 (Republican Guard) gd regt (1 sy sqn, 1 (close protection) sy sqn, 1 cbt spt sqn (1 recce pl, 1 armd pl, 1 arty pl), 1 spt sqn)

#### COMBAT SUPPORT

1 arty regt

1 demining coy

1 sigs regt

1 CIS sect

#### COMBAT SERVICE SUPPORT

1 log regt

1 maint coy

#### EQUIPMENT BY TYPE

RECCE 56: 4 AML-60+; 17 AML-90; 15 VBL; 16-20 *Ratel*

AIFV 8 BTR-80A

APC 40

APC (W) 18: 12 BTR-60+; 6 *Puma*

PPV 22: 12 *Cougar* 4x4; 10 RG-33L

ARTY 71

SP 155mm 10 M109L

TOWED 122mm 6 D-30

MRL 122mm 10: 6 (6-tube Toyota Land Cruiser 70 series); 2 (30-tube Iveco 110-16); 2 (30-tube)

MOR 45: 81mm 25; 120mm 20 Brandt

AT

RCL 106mm 16 M40A1

GUNS • SP 105mm 1 PTL-02 *Assaulter*

AD • GUNS 15+

SP 20mm 5 M693

TOWED 10: 23mm 5 ZU-23; 40mm 5 L/70

### Navy €200

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 12

PBF 2 Battalion-17

PB 10: 1 *Plascoat*; 2 Sea Ark 1739; 1 *Swarit*; 6 others

AMPHIBIOUS • LCT 1 EDIC 700

### Air Force 250

#### EQUIPMENT BY TYPE

AIRCRAFT

TPT • Light 4: 1 Cessna U206G *Stationair*; 1 Cessna 208 *Caravan*; 1 L-410UVP *Turbolet*; 1 MA60

HELICOPTERS

ATK (2 Mi-35 *Hind* in store)

MRH 1 Mi-17 *Hip* H

TPT 3: Medium 1 Mi-8T *Hip*; Light 2 AS355F *Ecureuil* II

**Gendarmerie 2,000+**

Ministry of Defence

**FORCES BY ROLE****MANOEUVRE****Other**

1 paramilitary bn

**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 1 PB

**Paramilitary €2,500****National Security Force €2,500**

Ministry of Interior

**Coast Guard 145****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 9 PB

**DEPLOYMENT****SOMALIA**

AU • AMISOM 1,850; 2 inf bn

**FOREIGN FORCES**

**France** 1,700: 1 (Marine) combined arms regt (2 recce sqn, 2 inf coy, 1 arty bty, 1 engr coy); 1 hel det with 4 SA330 *Puma*; 2 SA342 *Gazelle*; 1 LCM; 1 *Falcon* 50MI; 1 air sqn with 7 *Mirage* 2000C/D; 1 C-160 *Transall*; 2 SA330 *Puma*; 1 AS555 *Fennec*

**Germany** *Operation Atalanta* 1 AP-3C *Orion*

**Japan** 170; 2 P-3C *Orion*

**New Zealand** 1 P-3K2 *Orion*

**Spain** *Operation Atalanta* 1 P-3A *Orion*

**United States** US Africa Command: 1,200; 1 tpt sqn with C-130H/J-30 *Hercules*; 1 spec ops sqn with MC-130H; PC-12 (U-28A); 1 CSAR sqn with HH-60G *Pave Hawk*; 1 naval air base

**Equatorial Guinea EQG**

CFA Franc BEAC fr		2014	2015	2016
GDP	fr	7.68tr	5.91tr	
	US\$	15.5bn	10bn	
<i>per capita</i>	US\$	19,960	12,541	
Growth	%	-0.3	-10.2	
Inflation	%	4.3	3.5	
Def exp	fr	n.k.		
	US\$	n.k.		
US\$1=fr		494.41	589.87	

Population 740,743

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	20.6%	5.4%	4.6%	3.9%	13.7%	1.7%
Female	19.9%	5.2%	4.4%	3.8%	14.6%	2.3%

**Capabilities**

The country's armed forces are dominated by the army, with smaller naval and air components. The army's primary role is internal security, and there is only limited ability for power projection. There has been significant naval investment in recent years, including both equipment and onshore infrastructure at Malabo and Bata. Maritime-security concerns in the Gulf of Guinea have resulted in increased emphasis on bolstering a limited coastal-patrol capacity, with new offshore-patrol vessels commissioned, and the nation's forces taking part in international exercises, including *Obangame Express 2015*.

**ACTIVE 1,320 (Army 1,100 Navy 120 Air 100)****ORGANISATIONS BY SERVICE****Army 1,100****FORCES BY ROLE****MANOEUVRE****Light**

3 inf bn(-)

**EQUIPMENT BY TYPE**

MBT 3 T-55

RECCE 6 BRDM-2

AIFV 20 BMP-1

APC 22

APC (W) 10 BTR-152

PPV 12 *Reva* (reported)**Navy €120****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 11

PSO 2:

1 *Bata* with 1 76mm gun, 1 hel landing platform1 *Wele Nzaz* with 2 AK630M 30mm CIWS, 2 76mm gun, 1 hel landing platform

PCC 2 OPV 62

PBF 2 *Shaldag* IIPB 5: 1 *Daphne*; 2 *Estuario de Muni*; 2 *Zhuk***LOGISTICS AND SUPPORT**AKRH 1 *Capitan David Eyama Angue Osa* with 1 76 mm gun**Air Force 100****EQUIPMENT BY TYPE**

AIRCRAFT 4 combat capable

ATK 4: 2 Su-25 *Frogfoot*; 2 Su-25UB *Frogfoot* BTPT 4: **Light** 3: 1 An-32B *Cline*; 2 An-72 *Coaler*; **PAX** 1 *Falcon* 900 (VIP)TRG 2 L-39C *Albatros***HELICOPTERS**ATK 5 Mi-24P/V *Hind*MRH 1 Mi-17 *Hip* HTPT 4: **Heavy** 1 Mi-26 *Halo*; **Medium** 1 Ka-29 *Helix*;**Light** 2 Enstrom 480

## Paramilitary

### Guardia Civil

#### FORCES BY ROLE

##### MANOEUVRE

###### Other

2 paramilitary coy

### Coast Guard

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 1+

Eritrea ERI				
Eritrean Nakfa ERN		2014	2015	2016
GDP	ERN	59.3bn	65.4bn	
	US\$	3.86bn	4.26bn	
<i>per capita</i>	US\$	590	630	
Growth	%	1.7	0.2	
Inflation	%	12.3	12.3	
Def exp	ERN	€1.2bn		
	US\$	€78m		
US\$1=ERN		15.37	15.37	

Population 6,527,689

Ethnic groups: Tigrinya 50%; Tigre and Kunama 40%; Afar; Saho 3%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	20.2%	5.6%	4.6%	3.8%	13.5%	1.6%
Female	20.0%	5.5%	4.7%	3.9%	14.3%	2.1%

## Capabilities

Eritrea maintains a large standing army (mostly conscripted), the primary focus of which is defence of the border with Ethiopia; many troops are also used for civilian development and construction tasks. An ongoing UN arms embargo will have contributed to leaving the inventory dominated by outdated but numerous platforms, and it is likely that many will be slowly cannibalised for parts. There has been some investment in the nascent air force to produce a regionally comparable fighter wing, though this lacks experienced and trained pilots, while the navy remains capable of only limited coastal-patrol and interception operations. However, significant numbers of conscripts choose to flee the country rather than serve, or evade service in other ways, which may have some effect on military cohesion and effectiveness.

**ACTIVE 201,750** (Army 200,000 Navy 1,400 Air 350)

*Conscript liability* 16 months (4 months mil trg)

**RESERVE 120,000** (Army €120,000)

## ORGANISATIONS BY SERVICE

**Army** €200,000

Heavily cadreised

## FORCES BY ROLE

### COMMAND

4 corps HQ

### MANOEUVRE

#### Mechanised

1 mech bde

#### Light

19 inf div

1 cdo div

**Reserve** €120,000

### FORCES BY ROLE

#### MANOEUVRE

##### Light

1 inf div

### EQUIPMENT BY TYPE

MBT 270 T-54/T-55

RECCE 40 BRDM-1/BRDM-2

AIFV 15 BMP-1

APC 35

APC (T) 10 MT-LB+

APC (W) 25 BTR-152/BTR-60

ARTY 208+

SP 45: 122mm 32 2S1; 152mm 13 2S5

TOWED 19+: 122mm D-30; 130mm 19 M-46

MRL 44: 122mm 35 BM-21; 220mm 9 9P140 *Uragan*

MOR 120mm/160mm 100+

AT

MSL • MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K113

Konkurs (AT-5 *Spandrel*)

GUNS 85mm D-44

AD

SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS 70+

SP 23mm ZSU-23-4

TOWED 23mm ZU-23

ARV T-54/T-55 reported

VLB MTU reported

## Navy 1,400

### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 12

PBF 9: 5 Battalion-17; 4 *Super Dvora*

PB 3 Swiftships

AMPHIBIOUS 3

LS • LST 2: 1 *Chamot* (Ministry of Transport); 1 *Ashdod†*

LC • LCU 1 T-4† (in harbour service)

## Air Force €350

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with MiG-29/MiG-29SMT/MiG-29UB *Fulcrum*

1 sqn with Su-27/Su-27UBK *Flanker*

#### TRANSPORT

1 sqn with Y-12(II)

#### TRAINING

1 sqn with L-90 *Redigo*

1 sqn with MB-339CE\*

**TRANSPORT HELICOPTER**1 sqn with Bell 412 *Twin Huey*1 sqn with Mi-17 *Hip H***EQUIPMENT BY TYPE****AIRCRAFT** 20 combat capable**FTR** 6: 4 MiG-29 *Fulcrum*; 2 MiG-29UB *Fulcrum*;**FGA** 10: 2 MiG-29SMT *Fulcrum*; 5 Su-27 *Flanker*; 3 Su-27UBK *Flanker***TPT • Light** 5: 1 Beech 200 *King Air*; 4 Y-12(II)**TRG** 12: 8 L-90 *Redigo*; 4 MB-339CE\***HELICOPTERS****MRH** 8: 4 Bell 412 *Twin Huey* (AB-412); 4 Mi-17 *Hip H***MSL****AAM • IR** R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR**/**SARH** R-27 (AA-10 *Alamo*)**Ethiopia ETH**

Ethiopian Birr EB		2014	2015	2016
<b>GDP</b>	EB	1.05tr	1.26tr	
	US\$	54.8bn	63bn	
<i>per capita</i>	US\$	620	702	
<b>Growth</b>	%	10.3	8.7	
<b>Inflation</b>	%	7.4	10.0	
<b>Def bdgt</b>	EB	7.5bn	8bn	
	US\$	392m	399m	
<b>FMA (US)</b>	US\$	0.84m	0.7m	0.7m
<b>US\$1=EB</b>		19.11	20.07	

**Population** 99,465,819**Ethnic groups:** Oromo 40%; Amhara and Tigrean 32%; Sidamo 9%; Shankella 6%; Somali 6%; Afar 4%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	22.0%	5.4%	4.5%	3.8%	12.6%	1.3%
<b>Female</b>	21.9%	5.5%	4.6%	3.9%	12.9%	1.6%

**Capabilities**

Ethiopia maintains one of the region's most effective armed forces, which have become battle-hardened and experienced following a history of combat operations. Ethiopia is coming to the end of a ten-year (2005–15) modernisation plan, designed to create flexible armed forces able to respond to regional contingencies. The country has enough deployable capability to make significant contributions to UN missions in Darfur and South Sudan, as well as the AMISOM mission in Somalia, though these – and standing deployments on the Eritrean border – mean it has to try and transform while on operations. As of November 2015, Ethiopia was the largest troop contributor to UN peace-keeping missions. The country's arsenal remains focused on Soviet-era equipment, but there is adequate maintenance capability within the local defence industry. There is also increasing procurement of Chinese systems.

**ACTIVE 138,000 (Army 135,000 Air 3,000)****ORGANISATIONS BY SERVICE****Army 135,000**

4 Mil Regional Commands (Northern, Western, Central, and Eastern) each acting as corps HQ

**FORCES BY ROLE****MANOEUVRE****Light**

1 (Agazi Cdo) SF comd

1 (Northern) corps (1 mech div, 4 inf div)

1 (Western) corps (1 mech div, 3 inf div)

1 (Central) corps (1 mech div, 5 inf div)

1 (Eastern) corps (1 mech div, 5 inf div)

**EQUIPMENT BY TYPE****MBT** 457+: 246+ T-54/T-55/T-62; 211 T-72**RECCE/AIFV/APC (W)** ε450 BRDM/BMP/BTR-60/BTR-152/Type-89/Type-92/*Ze'ev***ARTY** 524+**SP** 10+: **122mm** 2S1; **152mm** 10 2S19**TOWED** 464+: **122mm** 464 D-30/M-1938 (M-30); **130mm** M-46; **155mm** AH2**MRL** **122mm** ε50 BM-21**MOR** **81mm** M1/M29; **82mm** M-1937; **120mm** M-1944**AT****MSL • MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); 9K111*Fagot* (AT-4 *Spigot*); 9K135 *Kornet-E* (AT-14 *Spriggan*)**RCL** **82mm** B-10; **107mm** B-11**GUNS** **85mm** εD-44**AD • SAM** ε370**TOWED** S-75 *Dvina* (SA-2 *Guideline*); S-125 *Pechora* (SA-3 *Goa*)**MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡**GUNS****SP** **23mm** ZSU-23-4**TOWED** **23mm** ZU-23; **37mm** M-1939; **57mm** S-60**ARV** T-54/T-55 reported**VLB** MTU reported**MW** Bozena**Air Force 3,000****FORCES BY ROLE****FIGHTER/GROUND ATTACK**1 sqn with MiG-21MF *Fishbed J*; MiG-21UM *Mongol B*1 sqn with Su-27/Su-27UB *Flanker***TRANSPORT**1 sqn with An-12 *Cub*; An-26 *Curl*; An-32 *Cline*; C-130B *Hercules*; DHC-6 *Twin Otter*; L-100-30; Yak-40 *Cooling* (VIP)**TRAINING**1 sqn with L-39 *Albatros*

1 sqn with SF-260

**ATTACK/TRANSPORT HELICOPTER**2 sqn with Mi-24/Mi-35 *Hind*; Mi-8 *Hip*; Mi-17 *Hip H*;SA316 *Alouette III***EQUIPMENT BY TYPE****AIRCRAFT** 26 combat capable**FGA** 26: 15 MiG-21MF *Fishbed J*/MiG-21UM *Mongol B*;8 Su-27 *Flanker*; 3 Su-27UB *Flanker*

**TPT 12: Medium** 8: 3 An-12 *Cub*; 2 C-130B *Hercules*; 1 C-130E *Hercules*; 2 L-100-30; **Light** 4: 1 An-26 *Curl*; 1 An-32 *Cline*; 1 DHC-6 *Twin Otter*; 1 Yak-40 *Codling* (VIP)  
**TRG** 16: 12 L-39 *Albatros*; 4 SF-260

#### HELICOPTERS

**ATK** 18: 15 Mi-24 *Hind*; 3 Mi-35 *Hind*  
**MRH** 7: 1 AW139; 6 SA316 *Alouette III*  
**MRH/TPT** 12 Mi-8 *Hip*/Mi-17 *Hip H*  
**MSL**

**AAM** • **IR** R-3 (AA-2 *Atoll*)‡; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR/SARH** R-23/R-24 (AA-7 *Apex*); R-27 (AA-10 *Alamo*)

### DEPLOYMENT

#### CÔTE D'IVOIRE

UN • UNOCI 2 obs

#### LIBERIA

UN • UNMIL 6; 11 obs

#### SOMALIA

AU • AMISOM 4,400; 4 inf bn

#### SOUTH SUDAN

UN • UNMISS 1,263; 10 obs; 3 inf bn(-)

#### SUDAN

UN • UNAMID 2,522; 11 obs; 3 inf bn

UN • UNISFA 4,367; 79 obs; 1 recce coy; 1 armd coy; 1 mech inf bn; 2 inf bn; 1 hel sqn; 2 arty coy; 1 engr coy; 1 sigs coy; 1 fd hospital

### FOREIGN FORCES

United States some MQ-9 *Reaper*

## Gabon GAB

CFA Franc BEAC fr		2014	2015	2016
GDP	fr	8.99tr	8.14tr	
	US\$	18.2bn	13.8bn	
<i>per capita</i>	US\$	11,484	8,581	
Growth	%	4.3	3.5	
Inflation	%	4.5	0.6	
Def bdgt [a]	fr	96.8bn	116bn	
	US\$	196m	197m	
US\$1=fr		493.62	589.60	

[a] Includes funds allocated to Republican Guard

Population 1,705,336

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	21.1%	5.4%	4.7%	4.1%	12.7%	1.6%
Female	20.9%	5.4%	4.7%	4.1%	12.9%	2.2%

### Capabilities

Gabon's small armed forces are reasonably well equipped for their size, and there is sufficient airlift to ensure mobility

within the country and even a limited capability to project power into its near abroad both by sea and air. The country has benefited from the long-term presence of French troops acting as a security guarantor, while oil revenues have hitherto allowed the government to support, in regional terms, capable armed forces. There is regular training with international partners. Military medicine is well regarded. Gabon contributed a field hospital to the ECCAS *Loango 2014* exercise, and engaged in field medical training with US forces in 2015. Gabon hosted US AFRICOM's 2015 *Central Accord* interoperability exercise.

**ACTIVE 4,700 (Army 3,200 Navy 500 Air 1,000)**  
**Paramilitary 2,000**

### ORGANISATIONS BY SERVICE

#### Army 3,200

Republican Guard under direct presidential control

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

1 (Republican Guard) gd gp (bn)

(1 armd/recce coy, 3 inf coy, 1 arty bty, 1 ADA bty)

8 inf coy

###### Air Manoeuvre

1 cdo/AB coy

##### COMBAT SUPPORT

1 engr coy

##### EQUIPMENT BY TYPE

**RECCE** 77: 24 AML-60/AML-90; 12 EE-3 *Jararaca*; 14 EE-9 *Cascavel*; 6 ERC-90F4 *Sagaie*; 7 RAM V-2; 14 VBL

**AIFV** 12 EE-11 *Urutu* (with 20mm gun)

##### APC 69

**APC (W)** 30: 9 LAV-150 *Commando*; 5 Bastion APC; 3

WZ-523; 12 VXB-170; 1 *Pandur*

**PPV** 39: 5 *Aravis*; 34 Ashok Leyland MPV

##### ARTY 51

**TOWED 105mm** 4 M101

**MRL 140mm** 8 *Teruel*

**MOR** 39: **81mm** 35; **120mm** 4 Brandt

##### AT

**MSL** • **MANPATS** 4 *Milan*

**RCL 106mm** M40A1

##### AD • GUNS 41

**SP 20mm** 4 ERC-20

**TOWED** 37: **23mm** 24 ZU-23-2; **37mm** 10 M-1939; **40mm** 3 L/70

#### Navy €500

HQ located at Port Gentil

##### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 11

**PCC** 2 *General Ba'Oumar* (FRA P-400) with 1 57 mm gun

**PBG** 1 *Patra* with 4 SS 12M AShM

**PB** 8: 4 *Port Gentil* (FRA VCSM); 4 Rodman 66

##### AMPHIBIOUS 14

**LANDING SHIPS** • **LST** 1 *President Omar Bongo* (FRA *Batral*) (capacity 1 LCVP; 7 MBT; 140 troops) with 1 hel landing platform



LANDING CRAFT 13  
LCU 1 Mk 9 (ex-UK)  
LCVP 12

## Air Force 1,000

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with *Mirage F-1AZ*

#### TRANSPORT

1 (Republican Guard) sqn with AS332 *Super Puma*; ATR-42F; *Falcon 900*; Gulfstream IV-SP/G650ER

1 sqn with C-130H *Hercules*; CN-235M-100

#### ATTACK/TRANSPORT HELICOPTER

1 sqn with Bell 412 *Twin Huey* (AB-412); SA330C/H *Puma*; SA342M *Gazelle*

### EQUIPMENT BY TYPE

#### AIRCRAFT 8 combat capable

FGA 6 *Mirage F-1AZ*

ATK 2 MB-326 *Impala I*

MP (1 EMB-111\* in store)

TPT 6: **Medium** 1 C-130H *Hercules*; (1 L-100-30 in store);

**Light** 2: 1 ATR-42F; 1 CN-235M-100; **PAX** 3: 1 *Falcon 900*;

1 Gulfstream IV-SP; 1 Gulfstream G650ER

TRG (4 CM-170 *Magister* in store)

#### HELICOPTERS

MRH 2: 1 Bell 412 *Twin Huey* (AB-412); 1 SA342M *Gazelle*; (2 SA342L *Gazelle* in store)

TPT 5: **Medium** 4: 1 AS332 *Super Puma*; 3 SA330C/H

*Puma*; **Light** 1 H135

TRG 2 H120 *Colibri*

MSL • AAM • IR *U-Darter* (reported)

## Paramilitary 2,000

### Gendarmerie 2,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

2 arm'd sqn

###### Other

3 paramilitary bde

11 paramilitary coy

##### Aviation

1 unit with AS350 *Ecureuil*; AS355 *Ecureuil II*

#### EQUIPMENT BY TYPE

**HELICOPTERS** • **TPT** • **Light** 4: 2 AS350 *Ecureuil*; 2 AS355 *Ecureuil II*

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 436; 1 obs; 1 inf bn

## FOREIGN FORCES

France 450; 1 AB bn; 1 SAR/tpt sqn with 1 CN-235M; 1 SA330 *Puma*

## Gambia GAM

Gambian Dalasi D		2014	2015	2016
GDP	D	34.4bn	38.2bn	
	US\$	824m	761m	
<i>per capita</i>	US\$	427	384	
Growth	%	-0.2	4.7	
Inflation	%	6.2	6.5	
Def bdgt	D	609m	591m	
	US\$	15m	12m	
US\$1=D		41.72	50.20	

Population 1,967,709

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	19.2%	5.3%	5.0%	4.3%	14.0%	1.6%
Female	19.1%	5.4%	5.1%	4.5%	14.7%	1.8%

## Capabilities

Maritime security and human trafficking are security concerns. A National Maritime Security Committee was inaugurated in 2015. The country has a small army supported by air and marine units. Its forces have been deployed in support of UN missions, and have received training assistance from the US.

### ACTIVE 800 (Army 800)

## ORGANISATIONS BY SERVICE

### Gambian National Army 800

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

2 inf bn

###### Other

1 (Presidential Guard) gd coy

##### COMBAT SUPPORT

1 engr sqn

### Marine Unit €70

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 9

PBF 4: 2 *Rodman 55*; 2 *Fatimah I*

PB 5: 1 *Bolong Kantat*; 4 *Taipei* (ROC *Hai Ou*) (of which one damaged and in reserve)

### Air Wing

#### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT 5: **Light** 2 AT-802A *Air Tractor*; **PAX** 3: 1 B-727; 1

CL-601; 1 Il-62M *Classic* (VIP)

## DEPLOYMENT

### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 2; 2 obs

**CÔTE D'IVOIRE**

UN • UNOCI 4 obs

**LIBERIA**

UN • UNMIL 1 obs

**MALI**

UN • MINUSMA 3

**SUDAN**

UN • UNAMID 213; 1 inf coy

**Ghana GHA**

Ghanaian New Cedi C		2014	2015	2016
GDP	C	113bn	134bn	
	US\$	38.6bn	37.7bn	
<i>per capita</i>	US\$	1,473	1,401	
Growth	%	4.0	3.5	
Inflation	%	15.5	15.3	
Def bdgt	C	914m	880m	941m
	US\$	311m	247m	
FMA (US)	US\$	0.35m	0.3m	0.3m
US\$1=C		2.94	3.56	

Population 26,327,649

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	19.3%	5.0%	4.3%	3.9%	14.9%	1.9%
Female	19.1%	5.0%	4.4%	4.1%	15.9%	2.2%

**Capabilities**

The Ghanaian armed forces are some of the most capable regionally, with a long-term development plan covering both the current and the next decade. Internal and maritime security are the forces' central roles, along with participation in peacekeeping missions. The air force is building its light- and medium-lift capacity. The ability to control its maritime EEZ is of increasing importance because of growing piracy and resource exploitation, and this underpins the navy's expansion ambitions. The army is a regular contributor to UN peacekeeping missions.

**ACTIVE 15,500 (Army 11,500 Navy 2,000 Air 2,000)****ORGANISATIONS BY SERVICE****Army 11,500****FORCES BY ROLE****COMMAND**

2 comd HQ

**MANOEUVRE****Reconnaissance**

1 armd recce regt (3 recce sqn)

**Light**

1 (rapid reaction) mot inf bn

6 inf bn

**Air Manoeuvre**

2 AB coy

**COMBAT SUPPORT**

1 arty regt (1 arty bty, 2 mor bty)

1 fd engr regt (bn)

1 sigs regt

1 sigs sqn

**COMBAT SERVICE SUPPORT**

1 log gp

1 tpt coy

2 maint coy

1 med coy

1 trg bn

**EQUIPMENT BY TYPE**RECCE 3 EE-9 *Cascavel*AIFV 39: 24 *Ratel-90*; 15 *Ratel-20*APC (W) 56: 50 *Piranha*; 6 Type-05P

ARTY 87+

TOWED 122mm 6 D-30

MRL 3+: 107mm Type-63; 122mm 3 Type-81

MOR 78: 81mm 50; 120mm 28 *Tampella*AT • RCL 84mm 50 *Carl Gustav*AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS • TOWED 8+: 14.5mm 4+: 4 ZPU-2; ZPU-4;

23mm 4 ZU-23-2

ARV *Piranha* reported**Navy 2,000**

Naval HQ located at Accra; Western HQ located at

Sekondi; Eastern HQ located at Tema

**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS 14

PCO 2 *Anzone* (US)PCC 10: 2 *Achimota* (GER Lurssen 57m) with 1 76mm gun; 2 *Dzata* (GER Lurssen 45m); 2 *Warrior* (GER*Gepard*); 4 *Snake* (PRC 47m)PBF 1 *Stephen Otu* (ROK *Sea Dolphin*)PB 1 *David Hansen* (US)**Air Force 2,000****FORCES BY ROLE****GROUND ATTACK**1 sqn with K-8 *Karakorum*\*; L-39ZO\*; MB-326K; MB-339A\***ISR**

1 unit with DA-42

**TRANSPORT**1 sqn with BN-2 *Defender*; Cessna 172; F-27 *Friendship*;F-28 *Fellowship* (VIP)**TRANSPORT HELICOPTER**1 sqn with AW109A; Bell 412SP *Twin Huey*; Mi-17V-5*Hip H*; SA319 *Alouette III*; Z-9EH**EQUIPMENT BY TYPE†**

AIRCRAFT 11 combat capable

ATK 3 MB-326K

TPT 14: Light 13: 1 BN-2 *Defender*; 2 C-295; 3 Cessna172; 3 DA-42; 4 F-27 *Friendship*; PAX 1 F-28 *Fellowship*

(VIP)

TRG 8: 4 K-8 *Karakorum*\*; 2 L-39ZO\*; 2 MB-339A\*

**HELICOPTERS**

MRH 10: 1 Bell 412SP *Twin Huey*; 3 Mi-17V-5 *Hip H*; 2 SA319 *Alouette III*; 4 Z-9EH  
TPT 6: **Medium** 4 Mi-171Sh; **Light** 2 AW109A

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 2; 3 obs

**CÔTE D'IVOIRE**

UN • UNOCI 104; 6 obs; 1 hel sqn

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 465; 22 obs; 1 mech inf bn(-)

**INDIA/PAKISTAN**

UN • UNMOGIP 2 obs

**LEBANON**

UN • UNIFIL 871; 1 mech inf bn

**LIBERIA**

UN • UNMIL 820; 13 obs; 1 inf bn; 1 log pl

**MALI**

UN • MINUSMA 217; 3 obs; 1 engr coy; 1 fd hospital

**SOUTH SUDAN**

UN • UNMISS 312; 8 obs; 1 inf bn(-)

**SUDAN**

UN • UNAMID 19; 4 obs

UN • UNISFA 3; 2 obs

**WESTERN SAHARA**

UN • MINURSO 7; 11 obs

**Guinea GUI**

Guinean Franc fr		2014	2015	2016
GDP	fr	47.7tr	50.9tr	
	US\$	6.71bn	6.73bn	
<i>per capita</i>	US\$	557	546	
Growth	%	1.1	-0.002	
Inflation	%	9.7	9.0	
Def exp	fr	n.k.		
	US\$	n.k.		
FMA (US)	US\$	0.2m		
US\$1=fr		7,116.36	7,563.03	

Population 11,780,162

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	21.2%	5.4%	4.5%	3.8%	13.6%	1.6%
Female	20.7%	5.3%	4.4%	3.8%	13.7%	2.0%

**Capabilities**

Much of the country's military equipment is ageing and of Soviet-era vintage; serviceability will be questionable for some types. There have been past reports suggesting gaps in insti-

tutional cohesiveness and accountability. There is no fixed-wing airlift capacity and very limited rotary-wing airlift.

**ACTIVE 9,700 (Army 8,500 Navy 400 Air 800)**

**Paramilitary 2,600**

*Conscript liability 2 years*

**ORGANISATIONS BY SERVICE****Army 8,500****FORCES BY ROLE****MANOEUVRE****Armoured**

1 armd bn

**Light**

1 SF bn

5 inf bn

1 ranger bn

1 cdo bn

**Air Manoeuvre**

1 air mob bn

**Other**

1 (Presidential Guard) gd bn

**COMBAT SUPPORT**

1 arty bn

1 AD bn

1 engr bn

**EQUIPMENT BY TYPE**

MBT 38: 8 T-54; 30 T-34

LT TK 15 PT-76

RECCE 27: 2 AML-90; 25 BRDM-1/BRDM-2

AIFV 2 BMP-1

APC 50

APC (T) 10 BTR-50

APC (W) 30: 16 BTR-40; 8 BTR-60; 6 BTR-152

PPV 10 *Mamba*†

ARTY 47+

TOWED 24: **122mm** 12 M-1931/37; **130mm** 12 M-46

MRL **220mm** 3 9P140 *Uragan*

MOR 20+: **82mm** M-43; **120mm** 20 M-1943/M-38

**AT**

MSL • MANPATS 9K11 *Malyutka* (AT-3 *Sagger*); 9K113

*Konkurs* (AT-5 *Spandrel*)

RCL **82mm** B-10

GUNS 6+: **57mm** ZIS-2 (M-1943); **85mm** 6 D-44

AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)†

GUNS • TOWED 24+: **30mm** M-53 (twin); **37mm** 8

M-1939; **57mm** 12 Type-59 (S-60); **100mm** 4 KS-19

ARV T-54/T-55 reported

**Navy €400****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PB 4: 1

Swiftship†; 3 RPB 20

**Air Force 800****EQUIPMENT BY TYPE†****AIRCRAFT**

FGA (3 MiG-21 *Fishbed* non-op)

TPT • **Light** 2 An-2 *Colt*

**HELICOPTERS**ATK 4 Mi-24 *Hind*MRH 5: 2 MD-500MD; 2 Mi-17-1V *Hip H*; 1 SA342K *Gazelle*TPT 2: **Medium** 1 SA330 *Puma*; **Light** 1 AS350B *Ecureuil***MSL**AAM • IR R-3 (AA-2 *Atoll*)‡**Paramilitary 2,600 active****Gendarmerie 1,000****Republican Guard 1,600****People's Militia 7,000 reservists****DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 1; 1 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 1 obs

**MALI**

UN • MINUSMA 854; 3 obs; 1 inf bn

**SOUTH SUDAN**

UN • UNMISS 1; 1 obs

**WESTERN SAHARA**

UN • MINURSO 5 obs

**Guinea-Bissau GNB**

CFA Franc BCEAO fr		2014	2015	2016
GDP	fr	548bn	610bn	
	US\$	1.11bn	1.04bn	
<i>per capita</i>	US\$	639	582	
Growth	%	2.5	4.7	
Inflation	%	-1.0	1.3	
Def exp	fr	€13bn		
	US\$	€26m		
US\$1=fr		493.52	589.48	

Population 1,726,170

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	19.7%	5.3%	4.7%	4.1%	13.8%	1.3%
Female	19.8%	5.4%	4.8%	4.2%	15.0%	2.1%

**Capabilities**

The armed forces have often played a direct role in domestic politics. Narcotics trafficking remains a substantial problem that the armed forces have so far been unable to tackle. The parlous state of the economy limits any ability to replace its ageing inventory of mainly Soviet-era equipment. Previous attempts at security-sector reform have largely been unsuccessful, and long-term international support is necessary for future attempts to gain traction.

**ACTIVE 4,450 (Army 4,000 Navy 350 Air 100)****Paramilitary 2,000***Conscript liability* Selective conscription

Manpower and eqpt totals should be treated with caution. A number of draft laws to restructure the armed services and police have been produced.

**ORGANISATIONS BY SERVICE****Army €4,000 (numbers reducing)****FORCES BY ROLE****MANOEUVRE****Reconnaissance**

1 recce coy

**Armoured**

1 armd bn (sqn)

**Light**

5 inf bn

**COMBAT SUPPORT**

1 arty bn

1 engr coy

**EQUIPMENT BY TYPE**

MBT 10 T-34

LT TK 15 PT-76

RECCE 10 BRDM-2

APC (W) 55: 35 BTR-40/BTR-60; 20 Type-56 (BTR-152)

ARTY 26+

**TOWED 122mm** 18 D-30/M-1938**MOR 8+:** **82mm** M-43; **120mm** 8 M-1943**AT**RCL **75mm** Type-52 (M20); **82mm** B-10GUNS **85mm** 8 D-44AD • **SAM** • **MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡GUNS • **TOWED** 34: **23mm** 18 ZU-23; **37mm** 6 M-1939;**57mm** 10 S-60**Navy €350****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PB 2

*Alfeitet***Air Force 100****EQUIPMENT BY TYPE**AIRCRAFT • TPT • **Light** 1 Cessna 208B**Paramilitary 2,000 active****Gendarmerie 2,000****DEPLOYMENT****MALI**

UN • MINUSMA 1

**FOREIGN FORCES**

Nigeria ECOMIB 160

Senegal ECOMIB 200

## Kenya KEN

Kenyan Shilling sh		2014	2015	2016
GDP	sh	5.36tr	6.09tr	
	US\$	60.9bn	63.1bn	
<i>per capita</i>	US\$	1,420	1,432	
Growth	%	5.3	6.5	
Inflation	%	6.9	6.3	
Def bdgt [a]	sh	89.4bn	90.7bn	113bn
	US\$	1.02bn	940m	
FMA (US)	US\$	1.2m	1.2m	1m
US\$1=sh		87.92	96.45	

[a] Includes national-intelligence funding

Population 45,925,301

Ethnic groups: Kikuyu €22–32%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	20.8%	4.9%	4.4%	4.3%	14.2%	1.2%
Female	20.7%	4.9%	4.4%	4.3%	14.2%	1.6%

## Capabilities

Kenya's armed forces are a leading element of the East African Standby Force and AMISOM in Somalia. Combat units that have rotated through Somalia have a higher level of confidence and capability, which is also reflected in Kenya's contribution to UN peacekeeping missions. In tandem with the police, the armed forces have been involved in internal-security tasks in the wake of al-Shabaab terrorist attacks in recent years. Modernisation is focused on helicopters, armoured vehicles, UAVs and border-surveillance equipment. The navy undertakes coast-guard and counter-piracy roles. The country has the ability to project power beyond its own territory, on a limited basis, via the air force's tactical support and airlift, and after two years on operations is well versed in managing deployment cycles. The armed forces regularly join UK troops training in Kenya and take part in international exercises in Africa, while there are also significant defence ties with the US and a developing relationship with the Chinese armed forces.

**ACTIVE 24,100** (Army 20,000 Navy 1,600 Air 2,500)  
Paramilitary 5,000

## ORGANISATIONS BY SERVICE

### Army 20,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Armoured

1 armd bde (1 armd recce bn, 2 armd bn)

###### Light

1 spec ops bn

1 ranger bn

1 inf bde (3 inf bn)

1 inf bde (2 inf bn)

1 indep inf bn

#### Air Manoeuvre

1 air cav bn

1 AB bn

#### COMBAT SUPPORT

1 arty bde (2 arty bn, 1 mor bty)

1 ADA bn

1 engr bde (2 engr bn)

#### EQUIPMENT BY TYPE

MBT 78 Vickers Mk 3

RECCE 92: 72 AML-60/AML-90; 12 *Ferret*; 8 S52 *Shorland*  
APC 189

APC (W) 84: 52 UR-416; 32 Type-92; (10 M3 Panhard in store)

PPV 105 *Puma* M26-15

ARTY 110

TOWED 105mm 48: 8 Model 56 pack howitzer; 40 L118 Light Gun

MOR 62: 81mm 50; 120mm 12 Brandt

AT • MSL • MANPATS *Milan*

RCL 84mm 80 *Carl Gustav*

AD • GUNS • TOWED 94: 20mm 81: 11 Oerlikon; €70 TCM-20; 40mm 13 L/70

ARV 7 Vickers ARV

MW Bozena

#### HELICOPTERS

MRH 37: 2 Hughes 500D+; 12 Hughes 500M+; 10 Hughes 500MD *Scout Defender*+ (with TOW); 10 Hughes 500ME+; 3 Z-9W

MSL • ASM TOW

## Navy 1,600 (incl 120 marines)

#### EQUIPMENT BY TYPE

##### PATROL AND COASTAL COMBATANTS 7

PCO 1 *Jasiri* (to be fitted with 1 76 mm gun)

PCFG 2 *Nyayo*

PCC 3: 1 *Harambee* (ex-FRA P400); 2 *Shujaa* with 1 76mm gun

PBF 1 *Archangel*

AMPHIBIOUS • LCM 2 *Galana*

LOGISTICS AND SUPPORT • AP 2

## Air Force 2,500

#### FORCES BY ROLE

##### FIGHTER/GROUND ATTACK

2 sqn with F-5E/F *Tiger* II

##### TRANSPORT

Some sqn with DHC-5D *Buffalo*+; DHC-8+; F-70+ (VIP); Y-12(II)+

##### TRAINING

Some sqn with *Bulldog* 103/*Bulldog* 127+; EMB-312 *Tucano*+\*; *Hawk* Mk52+\*; Hughes 500D+

##### TRANSPORT HELICOPTER

1 sqn with SA330 *Puma*+

#### EQUIPMENT BY TYPE+

AIRCRAFT 38 combat capable

FTR 22: 18 F-5E *Tiger* II; 4 F-5F *Tiger* II

TPT 17 *Light* 16: 4 DHC-5D *Buffalo*+; 3 DHC-8+; 9

Y-12(II)+; (6 Do-28D-2+ in store); PAX 1 F-70 (VIP)

TRG 30: 8 *Bulldog* 103/127+; 11 EMB-312 *Tucano*+\*; 6

Grob 120A; 5 *Hawk* Mk52+\*



**HELICOPTERS**TPT • Medium 13: 2 Mi-171; 11 SA330 *Puma*†**MSL**AAM • IR AIM-9 *Sidewinder*ASM AGM-65 *Maverick***Paramilitary 5,000****Police General Service Unit 5,000****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PB 5 (2 on Lake Victoria)

**Air Wing****EQUIPMENT BY TYPE**AIRCRAFT • TPT • Light 6: 2 Cessna 208B *Caravan*; 3 Cessna 310; 1 Cessna 402**HELICOPTERS**MRH 3 Mi-17 *Hip H*TPT • Light 3: 2 Bell 206L *Long Ranger*; 1 Bo-105

TRG 1 Bell 47G

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 8; 6 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 10; 15 obs

**LEBANON**

UN • UNIFIL 1

**MALI**

UN • MINUSMA 4

**SOMALIA**

AU • AMISOM 3,650; 3 inf bn

**SOUTH SUDAN**

UN • UNMISS 742; 12 obs; 1 inf bn

**SUDAN**

UN • UNAMID 112; 4 obs; 1 MP coy

**FOREIGN FORCES**

United Kingdom Army 200

**Lesotho LSO**

Lesotho Loti M		2014	2015	2016
GDP	M	24.1bn	25.9bn	
	US\$	2.22bn	2.04bn	
per capita	US\$	1,162	1,063	
Growth	%	3.4	2.6	
Inflation	%	3.8	3.9	
Def bdgt	M	535m	555m	
	US\$	49m	44m	
US\$1=M		10.84	12.73	

Population 1,947,701

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	16.4%	4.8%	4.6%	4.6%	16.2%	2.8%
Female	16.3%	5.1%	5.2%	5.4%	15.9%	2.7%

**Capabilities**

Lesotho's small armed forces are charged with protecting territorial integrity and sovereignty, although cohesion has suffered following an attempted military coup in September 2014. That prompted South Africa to deploy 140 members of its Police Service in late 2014. South Africa, in effect, acts as a security guarantor; Lesotho contains significant water resources. Continued political instability throughout 2015, notably the killing in mid-year of a former army commander, led South Africa to send a fact-finding mission, and SADC to organise a Commission of Inquiry. Security-sector reform was being urged by year end.

**ACTIVE 2,000 (Army 2,000)****ORGANISATIONS BY SERVICE****Army €2,000****FORCES BY ROLE****MANOEUVRE****Reconnaissance**

1 recce coy

**Light**

7 inf coy

**Aviation**

1 sqn

**COMBAT SUPPORT**

1 arty bty(-)

1 spt coy (with mor)

**EQUIPMENT BY TYPE**

MBT 1 T-55

RECCE 30; 4 AML-90; 2 BRDM-2†; 6 RAM-2000; 10 RBY-1; 8 S52 *Shorland*

ARTY 12

TOWED 105mm 2

MOR 81mm 10

AT • RCL 106mm 6 M40

**Air Wing 110****AIRCRAFT**TPT • Light 3: 2 C-212-300 *Aviocar*; 1 GA-8 *Airvan***HELICOPTERS**MRH 3: 1 Bell 412 *Twin Huey*; 2 Bell 412EP *Twin Huey*TPT • Light 2: 1 Bell 206 *Jet Ranger*; 1 H135**DEPLOYMENT****SUDAN**

UN • UNAMID 2 obs

**Liberia LBR**

Liberian Dollar L\$		2014	2015	2016
GDP	L\$	2.01bn	2.02bn	
	US\$	2.01bn	2.02bn	
per capita	US\$	481	469	
Growth	%	0.7	0.9	
Inflation	%	9.9	7.9	
Def exp	L\$	14m		
Def bdgt	L\$	24m	15m	13m
	US\$	24m	15m	
FMA (US)	US\$	4m	2.5m	2.5m
US\$1=L\$		1.00	1.00	

Population 4,195,666

Ethnic groups: Americo-Liberians 5%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	21.6%	5.4%	3.5%	4.0%	13.8%	1.5%
Female	21.2%	5.6%	3.8%	4.1%	13.9%	1.6%

**Capabilities**

The development of the Liberian armed forces has been underpinned by US support for almost the past decade, although the UN's UNMIL mission is still required as a stabilisation force 11 years after it was established. There is no domestic airlift capacity; this will have hindered attempts to respond to the recent Ebola outbreak, which constituted a major challenge for the developing local security forces.

**ACTIVE 2,050 (Army 2,000, Coast Guard 50)****ORGANISATIONS BY SERVICE****Army 2,000****FORCES BY ROLE****MANOEUVRE****Light**

1 (23rd) inf bde with (2 inf bn, 1 engr coy, 1 MP coy)

**COMBAT SERVICE SUPPORT**

1 trg unit (forming)

**Coast Guard 50**10 craft (8 *Zodiac* and 2 *Defender*) under 10t FLD**DEPLOYMENT****MALI**

UN • MINUSMA 49; 1 inf pl

**FOREIGN FORCES**

All under UNMIL comd unless otherwise specified

**Bangladesh** 292; 8 obs; 1 engr coy; 1 log pl**Benin** 1; 2 obs**Bolivia** 1 obs**Brazil** 2; 2 obs**Bulgaria** 2 obs**China, People's Republic of** 514; 2 obs; 1 engr coy; 1 tpt coy; 1 fd hospital**Denmark** 2; 2 obs**Ecuador** 1; 2 obs**Egypt** 8 obs**Ethiopia** 6; 11 obs**Finland** 1**Gambia** 1 obs**Germany** 2 obs**Ghana** 820; 13 obs; 1 inf bn; 1 log pl**Indonesia** 1 obs**Korea, Republic of** 1; 1 obs**Kyrgyzstan** 3 obs**Malaysia** 1; 3 obs**Moldova** 2 obs**Myanmar** 2 obs**Namibia** 1; 1 obs**Nepal** 18; 2 obs**Niger** 2 obs**Nigeria** 1,408; 10 obs; 2 inf bn**Pakistan** 131; 9 obs; 1 fd hospital**Poland** 2 obs**Romania** 2 obs**Russia** 3 obs**Serbia** 5 obs**Togo** 1; 2 obs**Ukraine** 175; 2 obs; 1 hel sqn**United States** 4; 4 obs**Yemen, Republic of** 1**Zambia** 2 obs**Zimbabwe** 3 obs

Madagascar MDG				
Malagasy Ariary fr		2014	2015	2016
GDP	fr	25.8tr	28.7tr	
	US\$	10.7bn	9.51bn	
<i>per capita</i>	US\$	453	393	
Growth	%	3.3	3.4	
Inflation	%	6.1	7.6	
Def bdtg	fr	173bn	173bn	195bn
	US\$	72m	57m	
US\$1=fr		2,414.70	3,016.08	

Population 23,812,681

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	20.4%	5.5%	4.8%	4.0%	13.8%	1.5%
Female	20.1%	5.4%	4.8%	4.0%	14.0%	1.8%

## Capabilities

The armed forces have played a significant role in the island's recent political instability. Elements were involved in an abortive coup attempt in 2010 and a mutiny in 2012. The army is the dominant force, but the state has no power-projection capability. Moves towards a security-sector-reform process have begun, with an African Union mission conducted in late 2015, designed to 'sensitise senior officials and civil society' on SSR.

**ACTIVE 13,500** (Army 12,500 Navy 500 Air 500)

**Paramilitary 8,100**

*Conscript liability* 18 months (incl for civil purposes)

## ORGANISATIONS BY SERVICE

**Army 12,500+**

**FORCES BY ROLE**

**MANOEUVRE**

**Light**

2 (intervention) inf regt

10 (regional) inf regt

**COMBAT SUPPORT**

1 arty regt

1 ADA regt

3 engr regt

1 sigs regt

**COMBAT SERVICE SUPPORT**

1 log regt

**EQUIPMENT BY TYPE**

LT TK 12 PT-76

RECCE 73: ε35 BRDM-2; 10 *Ferret*; ε20 M3A1; 8 M8

APC (T) ε30 M3A1 half-track

ARTY 25+

TOWED 17: 105mm 5 M101; 122mm 12 D-30

MOR 8+: 82mm M-37; 120mm 8 M-43

AT • RCL 106mm M40A1

AD • GUNS • TOWED 70: 14.5mm 50 ZPU-4; 37mm 20 Type-55 (M-1939)

**Navy 500** (incl some 100 Marines)

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS 7**

PCC 1 *Chamois* (ex-FRA)

PB 7: 6 (ex-US); 1 *Daikannon Maru* (fishery protection)

**AMPHIBIOUS • LCT 1** (ex-FRA *Edic*)

**LOGISTICS AND SUPPORT 3**

YT 2 *Aigrette*

YTB 1 *Trozona*

**Air Force 500**

**FORCES BY ROLE**

**TRANSPORT**

1 sqn with An-26 *Curl*; Yak-40 *Codling* (VIP)

1 (liaison) sqn with Cessna 310; Cessna 337 *Skymaster*;

PA-23 *Aztec*

**TRAINING**

1 sqn with Cessna 172; J.300 *Joker*; *Tetras*

**TRANSPORT HELICOPTER**

1 sqn with SA318C *Alouette II*

**EQUIPMENT BY TYPE**

**AIRCRAFT • TPT 16:** Light 14: 1 An-26 *Curl*; 4 Cessna

172; 1 Cessna 310; 2 Cessna 337 *Skymaster*; 2 J.300 *Joker*;

1 PA-23 *Aztec*; 1 *Tetras*; 2 Yak-40 *Codling* (VIP); **PAX 2 B-737**

**HELICOPTERS • MRH 4 SA318C Alouette II**

**Paramilitary 8,100**

**Gendarmerie 8,100**

**EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS • 5 PB**

## Malawi MWI

Malawian Kwacha K		2014	2015	2016
GDP	K	2.57tr	3.19tr	
	US\$	6.06bn	6.39bn	
<i>per capita</i>	US\$	344	353	
Growth	%	5.7	4.0	
Inflation	%	23.8	20.1	
Def bdtg	K	26.4bn	18bn	
	US\$	62m	36m	
US\$1=K		424.39	498.91	

Population 17,964,697

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	23.2%	5.6%	4.6%	3.6%	11.3%	1.2%
Female	23.5%	5.7%	4.6%	3.7%	11.6%	1.5%

## Capabilities

The armed forces' role is to ensure the sovereignty and territorial integrity of the state, but there is only limited capacity for power projection. The army is the largest force, consisting mainly of infantry units supported by light armoured vehicles. The air wing and the naval unit are much smaller, supporting services for which counter-trafficking is one role. The army exercises regularly,

participates in and hosts multinational exercises, is involved in supporting UN missions and has received training from US AFRICOM.

**ACTIVE 5,300** (Army 5,300) Paramilitary 1,500

## ORGANISATIONS BY SERVICE

### Army 5,300

#### FORCES BY ROLE

##### COMMAND

2 bde HQ

##### MANOEUVRE

###### Light

5 inf bn

###### Air Manoeuvr

1 para bn

#### COMBAT SUPPORT

1 (general) bn (1+ mne coy, 1 armd recce sqn, 2 lt arty bty, 1 engr unit)

#### COMBAT SERVICE SUPPORT

8 log coy

#### EQUIPMENT BY TYPE

Less than 20% serviceability

RECCE 41: 13 *Eland*; 20 FV721 *Fox*; 8 *Ferret*

APC • PPV 18 *Puma* M26-15

ARTY 17

TOWED 105mm 9 L118

MOR 81mm 8 L16

AD • GUNS • TOWED 14.5mm 40 ZPU-4

### Navy 220

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 1

*Kasungu*†

### Air Wing 200

#### EQUIPMENT BY TYPE

AIRCRAFT • TPT • Light 1 Do-228

HELICOPTERS • TPT 3: Medium 2: 1 AS532UL

*Cougar*; 1 SA330H *Puma*; Light 1 AS350L *Ecureuil*

### Paramilitary 1,500

#### Mobile Police Force 1,500

#### EQUIPMENT BY TYPE

RECCE 8 S52 *Shorland*

#### AIRCRAFT

TPT • Light 4: 3 BN-2T *Defender* (border patrol); 1

SC.7 3M *Skyvan*

HELICOPTERS • MRH 2 AS365 *Dauphin* 2

## DEPLOYMENT

### CÔTE D'IVOIRE

UN • UNOCI 2; 3 obs

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 853; 9 obs; 1 inf bn

### SUDAN

UN • UNISFA 1

### WESTERN SAHARA

UN • MINURSO 3 obs

## Mali MLI

CFA Franc BCEAO fr		2014	2015	2016
GDP	fr	5.97tr	6.46tr	
	US\$	12.1bn	11bn	
<i>per capita</i>	US\$	766	672	
Growth	%	7.2	5.0	
Inflation	%	0.9	2.4	
Def bdtg [a]	fr	175bn	276bn	327bn
	US\$	355m	469m	
US\$1=fr		493.62	589.57	

[a] Defence and interior security budget

Population 16,955,536

Ethnic groups: Tuareg 6–10%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	23.8%	5.2%	3.9%	3.1%	11.2%	1.5%
Female	23.6%	5.5%	4.5%	3.8%	12.4%	1.5%

## Capabilities

In January 2013, the shortcomings of the Malian armed forces were exposed by its inability to deal with Islamist and Tuareg insurgents; this later led to French military intervention. Subsequently, tranches of the reconstituted armed forces have been trained by an EU Training Mission (EUTM). Originally due to end in 2014, the mission was extended to May 2016 and includes 200 instructors. A UN stabilisation mission (MINUSMA) took over from an African-led support mission in July 2013. EUTM Mali has as of October 2015 trained six battalion groups, and is now in the retraining stage for those early battalions that passed through the Koulikoro centre before deployment in the north.

**ACTIVE 6,000** (Army 6,000) Paramilitary 7,800

## ORGANISATIONS BY SERVICE

### Army €6,000

#### FORCES BY ROLE

The remnants of the pre-war Malian army are being reformed into new combined-arms battle groups, each of which comprise one lt mech coy, three mot inf coy, one arty bty and additional recce, cdo and cbt spt elms.

#### MANOEUVRE

##### Light

6 mot inf BG

#### EQUIPMENT BY TYPE

RECCE BRDM-2†

APC (W) 19+: 10+ BTR-60PB; 9 BTR-70

ARTY • MRL 122mm 30+ BM-21

**Navy****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PBR 3+

**Air Force****FORCES BY ROLE****FIGHTER**1 sqn with MiG-21MF *Fishbed*; MiG-21UM *Mongol B***TRANSPORT**1 sqn with An-24 *Coke*; An-26 *Curl*; BN-2 *Islander*; BT-67**TRAINING**1 sqn with L-29 *Delfin*; SF-260WL *Warrior\**; *Tetras***TRANSPORT HELICOPTER**1 sqn with Mi-8 *Hip*; Mi-24D *Hind*; Z-9**EQUIPMENT BY TYPE**

AIRCRAFT 4 combat capable

FGA 2: 1 MiG-21MF *Fishbed*+; 1 MiG-21UM *Mongol B*+TPT • **Light** 10: 1 An-24 *Coke*; 2 An-26 *Curl*; 1 BT-67; 2 BN-2 *Islander*; 4 *Tetras*TRG 8: 6 L-29 *Delfin*+; 2 SF-260WL *Warrior\****HELICOPTERS**ATK 2 Mi-24D *Hind*

MRH (1 Z-9 in store)

TPT 1: **Medium** 1 Mi-8 *Hip*; **Light** (1 AS350 *Ecureuil* in store)**Paramilitary 7,800 active****Gendarmerie 1,800****FORCES BY ROLE****MANOEUVRE****Other**

8 paramilitary coy

**Republican Guard 2,000****National Police 1,000****Militia 3,000****DEPLOYMENT****DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 1; 4 obs

**SUDAN**

UN • UNAMID 1 obs

**FOREIGN FORCES**

All under MINUSMA cmd unless otherwise specified

**Armenia 1****Austria** EUTM Mali 8**Bangladesh** 1,578; 1 inf bn; 1 engr coy; 1 rvn coy; 2 sigs coy; 1 tpt coy**Belgium** EUTM Mali 95**Benin** 256; 1 mech inf coy**Bulgaria** EUTM Mali 4**Burkina Faso** 1,714; 2 inf bn**Cambodia** 303; 1 engr coy; 1 EOD coy**Chad** 1,108; 1 SF coy; 2 inf bn**China** 402; 1 sy coy; 1 engr coy; 1 fd hospital**Côte d'Ivoire** 3**Czech Republic** EUTM Mali 38**Denmark** 19**Egypt** 65**El Salvador** 91; 1 hel sqn**Estonia** 10 • EUTM Mali 8**Finland** 5 • EUTM Mali 10**France** 24 • *Operation Barkhane* 1,680; 1 mech inf BG; 1 log bn; 1 hel unit with 2 *Tiger*; 2 AS532 *Cougar*; 2 NH90 TTH; 2 SA330 *Puma*; 2 SA342 *Gazelle* • EUTM Mali 15**Gambia** 3**Georgia** EUTM Mali 1**Germany** 9 • EUTM Mali 209**Ghana** 217; 3 obs; 1 engr coy; 1 hel sqn**Greece** EUTM Mali 2**Guinea** 854; 3 obs; 1 inf bn**Guinea-Bissau** 1**Hungary** EUTM Mali 5**Indonesia** 133; 1 hel sqn**Ireland** EUTM Mali 8**Italy** 2 • EUTM Mali 15**Jordan** 1**Kenya** 4**Latvia** EUTM Mali 3**Liberia** 49; 1 inf pl**Lithuania** EUTM Mali 4**Luxembourg** EUTM Mali 1**Mauritania** 1**Nepal** 145; 3 obs; 1 EOD coy**Netherlands** 532; 1 SF coy; 1 atk hel sqn; 1 hel sqn; 1 engr coy; 1 int coy • EUTM Mali 1**Niger** 859; 1 inf bn**Nigeria** 178; 2 obs; 1 sigs coy; 1 fd hospital**Norway** 21**Poland** EUTM Mali 20**Portugal** 2 • EUTM Mali 9**Romania** 1**Senegal** 675; 1 inf bn; 1 engr coy**Sierra Leone** 4**Slovenia** EUTM Mali 3**Spain** EUTM Mali 118**Sweden** 210; 1 int coy • EUTM Mali 10**Switzerland** 3**Togo** 935; 1 inf bn; 1 fd hospital**United Kingdom** 2 • EUTM Mali 26**United States** 10**Yemen** 7



## Mauritius MUS

Mauritian Rupee R		2014	2015	2016
GDP	R	386bn	405bn	
	US\$	12.6bn	11.6bn	
<i>per capita</i>	US\$	9,999	9,187	
Growth	%	3.6	3.2	
Inflation	%	3.2	2.0	
Def exp	R	6.93bn		
	US\$	226m		
Def bdgt [a]	R	8.73bn	8.41bn	7.88bn
	US\$	285m	240m	

US\$1=R 30.67 35.04

[a] Police-service budget

Population 1,339,827

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	10.6%	3.7%	4.0%	3.7%	23.6%	3.6%
Female	10.1%	3.6%	4.0%	3.6%	24.3%	5.2%

### Capabilities

The country has no standing armed forces, but the Special Mobile Force (part of the police force) is tasked with providing internal and external security. The coast guard is currently in the process of increasing its ability to patrol the country's large EEZ and several orders have been placed with India to deliver relevant capabilities; there are close ties with the Indian Navy. Port Louis was this year one of the two hubs for the US AFRICOM *Cutlass Express* exercise, designed to address regional maritime-security concerns.

**ACTIVE NIL** Paramilitary 2,500

### ORGANISATIONS BY SERVICE

**Paramilitary 2,500**

**Special Mobile Force €1,750**

#### FORCES BY ROLE

##### MANOEUVRE

##### Reconnaissance

2 recce coy

##### Light

5 (rifle) mot inf coy

##### COMBAT SUPPORT

1 engr sqn

##### COMBAT SERVICE SUPPORT

1 spt pl

#### EQUIPMENT BY TYPE

RECCE 4 *Shorland*

AIFV 2 VAB (with 20mm gun)

APC (W) 16: 7 *Tactica*; 9 VAB

ARTY • MOR 81mm 2

**Coast Guard €800**

#### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 6

PSOH 1 *Vigilant+* (1 hel landing platform) (vessel has been laid up since 2006 and is for sale)

PCO 1 *Barracuda*

PB 4: 1 P-2000; 1 SDB-Mk3; 2 *Zhuk* (FSU)

### LOGISTICS AND SUPPORT

AGS 1 *Pathfinder*

AIRCRAFT • TPT • Light 3: 1 BN-2T *Defender*; 2 Do-228-101

### Police Air Wing

#### EQUIPMENT BY TYPE

##### HELICOPTERS

MRH 9: 1 AS555 *Fennec*; 2 *Dhruv*; 1 SA315B *Lama* (*Cheetah*); 5 SA316 *Alouette III* (*Chetak*)

## Mozambique MOZ

Mozambique New Metical M		2014	2015	2016
GDP	M	526bn	591bn	
	US\$	16.7bn	17bn	
<i>per capita</i>	US\$	630	626	
Growth	%	7.4	7.0	
Inflation	%	2.3	4.0	
Def bdgt	M	12bn	5.28bn	
	US\$	382m	152m	
US\$1=M		31.52	34.82	

Population 25,303,113

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	22.7%	5.8%	4.7%	3.3%	11.0%	1.3%
Female	22.4%	5.9%	5.1%	3.9%	12.3%	1.6%

### Capabilities

The armed forces are tasked with combating maritime piracy and people-trafficking, assuring the country's territorial integrity and internal security. Serviceability levels remain unclear, but cooperative anti-piracy patrols with South Africa have provided Mozambique's forces with experience, albeit in a supporting role. After years of budget constraints, the country's economy is growing significantly, and there may be greater scope for defence acquisitions in the future. Patrol craft on order from France are expected to start being delivered in 2016 and will boost the country's maritime-patrol capability. Clashes between RENAMO and the government flared up in 2013, but in 2014 a peace deal was signed, with this agreement reportedly providing for the integration of former rebel personnel into national security forces, but progress on this remained unclear.

**ACTIVE 11,200** (Army 10,000 Navy 200 Air 1,000)

*Conscript liability 2 years*

### ORGANISATIONS BY SERVICE

**Army €9,000–10,000**

#### FORCES BY ROLE

##### SPECIAL FORCES

3 SF bn

**MANOEUVRE****Light**

7 inf bn

**COMBAT SUPPORT**

2-3 arty bn

2 engr bn

**COMBAT SERVICE SUPPORT**

1 log bn

**EQUIPMENT BY TYPE†**

Equipment at estimated 10% or less serviceability

**MBT** 60+ T-54**RECCE** 30 BRDM-1/BRDM-2**AIFV** 40 BMP-1**APC** 426

APC (T) 30 FV430

APC (W) 285: 160 BTR-60; 100 BTR-152; 25 *Saxon*PPV 11 *Casspir***ARTY** 126**TOWED** 62: **100mm** 20 M-1944; **105mm** 12 M101;**122mm** 12 D-30; **130mm** 6 M-46; **152mm** 12 D-1**MRL** **122mm** 12 BM-21**MOR** 52: **82mm** 40 M-43; **120mm** 12 M-43**AT****MSL** • **MANPATS** 9K11 *Malyutka* (AT-3 *Sagger*); 9K111*Fagot* (AT-4 *Spigot*)**RCL** **75mm**; **82mm** B-10; **107mm** 24 B-12**GUNS** **85mm** 18: 6 D-48; 12 Type-56 (D-44)**AD** • **GUNS** 290+**SP** **57mm** 20 ZSU-57-2**TOWED** 270+: **20mm** M-55; **23mm** 120 ZU-23-2; **37mm**90 M-1939; (10 M-1939 in store); **57mm** 60 S-60; (30 S-60 in store)**Navy** €200**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** • **PB** 1*Pebane* (ex-ESP *Conejera*-class)**Air Force** 1,000**FORCES BY ROLE****FIGHTER/GROUND ATTACK**1 sqn with MiG-21bis *Fishbed*; MiG-21UM *Mongol* B**TRANSPORT**1 sqn with An-26 *Curl*; FTB-337G *Milirole*; Cessna 150B; Cessna 172; PA-34 *Seneca***ATTACK/TRANSPORT HELICOPTER**1 sqn with Mi-24 *Hind*†**EQUIPMENT BY TYPE****AIRCRAFT****FGA** 8: 6 MiG-21bis *Fishbed*; 2 MiG-21UM *Mongol* B**ISR** 2 FTB-337G *Milirole***TPT** 6: **Light** 5: 1 An-26 *Curl*; 2 Cessna 150B; 1 Cessna 172; 1 PA-34 *Seneca*; (4 PA-32 *Cherokee* non-op); **PAX** 1

Hawker 850XP

**HELICOPTERS****ATK** 2 Mi-24 *Hind*†**TPT** • **Medium** (2 Mi-8 *Hip* non-op)**AD** • **SAM** • **TOWED**: (S-75 *Dvina* (SA-2 *Guideline*) non-op†; S-125 *Pechora* SA-3 *Goa* non-op‡)**Namibia** NAM

Namibian Dollar N\$		2014	2015	2016
<b>GDP</b>	N\$	146bn	162bn	
	US\$	13.6bn	12.9bn	
<i>per capita</i>	US\$	6,188	5,787	
<b>Growth</b>	%	4.5	4.8	
<b>Inflation</b>	%	5.3	4.8	
<b>Def bdgt</b>	N\$	6.6bn	7.23bn	
	US\$	617m	574m	
<b>US\$1=N\$</b>		10.69	12.61	

**Population** 2,212,307

Age	0-14	15-19	20-24	25-29	30-64	65 plus
<b>Male</b>	15.6%	6.0%	5.7%	5.2%	16.0%	1.9%
<b>Female</b>	15.3%	5.9%	5.6%	5.0%	15.1%	2.6%

**Capabilities**

The armed forces support territorial integrity and civil authorities, and participate in peace-support operations. They also take part in multinational exercises and have been involved in UN and African Union deployments, though there is only limited ability for independent power projection beyond national territory. The air force took part in the 2015 SADC *Blue Okavango* exercise. Donations of military equipment from China as well as the supply of some basic equipment from local industry have increased capability; the country is also funding the renovation of existing and the construction of new infrastructure for the army and the air force.

**ACTIVE 9,200** (Army 9,000 Navy 200) Paramilitary 6,000**ORGANISATIONS BY SERVICE****Army** 9,000**FORCES BY ROLE****MANOEUVRE****Reconnaissance**

1 recce regt

**Light**

3 inf bde (total: 6 inf bn)

**Other**

1 (Presidential Guard) gd bn

**COMBAT SUPPORT**

1 arty bde with (1 arty regt)

1 AT regt

1 AD regt

1 engr regt

1 sigs regt

**COMBAT SERVICE SUPPORT**

1 log bn

**EQUIPMENT BY TYPE****MBT** T-54/T-55†; T-34†**RECCE** 12 BRDM-2

**APC 68**

**APC (W)** 48: 10 BTR-60; 8 Type-05P; 30 *Wolf Turbo 2*  
**PPV** 20 *Casspir*

**ARTY 69**

**TOWED** 140mm 24 G-2  
**MRL** 122mm 5 BM-21  
**MOR** 40: 81mm; 82mm

**AT • RCL 82mm B-10**

**GUNS** 12+: 57mm; 76mm 12 ZIS-3

**AD • SAM • MANPAD 9K32 Strela-2 (SA-7 Grail)‡**

**GUNS** 65

**SP** 23mm 15 *Zumlac*

**TOWED** 14.5mm 50 ZPU-4

**ARV T-54/T-55** reported**Navy** €200**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 5**

**PSO** 1 *Elephant*

**PCC** 1 *Oryx*

**PB** 3: 1 *Brendan Simbwaye*; 2 *Marlim*

**AIRCRAFT • TPT • Light 1 F406 Caravan II****HELICOPTERS • TPT • Medium 1 S-61L****Air Force****FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with F-7 (F-7NM); FT-7 (FT-7NG)

**ISR**

1 sqn with O-2A *Skymaster*

**TRANSPORT**

Some sqn with An-26 *Curl*; *Falcon* 900; Learjet 36; Y-12

**TRAINING**

1 sqn with K-8 *Karakorum\**

**ATTACK/TRANSPORT HELICOPTER**

1 sqn with H425; Mi-8 *Hip*; Mi-25 *Hind D*; SA315 *Lama* (*Cheetah*); SA316B *Alouette III* (*Chetak*)

**EQUIPMENT BY TYPE****AIRCRAFT** 12 combat capable

**FTR** 8: 6 F-7 (F-7NM); 2 FT-7 (FT-7NG)

**ISR** 5 O-2A *Skymaster*

**TPT** 6: **Light** 5: 2 An-26 *Curl*; 1 Learjet 36; 2 Y-12; **PAX** 1 *Falcon* 900

**TRG** 4+ K-8 *Karakorum\**

**HELICOPTERS**

**ATK** 2 Mi-25 *Hind D*

**MRH** 5: 1 H425; 1 SA315 *Lama* (*Cheetah*); 3 SA316B *Alouette III* (*Chetak*)

**TPT • Medium** 1 Mi-8 *Hip*

**Paramilitary 6,000**

**Police Force • Special Field Force 6,000** (incl Border Guard and Special Reserve Force)

**Ministry of Fisheries****EQUIPMENT BY TYPE**

**PATROL AND COASTAL COMBATANTS • PCO** 3: 2

*Nathanael Maxwilili*; 1 *Tobias Hainyenko*

**LOGISTICS AND SUPPORT** 5

**AGE** 1 *Mirabilis*

**AGOR** 4

**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 2 obs

**LIBERIA**

UN • UNMIL 1; 1 obs

**SOUTH SUDAN**

UN • UNMISS 3; 1 obs

**SUDAN**

UN • UNAMID 6; 3 obs

UN • UNISFA 2; 2 obs

**Niger NER**

CFA Franc BCEAO fr	2014	2015	2016
<b>GDP</b>	fr 3.96tr	4.2tr	
	US\$ 8.02bn	7.12bn	
<i>per capita</i>	US\$ 469	403	
<b>Growth</b>	% 6.9	4.3	
<b>Inflation</b>	% -0.9	1.3	
<b>Def exp</b>	fr €35.6bn		
	US\$ €72m		
<b>US\$1=fr</b>	493.62	589.91	

**Population** 18,045,729

**Ethnic groups:** Tuareg 8–10%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	25.0%	5.2%	4.0%	3.2%	11.5%	1.3%
<b>Female</b>	24.6%	5.3%	4.1%	3.4%	11.2%	1.3%

**Capabilities**

Internal and border security are key roles for the armed forces, in light of the regional threat from Islamist groups. The country is a member of the 'G5 Sahel' aimed at improving the ability to counter jihadists in the region; Boko Haram in 2015 mounted attacks in the country. However, the armed forces remain under-equipped and lack the resources to fully meet these challenges. In 2015, Niger again took part in exercise *Flintlock*, a US-led Special Operations Forces exercise. It also provides UAV basing for the US, the first at Niamey (which also has a French presence), while the second US site is being built at Agadez. Both countries have been providing equipment for surveillance tasks, including Cessna 208Bs from the US and *Gazelle* helicopters from France; two additional C-208s were transferred by the US in 2015.

**ACTIVE 5,300** (Army 5,200 Air 100) **Paramilitary 5,400**

*Conscript liability* Selective conscription, 2 years

## ORGANISATIONS BY SERVICE

### Army 5,200

3 Mil Districts

#### FORCES BY ROLE

##### MANOEUVRE

###### Reconnaissance

4 armd recce sqn

###### Light

7 inf coy

###### Air Manoeuvr

2 AB coy

#### COMBAT SUPPORT

1 AD coy

1 engr coy

#### COMBAT SERVICE SUPPORT

1 log gp

#### EQUIPMENT BY TYPE

RECCE 132: 35 AML-20/AML-60; 90 AML-90; 7 VBL

APC 45

APC (W) 24: 22 M3 Panhard; 2 WZ-523

PPV 21 *Puma* M26-15

ARTY • MOR 40: 81mm 19 Brandt; 82mm 17; 120mm 4 Brandt

AT • RCL 14: 75mm 6 M20; 106mm 8 M40

AD • GUNS 39

SP 20mm 10 M3 VDAA

TOWED 20mm 29

### Air Force 100

#### EQUIPMENT BY TYPE

AIRCRAFT 2 combat capable

ATK 2 Su-25 *Frogfoot*

ISR 6: 4 Cessna 208 *Caravan*; 2 DA42 MPP *Twin Star*

TPT 7: **Medium** 1 C-130H *Hercules*; **Light** 5: 1 An-26

*Curl*; 2 Cessna 208 *Caravan*; 1 Do-28; 1 Do-228-201; **PAX**

1 B-737-700 (VIP)

#### HELICOPTERS

MRH 5: 2 Mi-17 *Hip*; 3 SA342 *Gazelle*

### Paramilitary 5,400

**Gendarmerie** 1,400

**Republican Guard** 2,500

**National Police** 1,500

## DEPLOYMENT

#### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 133; 2 obs; 1 sigs coy

#### CÔTE D'IVOIRE

UN • UNOCI 866; 4 obs; 1 inf bn

#### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 4; 14 obs

#### LIBERIA

UN • UNMIL 2 obs

#### MALI

UN • MINUSMA 859; 1 inf bn

## FOREIGN FORCES

France *Opération Barkhane* 350; 1 FGA det with 2 *Mirage* 2000C; 2 *Mirage* 2000D; 1 UAV det with 2 *Harfang*; 3 MQ-9A *Reaper*

United States 250

## Nigeria NGA

Nigerian Naira N		2014	2015	2016
GDP	N	90.1tr	98.3tr	
	US\$	574bn	493bn	
<i>per capita</i>	US\$	3,300	2,758	
Growth	%	6.3	4.0	
Inflation	%	8.1	9.1	
Def bdgt	N	350bn	375bn	
	US\$	2.23bn	1.88bn	
FMA (US)	US\$	1m	0.6m	0.6m
US\$1=N		157.03	199.42	

Population 181,562,056

Ethnic groups: North (Hausa and Fulani) South-west (Yoruba) South-east (Ibo); these tribes make up 65% of population

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	22.0%	5.4%	4.6%	3.9%	13.7%	1.5%
Female	21.0%	5.1%	4.4%	3.8%	13.1%	1.6%

## Capabilities

Internal security is the central concern for the comparatively well-equipped and -trained armed forces, with border and maritime security also vital tasks. There have been repeated clashes with Boko Haram in the north of the country with reports that the difficulty in defeating the insurgents was adversely affecting morale, despite training support from the US and other countries. The armed forces have been attempting to adopt COIN tactics, and looking to establish forward-operating bases and quick-reaction groups. Boko Haram's move into neighbouring states has given Nigeria allies in combating the group, and the Multinational Joint Task Force is in the initial deployment stages. In response to the continuing insurgency, items have been brought out of storage and into service, including transport aircraft and light fighters. Equipment maintenance and serviceability has been a long-standing issue. Piracy remains a problem in western waters and in the Niger Delta.

**ACTIVE 80,000** (Army 62,000 Navy 8,000 Air 10,000)

Paramilitary 82,000

Reserves planned, none org

## ORGANISATIONS BY SERVICE

**Army** 62,000

**FORCES BY ROLE****SPECIAL FORCES**

- 1 spec ops bn
- 1 ranger bn

**MANOEUVRE****Armoured**

- 1 (3rd) armd div (1 armd bde, 1 arty bde)

**Mechanised**

- 2 (1st) mech div (1 recce bn, 1 mech bde, 1 mot inf bde, 1 arty bde, 1 engr regt)
- 1 (2nd) mech div (1 recce bn, 1 armd bde, 1 armd bde, 1 arty bde, 1 engr regt)
- 1 (81st) composite div (1 recce bn, 1 mech bde, 1 arty bde, 1 engr regt)

**Light**

- 1 (7th) inf div (1 spec ops bn, 1 recce bn(-), 1 armd bde, 1 inf bde, 4 (task force) inf bde, 1 arty bde, 1 engr regt)
- 1 (82nd) composite div (1 recce bn, 1 mech bde, 2 mot inf bde, 1 amph bde, 1 arty bde, 1 engr regt)
- 1 (Multi-national Joint Task Force) bde (2 inf bn(-))

**Other**

- 1 (Presidential Guard) gd bde (4 gd bn)

**COMBAT SUPPORT**

- 1 AD regt

**EQUIPMENT BY TYPE**

**MBT** 292+: 176 Vickers Mk 3; 100 T-55†; 12 T-72AV; 4+ T-72M1

**LT TK** 157 *Scorpion*

**RECCE** 452: 90 AML-60; 40 AML-90; 70 EE-9 *Cascavel*; 50 FV721 *Fox*; 20 *Saladin* Mk2; 72 VBL; 110 *Cobra*

**AIFV 10+:** 10 BTR-4EN; some BVP-1

**APC** 507+

**APC (T)** 317: 250 4K-7FA *Steyr*; 67 MT-LB

**APC (W)** 172+: 10 FV603 *Saracen*; 110 AVGP *Grizzly* mod/*Piranha* 1 6x6; 47 BTR-3U; 5 BTR-80; some EE-11 *Urutu* (reported)

**PPV** 23+: 23 *Reva* 4x4; some Streit *Spartan*; Some Streit *Cougar* (*Igirigi*); some *Bigfoot*

**ARTY** 488+

**SP 155mm** 39 *Palmaria*

**TOWED** 94: **105mm** 50 M-56; **122mm** 37 D-30/D-74; **130mm** 7 M-46; (**155mm** 24 FH-77B in store)

**MRL 122mm** 25+: 25 APR-21; some RM-70

**MOR** 330+: **81mm** 200; **82mm** 100; **120mm** 30+

**AT • MSL • MANPATS** *Swingfire*

**RCL 84mm** *Carl Gustav*; **106mm** M40A1

**AD • SAM** 164

**SP** 16 *Roland*

**MANPAD** *Blowpipe*; 9K32 *Strela-2* (SA-7 *Grail*)‡

**GUNS** 90+

**SP 23mm** 30 ZSU-23-4

**TOWED** 60+: **20mm** 60+; **23mm** ZU-23; **40mm** L/70

**RADAR • LAND:** some RASIT (veh, arty)

**ARV** 17+: AVGP *Husky*; 2 *Greif*; 15 Vickers ARV

**VLB** MTU-20; VAB

**Navy 8,000 (incl Coast Guard)**

Western Comd HQ located at Apapa; Eastern Comd HQ located at Calabar

**EQUIPMENT BY TYPE****PRINCIPAL SURFACE COMBATANTS 1**

**FRIGATES • FFGHM** 1 *Aradu* (GER MEKO 360) with 8 single Inchr with *Otomat* AShM, 1 octuple *Albatros* Inchr with *Aspide* SAM, 2 triple STWS 1B 324mm ASTT with A244 LWT, 1 127mm gun, (capacity 1 *Lynx* Mk89 hel)

**PATROL AND COASTAL COMBATANTS 115**

**CORVETTES • FSM** 1 *Enymiri* (UK Vosper Mk 9) with 1 triple Inchr with *Seacat* SAM, 1 twin 375mm A/S mor, 1 76mm gun

**PSOH** 3: 1 *Centenary* with 1 76mm gun; 2 *Thunder* (ex-US *Hamilton*) with 1 76mm gun

**PCFG** 1 *Ayam* (FRA *Combattante*) with 2 twin Inchr with MM-38 *Exocet* AShM, 1 76mm gun (additional 2 vessels† - 1 used as spares; 1 non-operational; both without *Exocet* AShM)

**PCO** 4 *Balsam* (buoy tenders (US))

**PCC** 3 *Ekpet* (GER Lurssen 57m) with 1 76mm gun

**PBF** 30: 21 *Manta* (Suncraft 17m); 4 *Manta* MkII; 3 *Shaldag* II; 2 *Torie*

**PB** 73: 1 *Andoni*; 1 *Dorina*; 3 *Okpoku* (FPB 98 MkII); 1 *Sagbama*; 2 *Sea Eagle* (Suncraft 38m); 2 *Sentinel* (Nautic 17m); 15 *Stingray* (Suncraft 16m); 40 Suncraft 12m; 4 Swiftships; 2 *Town* (of which one laid up); 2 *Yola*; (a further 150 small patrol craft under 10 tonnes FLD may be in operation)

**MINE WARFARE • MINE COUNTERMEASURES 2:**

**MCC** 2 *Ohue* (mod ITA *Lerici*)

**AMPHIBIOUS 5**

**LS • LST** 1 *Ambet* (capacity 5 tanks; 220 troops) (GER)

**LC • LCVP** 4 *Stingray* 20

**LOGISTICS AND SUPPORT 10**

**AGHS** 1

**AX** 1 *Prosperity*

**YFL** 2 (ex-GER Damen Stan 1905)

**YTB** 2 (ex-GER Damen Stan 2909/2608)

**YTL** 4

**Naval Aviation****EQUIPMENT BY TYPE****HELICOPTERS**

**MRH** 2 AW139 (AB-139)

**TPT • Light** 3 AW109E *Power†*

**Special Forces 200****EQUIPMENT BY TYPE****FORCES BY ROLE****SPECIAL FORCES**

1 SF unit

**Air Force 10,000****FORCES BY ROLE**

Very limited op capability

**FIGHTER/GROUND ATTACK**

1 sqn with F-7 (F-7NI); FT-7 (FT-7NI)

**MARITIME PATROL**

1 sqn with ATR-42-500 MP; Do-128D-6 *Turbo SkyServant*; Do-228-100/200

**TRANSPORT**

2 sqn with C-130H *Hercules*; C-130H-30 *Hercules*; G-222



1 (Presidential) gp with B-727; B-737BBJ; BAe-125-800; Beech 350 *King Air*; Do-228-200; *Falcon 7X*; *Falcon 900*; Gulfstream IV/V

#### TRAINING

1 unit with *Air Beetle*†;  
1 unit with *Alpha Jet*\*  
1 unit with L-39 *Albatros*\*; MB-339A\*  
1 hel unit with Mi-34 *Hermit* (trg);

#### ATTACK/TRANSPORT HELICOPTER

2 sqn with AW109LUH; Mi-24/Mi-35 *Hind*†

#### EQUIPMENT BY TYPE†

##### AIRCRAFT 51 combat capable

**FTR** 14: 11 F-7 (F-7NI); 3 FT-7 (FT-7NI)

**ELINT** 2 ATR-42-500 MP

**TPT** 32: **Medium** 5: 1 C-130H *Hercules* (4 more in store)†; 1 C-130H-30 *Hercules* (2 more in store); 3 G-222† (2 more in store)†; **Light** 18: 3 Beech 350 *King Air*; 1 Cessna 550 *Citation*; 8 Do-128D-6 *Turbo SkyServant*; 1 Do-228-100; 5 Do-228-200 (incl 2 VIP); **PAX** 9: 1 B-727; 1 B-737BBJ; 1 BAe 125-800; 2 *Falcon 7X*; 2 *Falcon 900*; 1 Gulfstream IV; 1 Gulfstream V

**TRG** 105: 58 *Air Beetle*† (up to 20 awaiting repair); 2 *Alpha Jet A*\*; 10 *Alpha Jet E*\*; 23 L-39 *Albatros*\*; 12 MB-339AN\* (all being upgraded)

#### HELICOPTERS

**ATK** 11: 2 Mi-24P *Hind*; 4 Mi-24V *Hind*; 3 Mi-35 *Hind*; 2 Mi-35P *Hind*

**MRH** 9+: 6 AW109LUH; 3+ SA341 *Gazelle*

**TPT** 8: **Medium** 2 AS332 *Super Puma* (4 more in store);

**Light** 6: 4 AS350B *Ecureuil*; 1 AW109; 1 Bell 205

#### UAV 1+

**CISR** • **Heavy** 1+ CH-3

**ISR** • **Medium** (9 *Aerostar* non-operational)

**MSL** • **AAM** • **IR R-3** (AA-2 *Atoll*)‡; PL-9C

### Paramilitary €82,000

#### Nigerian Police

#### Port Authority Police €2,000

### Security and Civil Defence Corps • Police 80,000

#### EQUIPMENT BY TYPE

**APC (W)** 74+: 70+ AT105 *Saxon*†; 4 BTR-3U; UR-416

**AIRCRAFT** • **TPT** • **Light** 4: 1 Cessna 500 *Citation I*; 2 PA-31 *Navajo*; 1 PA-31-350 *Navajo Chieftain*

**HELICOPTERS** • **TPT** • **Light** 4: 2 Bell 212 (AB-212); 2 Bell 222 (AB-222)

### DEPLOYMENT

#### CÔTE D'IVOIRE

UN • UNOCI 3 obs

#### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO 1; 19 obs

#### GUINEA-BISSAU

ECOWAS • ECOMIB 160

#### LEBANON

UN • UNIFIL 1

#### LIBERIA

UN • UNMIL 1,408; 10 obs; 2 inf bn

#### MALI

UN • MINUSMA 178; 2 obs; 1 sigs coy; 1 fd hospital

#### SOUTH SUDAN

UN • UNMISS 2; 3 obs

#### SUDAN

UN • UNAMID 928; 5 obs; 1 inf bn

UN • UNISFA 1

#### WESTERN SAHARA

UN • MINURSO 3 obs

## Rwanda RWA

Rwandan Franc fr	2014	2015	2016
<b>GDP</b>	fr 5.39tr	5.97tr	
	US\$ 7.9bn	8.47bn	
<i>per capita</i>	US\$ 712	743	
<b>Growth</b>	% 6.9	6.5	
<b>Inflation</b>	% 1.8	2.1	
<b>Def bdgt</b>	fr 55.1bn	63.9bn	
	US\$ 81m	91m	
<b>FMA (US)</b>	US\$ 0.2m		
<b>US\$1=fr</b>	682.41	704.83	

**Population** 12,661,733

**Ethnic groups:** Hutu 80%; Tutsi 19%

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	21.1%	5.3%	4.1%	4.2%	14.1%	1.0%
<b>Female</b>	20.7%	5.3%	4.2%	4.3%	14.2%	1.5%

## Capabilities

The main tasks for the armed forces are to defend territorial integrity and national sovereignty. A law on downsizing and demobilising elements of the armed forces was published in October 2015 (no.38/2015). The country fields a comparatively large army, but units are lightly equipped, with little mechanisation. The army regularly takes part in multinational exercises and is a key contributor to the East Africa Standby Force, having pledged a motorised infantry battalion. It also maintains a battalion in UNMISS in South Sudan and is a significant contributor to UN missions. However, the lack of fixed-wing aircraft limits the armed forces' ability to deploy independently overseas, and air movements have largely been accomplished with the assistance of donor or charter airlift capacity. In October, Rwanda committed a motorised infantry battalion, one artillery battery and one level-two hospital to the ACIRC initiative.

**ACTIVE 33,000** (Army 32,000 Air 1,000) Paramilitary 2,000

## ORGANISATIONS BY SERVICE

### Army 32,000

#### FORCES BY ROLE

##### MANOEUVRE

###### Light

2 cdo bn

4 inf div (3 inf bde)

##### COMBAT SUPPORT

1 arty bde

#### EQUIPMENT BY TYPE

MBT 34: 24 T-54/T-55; 10 *Tiran-5*

RECCE 106: €90 AML-60/AML-90; 16 VBL

AIFV 35+: BMP; 15 *Ratel-90*; 20 *Ratel-60*

APC 56+

APC (W) 20+: BTR; *Buffalo* (M3 Panhard); 20 Type-92 (reported)

PPV 36 RG-31 *Nyala*

ARTY 160+

TOWED 35+: 105mm some; 122mm 6 D-30; 152mm 29

Type-54 (D-1)†

MRL 10: 122mm 5 RM-70; 160mm 5 LAR-160

MOR 115: 81mm; 82mm; 120mm

AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS €150: 14.5mm; 23mm; 37mm

ARV T-54/T-55 reported

### Air Force €1,000

#### FORCES BY ROLE

##### ATTACK/TRANSPORT HELICOPTER

1 sqn with Mi-17/Mi-17MD/Mi-17V-5/Mi-17-1V *Hip H*;  
Mi-24P/V *Hind*

#### EQUIPMENT BY TYPE

##### HELICOPTERS

ATK 5: 2 Mi-24V *Hind E*; 3 Mi-24P *Hind*

MRH 12: 1 AW139; 4 Mi-17 *Hip H*; 1 Mi-17MD *Hip H*; 1

Mi-17V-5 *Hip H*; 5 Mi-17-1V *Hip H*

TPT • Light 1 AW109S

### Paramilitary

Local Defence Forces €2,000

## DEPLOYMENT

#### CENTRAL AFRICAN REPUBLIC

UN • MINUSCA 780; 10 obs; 1 inf bn

#### SOUTH SUDAN

UN • UNMISS 1,842; 13 obs; 2 inf bn

#### SUDAN

UN • UNAMID 2,443; 5 obs; 3 inf bn

UN • UNISFA 1; 1 obs

## Senegal SEN

CFA Franc BCEAO fr		2014	2015	2016
GDP	fr	7.74tr	8.25tr	
	US\$	15.7bn	14bn	
<i>per capita</i>	US\$	1,079	935	
Growth	%	4.7	5.1	
Inflation	%	-1.1	0.6	
Def bdgt	fr	119bn	127bn	
	US\$	241m	216m	
FMA (US)	US\$	0.325m	0.3m	0.3m
US\$1=fr		493.63	589.89	

Population 13,975,834

Ethnic groups: Wolof 36%; Fulani 17%; Serer 17%; Toucouleur 9%; Man-dingo 9%; Diola 9% (of which 30–60% in Casamance)

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	21.2%	5.5%	4.7%	3.9%	11.8%	1.3%
Female	21.0%	5.4%	4.8%	4.2%	14.6%	1.6%

## Capabilities

The armed forces' priorities are internal and border security, including countering an insurgency in the country's south and Islamist activity in neighbouring states, and combating narcotics trafficking. The armed forces have a limited capability only to address national-security requirements. France retains a military presence in the country and provides training support, as does the US, with the US Marines' Special Purpose Marine Air Ground Task Force Crisis Response–Africa holding a month-long training package in August–September 2015, focused on infantry tactics and small-boat work.

**ACTIVE 13,600 (Army 11,900 Navy 950 Air 750)**

**Paramilitary 5,000**

*Conscript liability* Selective conscription, 2 years

## ORGANISATIONS BY SERVICE

### Army 11,900 (incl conscripts)

7 Mil Zone HQ

#### FORCES BY ROLE

##### MANOEUVRE

###### Reconnaissance

4 armd recce bn

###### Light

1 cdo bn

6 inf bn

###### Air Manoeuvre

1 AB bn

###### Other

1 (Presidential Guard) horse cav bn

##### COMBAT SUPPORT

1 arty bn

1 engr bn

1 sigs bn

**COMBAT SERVICE SUPPORT**

3 construction coy  
1 log bn  
1 med bn  
1 trg bn

**EQUIPMENT BY TYPE**

RECCE 124: 30 AML-60; 74 AML-90; 10 M8; 4 M20; 6+  
RAM-2000

AIFV 26 *Ratel*-20

APC 75

APC (T) 12 M3 half-track  
APC (W) 16 M3 Panhard  
PPV 47: 8 *Casspir*; 39 *Puma* M26-15

ARTY 36

TOWED 20: 105mm 6 HM-2/M101; 155mm 14: ε6  
Model-50; 8 TR-F1

MOR 16: 81mm 8 Brandt; 120mm 8 Brandt

AT • MSL • MANPATS 4 *Milan*

AD • GUNS • TOWED 33: 20mm 21 M693; 40mm 12 L/60

**Navy (incl Coast Guard) 950****FORCES BY ROLE****SPECIAL FORCES**

1 cdo coy

**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS 12**

PCC 4: 1 *Fouta* (DNK *Osprey*); 1 *Njambour* (FRA SFCN  
59m) with 2 76mm gun; 2 *Saint Louis*† (PR-48)

PBF 1 *Ferlo* (RPB 33)

PB 7: 2 *Alioune Samb*; 2 *Alphonse Faye* (operated by  
Fisheries Protection Directorate); 1 *Conejera*; 1  
*Kedougou*; 1 *Senegal* II

**AMPHIBIOUS • LANDING CRAFT 5**

LCT 2 *Edic* 700

LCM 3

**LOGISTICS AND SUPPORT 3**

AG 1

YAG 1 *Archangel*

YTM 1

**Air Force 750****FORCES BY ROLE****MARITIME PATROL/SEARCH & RESCUE**

1 sqn with C-212 *Aviocar*; CN-235; Bell 205 (UH-1H  
*Iroquois*)

**ISR**

1 unit with BN-2T *Islander* (anti-smuggling patrols)

**TRANSPORT**

1 sqn with B-727-200 (VIP); F-27-400M *Troopship*

**TRAINING**

1 sqn with R-235 *Guerrier*\*; TB-30 *Epsilon*

**ATTACK/TRANSPORT HELICOPTER**

1 sqn with AS355F *Ecureuil* II; Bell 206; Mi-35P *Hind*; Mi-  
171Sh

**EQUIPMENT BY TYPE****AIRCRAFT** 1 combat capable

TPT 10: Light 8: 1 BN-2T *Islander* (govt owned, mil op);  
1 C-212-100 *Aviocar*; 2 CN-235; 2 Beech B200 *King Air*; 2  
F-27-400M *Troopship* (3 more in store); PAX 2: 1 A319; 1  
B-727-200 (VIP)

TRG 7: 1 R-235 *Guerrier*\*; 6 TB-30 *Epsilon*

**HELICOPTERS**

ATK 2 Mi-35P *Hind*

MRH 1 AW139

TPT 8: Medium 2 Mi-171Sh; Light 6: 1 AS355F *Ecureuil*  
II; 1 Bell 205 (UH-1H *Iroquois*); 2 Bell 206; 2 Mi-2 *Hoplite*

**Paramilitary 5,000****Gendarmerie 5,000****EQUIPMENT BY TYPE**

APC (W) 24: 12 *Gila*; 12 VXB-170

**Customs****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PB 2 VCSM

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 1; 1 obs

**CÔTE D'IVOIRE**

UN • UNOCI 739; 7 obs; 1 inf bn; 1 hel sqn

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 6; 7 obs

**GUINEA-BISSAU**

ECOWAS • ECOMIB 200

**MALI**

UN • MINUSMA 675; 1 inf bn; 1 engr coy

**SOUTH SUDAN**

UN • UNMISS 1; 2 obs

**SUDAN**

UN • UNAMID 805; 1 inf bn

**FOREIGN FORCES**

France 350; 1 *Falcon* 50MI; 1 C-160 *Transall*

**Seychelles** *SYC*

Seychelles Rupee SR		2014	2015	2016
GDP	SR	18.1bn	19.2bn	
	US\$	1.42bn	1.38bn	
<i>per capita</i>	US\$	15,141	14,466	
Growth	%	3.3	3.5	
Inflation	%	1.4	4.3	
Def exp	SR	€155m		
	US\$	€12m		
US\$1=SR		12.74	13.94	

Population 92,430

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	10.5%	3.4%	3.9%	4.2%	26.4%	2.9%
Female	10.0%	3.2%	3.5%	3.7%	23.9%	4.5%

## Capabilities

The primary focus of the small People's Defence Forces remains counter-piracy. China, the UAE and India have previously supported operations through equipment donations. The Seychelles maintains close ties with India, with 2015 seeing the inauguration of the first of eight planned Indian coastal-surveillance radars based on the islands. The country also hosts, on a rotational basis, US military forces conducting maritime-patrol activities, including the operation of unarmed UAVs. In 2014, the EU began basic-training activities for the air force, in conjunction with local staff, in a bid to bolster maritime-surveillance capacities.

**ACTIVE 420 (Land Forces 200; Coast Guard 200; Air Force 20)**

## ORGANISATIONS BY SERVICE

### People's Defence Force

#### Land Forces 200

##### FORCES BY ROLE

##### SPECIAL FORCES

1 SF unit

##### MANOEUVRE

##### Light

1 inf coy

##### Other

1 sy unit

##### COMBAT SUPPORT

1 MP unit

##### EQUIPMENT BY TYPE†

RECCE 6 BRDM-2†

ARTY • MOR 82mm 6 M-43†

AD • GUNS • TOWED 14.5mm ZPU-2†; ZPU-4†;  
37mm M-1939†

#### Coast Guard 200 (incl 80 Marines)

##### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 10

PCC 3: 1 *Andromache* (ITA *Pichiotti* 42m); 2 *Topaz*

PB 7: 2 *Aries*; 1 *Junon*; 2 *Rodman* 101; 1 *Shanghai* II; 1  
*Fortune* (UK *Tyne*)

#### Air Force 20

##### EQUIPMENT BY TYPE

##### AIRCRAFT

TPT • Light 4: 1 DHC-6-320 *Twin Otter*; 1 Do-228; 2  
Y-12

## Sierra Leone SLE

Sierra Leonean Leone L		2014	2015	2016
GDP	L	22.4tr	22tr	
	US\$	4.82bn	4.27bn	
<i>per capita</i>	US\$	773	675	
Growth	%	7.1	-23.9	
Inflation	%	8.3	10.2	
Def bdgt	L	70.6bn	69.1bn	
	US\$	15m	13m	
US\$1=L		4,655.27	5,148.68	

Population 5,879,098

Age	0-14	15-19	20-24	25-29	30-64	65 plus
Male	20.9%	4.8%	4.2%	3.8%	13.2%	1.6%
Female	21.0%	5.1%	4.5%	4.1%	14.5%	2.2%

## Capabilities

The armed forces' primary task is internal security and the provision of forces for continental peacekeeping missions, and there has been much focus on institutional development of the armed forces, with international support. The improved overall internal security environment was reflected by the end of the UN's 15-year-long peacekeeping mission in early 2014. The army has also been used to try to quarantine areas affected by the outbreak of the Ebola virus in 2014-15. Training has been provided by the US and the UK, and the army takes part in peacekeeping operations, most notably through its deployment of a battalion to AMISOM in Somalia.

**ACTIVE 8,500 (Joint 8,500)**

## ORGANISATIONS BY SERVICE

### Armed Forces 8,500

##### FORCES BY ROLE

##### MANOEUVRE

##### Light

3 inf bde (total: 12 inf bn)

##### EQUIPMENT BY TYPE

ARTY • MOR 31: 81mm ε27; 82mm 2; 120mm 2

AT • RCL 84mm *Carl Gustav*

HELICOPTERS • MRH/TPT 2 Mi-17 *Hip* H/Mi-8 *Hipt*

AD • GUNS 7: 12.7mm 4; 14.5mm 3

##### Navy ε200

##### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS • PB 2: 1  
*Shanghai* III; 1 *Isle of Man*

## DEPLOYMENT

### LEBANON

UN • UNIFIL 3

**MALI**

UN • MINUSMA 4

**SUDAN**

UN • UNAMID 2; 8 obs

UN • UNISFA 1 obs

**FOREIGN FORCES**

United Kingdom 27

**Somalia SOM**

Somali Shilling sh	2013	2014	2016
GDP	US\$		
per capita	US\$		

US\$1=sh

\*Definitive economic data unavailable

Population 10,616,380

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	21.8%	5.3%	4.3%	3.9%	14.2%	0.9%
Female	21.9%	5.2%	4.1%	3.8%	13.3%	1.4%

**Capabilities**

Somalia's armed forces are only developing, and the authorities are still reliant on international support to tackle the principal threat to national stability emanating from al-Shabaab jihadists. Though AMISOM and the Somali army have made significant progress, al-Shabaab remain a capable adversary. An internationally backed attempt to forge a Somali National Army has produced a force trained by AMISOM, the EU and private security companies. The SNA is infantry-heavy but support- and logistics-light, meaning that there are challenges in terms of conventional-force sustainment and organisation. According to the UN, there has been limited international support for longer-term plans to develop the capacity of the army, beyond the international assistance already offered in terms of training and intelligence support. Agreement was reached under the National Integration Commission on the integration of some personnel from Jubaland into the national army. Meanwhile, a 'security sector expenditure task force' is examining improvements to the salary and payments system in the armed forces. Somaliland and Puntland have their own militias, while a privately funded Puntland Maritime Police Force operates a small number of rigid inflatable boats and small aircraft.

**ACTIVE 17,000 (Army 17,000)****ORGANISATIONS BY SERVICE****Army 17,000+** (plus further militias (to be integrated))**FORCES BY ROLE****COMMAND**

1 (21st) div HQ

**MANOEUVRE****Light**

Some cdo unit

7 inf bde (total: €21 inf bn)

**EQUIPMENT BY TYPE**

APC 34+

APC (W) 25+: 25+ AT-105 *Saxon*; Fiat 6614PPV 9+: *Casspir*; MAV-5; 9+ *Mamba Mk5*; RG-31 *Nyala***Paramilitary****Coast Guard****EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS

PB various

**FOREIGN FORCES****Burundi** AMISOM 5,450; 6 inf bn**Djibouti** AMISOM 1,850; 2 inf bn**Ethiopia** AMISOM 4,400; 4 inf bn**Kenya** AMISOM 3,650; 3 inf bn**Uganda** AMISOM 6,200; 7 inf bn**TERRITORY WHERE THE RECOGNISED AUTHORITY (SNG) DOES NOT EXERCISE EFFECTIVE CONTROL**

Data presented here represents the de facto situation. This does not imply international recognition as a sovereign state.

**Somaliland**

Militia-unit strengths are not known. Equipment numbers are generalised assessments; most of this equipment is in poor repair or inoperable.

**Army €12,500****FORCES BY ROLE****MANOEUVRE****Armoured**

2 armd bde

**Mechanised**

1 mech inf bde

**Light**

14 inf bde

**COMBAT SUPPORT**

2 arty bde

**COMBAT SERVICE SUPPORT**

1 spt bn

**EQUIPMENT BY TYPE†**

MBT T-54/55

RECCE Fiat 6616

APC • APC(W) Fiat 6614

ARTY

MRL 106mm various inc BM-21 *Grad*

AD • GUNS • some 23mm ZU-23

**Coast Guard 600**



## Ministry of the Interior

### EQUIPMENT BY TYPE

PATROL AND COASTAL COMBATANTS 26

PB 7 *Dolphin 26*

PBR 19

## Puntland

**Army** €3,000 (to be integrated into Somali National Army)

**Maritime Police Force** €1,000

### EQUIPMENT BY TYPE

AIRCRAFT • TPT 4: Light 3 Ayres S2R; PAX 1 DC-3

HELICOPTERS • MRH SA316 *Alouette III*

PATROL AND COASTAL COMBATANTS

PB some

## South Africa RSA

South African Rand R		2014	2015	2016
GDP	R	3.8tr	4.03tr	
	US\$	350bn	317bn	
<i>per capita</i>	US\$	6,483	5,784	
Growth	%	1.5	1.4	
Inflation	%	6.1	4.8	
Def bdtg	R	42.9bn	44.6bn	
	US\$	3.95bn	3.51bn	
FMA (US)	US\$	0.7m	0.45m	0.45m
US\$1=R		10.84	12.72	

Population 53,675,563

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	14.3%	4.4%	4.8%	5.3%	18.4%	2.3%
Female	14.2%	4.5%	4.9%	5.2%	18.7%	3.2%

## Capabilities

The National Defence Force (SANDF) remains on paper the most capable force in the region, despite financial and structural problems, which have eroded capacity in many areas. There is some capacity for power projection, limited by the C-130s available, lack of military sealift and by the impact of funding constraints. Maritime security is a growing concern, illustrated by an ongoing counter-piracy mission in the Mozambique Channel. The production of *Seeker* UAVs by Denel will enhance the air force's limited ISR capability. Equipment recapitalisation efforts in all services have been delayed by funding problems. The problem of ageing equipment is particularly acute in the army and several procurement plans currently require funding. The SANDF still deploys regularly on peacekeeping missions and participates in national and multinational exercises. Historically South African forces have also played a significant role in training and supporting other regional forces and the air force has won the bid to train Omani pilots at the South African flying school. They are a key contributor to the

UN's intervention brigade in eastern DRC although this and other missions have strained the resources of the armed forces. (See pp. 425–28.)

**ACTIVE 67,200** (Army 40,600 Navy 7,650 Air 10,650 South African Military Health Service 8,300)

**RESERVE 15,050** (Army 12,250 Navy 850 Air 850 South African Military Health Service Reserve 1,100)

## ORGANISATIONS BY SERVICE

### Space

#### EQUIPMENT BY TYPE

SATELLITES • ISR 1 *Kondor-E*

## Army 40,600

### FORCES BY ROLE

Regt are bn sized. A new army structure is planned with 3 mixed regular/reserve divisions (1 mechanised, 1 motorised and 1 contingency) comprising 12 brigades (1 armoured, 1 mechanised, 7 motorised, 1 airborne, 1 air-landed and 1 sea landed)

### COMMAND

2 bde HQ

### SPECIAL FORCES

2 SF regt(-)

### MANOEUVRE

#### Reconnaissance

1 armd recce regt

#### Armoured

1 tk regt(-)

#### Mechanised

2 mech inf bn

#### Light

8 mot inf bn

1 lt inf bn

#### Air Manoeuvre

1 AB bn

1 air mob bn

#### Amphibious

1 amph bn

### COMBAT SUPPORT

1 arty regt

1 ADA regt

1 engr regt

3 sigs regt

### COMBAT SERVICE SUPPORT

1 engr spt regt

1 construction regt

**Reserve 12,250 reservists (under strength)**

### FORCES BY ROLE

#### MANOEUVRE

##### Reconnaissance

3 armd recce regt

##### Armoured

4 tk regt

##### Mechanised

6 mech inf bn

**Light**

14 mot inf bn  
3 lt inf bn (converting to mot inf)

**Air Manoeuvr**

1 AB bn  
1 air mob bn

**Amphibious**

1 amph bn

**COMBAT SUPPORT**

7 arty regt  
5 AD regt  
2 engr regt

**EQUIPMENT BY TYPE**

**MBT** 24 *Olifant* 2 (133 *Olifant* 1B in store)

**RECCE** 50 *Rooikat*-76 (126 in store)

**AIFV** 534 *Ratel*-20/*Ratel*-60/*Ratel*-90

**PPV** 810: 370 *Casspir*; 440 *Mamba*

**ARTY** 1,255

**SP 155mm** 2 G-6 (41 in store)

**TOWED 155mm** 6 G-5 (66 in store)

**MRL 127mm** 6 *Valkiri* Mk II MARS *Bataleur*; (26 *Valkiri* Mk I and 19 *Valkiri* Mk II in store)

**MOR** 1,226: **81mm** 1,190 (incl some SP on *Casspir*); **120mm** 36

**AT**

**MSL** • **MANPATS** ZT-3 *Swift*; *Milan* ADT/ER

**RCL 106mm** M40A1 (some SP)

**AD**

**MANPAD** *Starstreak*

**GUNS** 76

**SP 23mm** (36 *Zumlac* in store)

**TOWED 35mm** 40 GDF-002

**RADAR** • **LAND** 6: 4 ESR 220 *Thutlwa*; 2 Thales *Page*

**ARV** *Gemsbok*

**VLB** *Leguan*

**UAV** • **ISR** • **Light** up to 4 *Vulture*

**Navy 7,650**

Fleet HQ and Naval base located at Simon's Town; Naval stations located at Durban and Port Elizabeth

**EQUIPMENT BY TYPE**

**SUBMARINES** • **TACTICAL** • **SSK** 3 *Heroine* (Type-209) with 8 533mm TT with AEW SUT 264 HWT (of which one cyclically in reserve/refit)

**PRINCIPAL SURFACE COMBATANTS** • **FRIGATES** 4:

**FFGHM** 4 *Valour* (MEKO A200) with 2 quad Inchr with MM-40 *Exocet* AShM (upgrade to Block III planned); 2 16-cell VLS with *Umkhonto*-IR SAM, 1 76mm gun (capacity 1 *Super Lynx* 300 hel)

**PATROL AND COASTAL COMBATANTS** 6

**PCC** 3 *Warrior* (ISR *Reshef*) with 1 76mm gun

**PB** 3 *Tobie*

**MINE WARFARE** • **MINE COUNTERMEASURES** 2

**MHC** 2 *River* (GER *Navors*) (limited operational roles; training and dive support); (additional vessel in reserve)

**AMPHIBIOUS** • **LCU** 6 *Lima*

**LOGISTICS AND SUPPORT** 8

**AORH** 1 *Drakensberg* (capacity 4 LCU; 100 troops)

**AGHS** 1 *Protea* (UK *Hecla*)

**YTM** 6

**Maritime Reaction Squadron****FORCES BY ROLE****MANOEUVRE****Amphibious**

1 mne patrol gp

1 diving gp

1 mne boarding gp

**COMBAT SERVICE SUPPORT**

1 spt gp

**Air Force 10,650**

Air Force HQ, Pretoria, and 4 op gps

Command & Control: 2 Airspace Control Sectors, 1 Mobile Deployment Wg, 1 Air Force Command Post

**FORCES BY ROLE****FIGHTER/GROUND ATTACK**

1 sqn with *Gripen C/D* (JAS-39C/D)

**GROUND ATTACK/TRAINING**

1 sqn with *Hawk* Mk120\*

**TRANSPORT**

1 (VIP) sqn with B-737 BBJ; Cessna 550 *Citation* II; *Falcon* 50; *Falcon* 900;

1 sqn with C-47TP

2 sqn with Beech 200/300 *King Air*; C-130B/BZ *Hercules*; C-212; Cessna 208 *Caravan*

**ATTACK HELICOPTER**

1 (cbt spt) sqn with AH-2 *Rooivalk*

**TRANSPORT HELICOPTER**

4 (mixed) sqn with AW109; BK-117; *Oryx*

**EQUIPMENT BY TYPE**

**AIRCRAFT** 50 combat capable

**FGA** 26: 17 *Gripen* C (JAS-39C); 9 *Gripen* D (JAS-39D)

**TPT** 34: **Medium** 7: 2 C-130B *Hercules*; 5 C-130BZ

*Hercules*; **Light** 23: 3 Beech 200C *King Air*; 1 Beech 300

*King Air*; 3 C-47TP (maritime); 2 C-212-200 *Aviocar*; 1

C-212-300 *Aviocar*; 10 Cessna 208 *Caravan*; 2 Cessna 550

*Citation* II; 1 PC-12; **PAX** 4: 1 B-737BBJ; 2 *Falcon* 50; 1

*Falcon* 900

**TRG** 59: 24 *Hawk* Mk120\*; 35 PC-7 Mk II *Astra*

**HELICOPTERS**

**ATK** 11 AH-2 *Rooivalk*

**MRH** 4 *Super Lynx* 300

**TPT** 71: **Medium** 36 *Oryx*; **Light** 35: 27 AW109; 8 BK-117

**MSL** • **AAM** • **IIR** IRIS-T

**BOMBS** • **Laser-guided** GBU-12 *Paveway* II

**Ground Defence****FORCES BY ROLE****MANOEUVRE****Other**

12 sy sqn (SAAF regt)

**EQUIPMENT BY TYPE**

2 Radar (static) located at Ellisras and Mariepskop; 2 (mobile long-range); 4 (tactical mobile). Radar air control sectors located at Pretoria, Hoedspruit

**South African Military Health Service** 8,200; €1,100 reservists (total 9,300)

## Department of Agriculture, Fisheries and Forestry

### EQUIPMENT BY TYPE

#### PATROL AND COASTAL COMBATANTS 4

PSO 1 *Sarah Baartman*

PBO 3 *Lilian Nyogi*

LOGISTICS AND SUPPORT • AGE 2: 1 *Africana*; 1 *Ellen Khuzwayo*

## Department of Environmental Affairs

### EQUIPMENT BY TYPE

LOGISTICS AND SUPPORT • AGOS 1 *S A Agulhas II* (used for Antarctic survey)

## Cyber

South Africa published a National Cybersecurity Policy Framework in 2011. Since then, the defence-intelligence branch of the Department of Defence has been tasked to develop a comprehensive cyber-warfare strategy by early 2016 and a cyber-warfare implementation plan, as well as to establish a Cyber Command Centre Headquarters, to be fully operational by FY2018/19. A Cyber Security Incident Response Team (CSIRT) operates under the State Security Agency.

## DEPLOYMENT

### DEMOCRATIC REPUBLIC OF THE CONGO

UN • MONUSCO • *Operation Mistral* 1,326; 7 obs; 1 inf bn; 1 atk hel sqn; 1 hel sqn; 1 engr coy

### MOZAMBIQUE CHANNEL

Navy • 1 FFGHM

### SUDAN

UN • UNAMID • *Operation Cordite* 798; 10 obs; 1 inf bn

## South Sudan SSD

South Sudanese Pound ssp		2014	2015	2016
GDP	ssp	42.2bn	38bn	
	US\$	14.3bn	12.9bn	
<i>per capita</i>	US\$	1,256	1,083	
Growth	%	2.9	-5.3	
Inflation	%	1.7	41.1	
Def bdgt [a]	ssp	3.08bn	3.97bn	4.38bn
	US\$	1.04bn	1.35bn	
FMA (US)	US\$	0.2m		
US\$1=ssp		2.95	2.95	

[a] Security and law-enforcement spending

Population 12,042,910

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	23.1%	5.9%	4.7%	3.7%	12.2%	1.2%
Female	22.2%	5.3%	4.2%	3.6%	13.0%	0.9%

## Capabilities

South Sudan's civil war continues, creating insecurity and hardship for the civilian population, and impeding any economic progress. Political and ethnic factionalism remains high, while there remain security concerns stemming from the relationship with Sudan. President Salva Kiir has attempted to consolidate his control over the military, but the ensuing split in the armed forces (after fighting began when Vice-President Riek Machar was accused of a coup attempt) has significantly complicated DDR and SSR regimes. Future reform initiatives are unlikely to be solely focused on defence transformation and capability development; developing institutional capacity and accountability will likely also become a key task. There is an EU arms embargo on South Sudan, but amid concern that weapons were being stored – even after the peace deal of August 2015 – there was a debate over whether to attempt to secure a UN arms embargo.

**ACTIVE 185,000 (Army 185,000)**

## ORGANISATIONS BY SERVICE

**Army** €185,000

### FORCES BY ROLE

3 military comd

### MANOEUVRE

**Light**

8 inf div

### COMBAT SUPPORT

1 engr corps

### EQUIPMENT BY TYPE

MBT 80+: some T-55+; 80 T-72AV+

APC (W) *Streit Typhoon*; *Streit Cougar*; *Mamba*

ARTY 69+

SP 122mm 2S1; 152mm 2S3

TOWED 130mm Some M-46

MRL 122mm BM-21; 107mm Type-63

MOR 82mm; 120mm Type-55 look-alike

### AT

MSL • *MANPATS* HJ-73; 9K115 *Metis* (AT-7 *Saxhorn*)

RCL 73mm SPG-9 (with SSLA)

### AD

SAM • *MANPAD* 9K32 *Strela-2* (SA-7 *Grail*)†; 9K310 *Igla-1* (SA-16 *Gimlet*)

GUNS 14.5mm ZPU-4; 23mm ZU-23-2; 37mm Type-65/74

## Air Force

### EQUIPMENT BY TYPE

AIRCRAFT • TPT • **Light** 1 *Beech* 1900

### HELICOPTERS

ATK 4+ *Mi-24 Hind*

MRH 9 *Mi-17 Hip* H

TPT 3: **Medium** 1 *Mi-172* (VIP); **Light** 2 *AW109* (civ livery)

## FOREIGN FORCES

All UNMISS, unless otherwise indicated

**Australia** 17; 1 obs

**Bangladesh** 482; 6 obs; 1 engr coy; 1 rvn coy  
**Benin** 2; 1 obs  
**Bhutan** 2  
**Bolivia** 3; 3 obs  
**Brazil** 4; 5 obs  
**Cambodia** 147; 4 obs; 1 fd hospital  
**Canada** 5; 5 obs  
**China, People's Republic of** 1,052; 3 obs; 1 inf bn; 1 engr coy; 1 fd hospital  
**Denmark** 11; 3 obs  
**Egypt** 1; 3 obs  
**El Salvador** 1; 2 obs  
**Ethiopia** 1,263; 10 obs; 3 inf bn(-)  
**Fiji** 4; 2 obs  
**Germany** 7; 11 obs  
**Ghana** 312; 8 obs; 1 inf bn(-)  
**Guatemala** 4; 2 obs  
**Guinea** 1; 1 obs  
**India** 2,283; 11 obs; 2 inf bn; 1 engr coy; 1 fd hospital  
**Indonesia** 1; 3 obs  
**Japan** 272; 1 engr coy  
**Jordan** 4; 3 obs  
**Kenya** 742; 12 obs; 1 inf bn  
**Korea, Republic of** 273; 2 obs; 1 engr coy  
**Kyrgyzstan** 2; 1 obs  
**Mali** 3 obs  
**Moldova** 3 obs  
**Mongolia** 863; 7 obs; 1 inf bn  
**Myanmar** 2  
**Namibia** 3; 1 obs  
**Nepal** 1,576; 12 obs; 2 inf bn  
**Netherlands** 6; 4 obs  
**New Zealand** 1; 2 obs  
**Nigeria** 2; 3 obs  
**Norway** 12; 5 obs  
**Papua New Guinea** 2 obs  
**Paraguay** 2 obs  
**Peru** 2; 2 obs  
**Poland** 2 obs  
**Romania** 2; 5 obs  
**Russia** 4; 2 obs  
**Rwanda** 1,842; 13 obs; 2 inf bn  
**Senegal** 1; 2 obs  
**Sri Lanka** 174; 4 obs; 1 hel sqn; 1 fd hospital  
**Sweden** 1; 1 obs  
**Switzerland** 2; 1 obs  
**Tanzania** 4; 4 obs  
**Timor-Leste** 3 obs  
**Togo** 1  
**Uganda** 2; 3,000 (Ugandan Army)  
**Ukraine** 1; 1 obs  
**United Kingdom** 3  
**United States** 6  
**Vietnam** 2 obs

**Yemen** 6; 9 obs  
**Zambia** 3; 3 obs  
**Zimbabwe** 2 obs

## Sudan SDN

Sudanese Pound sdg		2014	2015	2016
GDP	sdg	427bn	517bn	
	US\$	74.8bn	84.3bn	
<i>per capita</i>	US\$	2,005	2,194	
Growth	%	3.6	3.5	
Inflation	%	36.9	19.8	
Def exp	sdg	n.k.		
	US\$	n.k.		
US\$1=sdg		5.71	6.14	

**Population** 36,108,853

**Ethnic and religious groups:** Muslim 70% mainly in north; Christian 10% mainly in south; Arab 39% mainly in north

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	20.4%	5.8%	4.8%	4.0%	13.7%	1.8%
Female	19.8%	5.4%	4.5%	3.9%	14.5%	1.5%

## Capabilities

The primary focus of the military remains ongoing tensions with South Sudan and counter-insurgency, with continued clashes with rebels in the south of the country including a number of reported airstrikes. Though the Sudanese military has a limited regional power-projection capability it made a contribution to the 2015 Saudi-led intervention in Yemen. An initial deployment of three Su-24 *Fencer* ground-attack aircraft to Saudi Arabia in symbolic support of the air campaign was later followed by the arrival in October of a ground-forces contingent in Aden. Sudan retains large armed forces with significant equipment holdings of primarily both ageing and more modern Russian and Chinese types, making it relatively well equipped by regional standards. This is complemented by the indigenous Military Industry Corporation's ability to manufacture ammunition, small arms and light vehicles.

**ACTIVE 244,300 (Army 240,000 Navy 1,300 Air 3,000) Paramilitary 20,000**

*Conscript liability* 2 years for males aged 18–30

**RESERVE NIL Paramilitary 85,000**

## ORGANISATIONS BY SERVICE

**Army** €240,000

### FORCES BY ROLE

#### SPECIAL FORCES

5 SF coy

#### MANOEUVRE

Reconnaissance

1 indep recce bde

**Armoured**

1 armd div

**Mechanised**

1 mech inf div

1 indep mech inf bde

**Light**

11+ inf div

6 indep inf bde

**Air Manoeuvre**

1 AB div

**Other**

1 (Border Guard) sy bde

**COMBAT SUPPORT**

3 indep arty bde

1 engr div (9 engr bn)

**EQUIPMENT BY TYPE****MBT** 465: 20 M60A3; 60 Type-59/Type-59D; 305 T-54/T-55; 70 T-72M1; 10 *Al-Bashier* (Type-85-IIM)**LT TK** 115: 70 Type-62; 45 Type-63**RECCE** 248: 6 AML-90; 70 BRDM-1/2; 50-80 *Ferret*; 42 M1114 HMMWV; 30-50 *Saladin***AIFV** 152: 135 BMP-1/2; 10 BTR-3; 7 BTR-80A**APC** 412**APC (T)** 66: 20-30 BTR-50; 36 M113**APC (W)** 346: 10 BTR-70M *Kobra* 2; 50-80 BTR-152; 20 OT-62; 50 OT-64; 10 Type-92 (reported); 55-80 V-150 *Commando*; 96 *Walid***ARTY** 860+**SP** 66: **122mm** 56 2S1; **155mm** 10 Mk F3**TOWED** 128+: **105mm** 20 M101; **122mm** 21+: 21 D-30; D-74; M-30; **130mm** 75 M-46/Type-59-I; **155mm** 12 M114A1**MRL** 666+: **107mm** 477 Type-63; **122mm** 188: 120 BM-21; 50 *Saqr*; 18 Type-81; **302mm** 1+ WS-1**MOR** **81mm**; **82mm**; **120mm** AM-49; M-43**AT** • **MSL** • **MANPATS** *Swingfire*; 9K11 *Malyutka* (AT-3 *Sagger*); HJ-8**RCL** **106mm** 40 M40A1**GUNS** 40+: 40 **76mm** ZIS-3/**100mm** M-1944; **85mm** D-44**AD** • **SAM** • **MANPAD** 9K32 *Strela-2* (SA-7 *Grail*) ‡**GUNS** 996+**SP** 20: **20mm** 8 M163 *Vulcan*; 12 M3 VDAA**TOWED** 946+: 740+ **14.5mm** ZPU-2/**14.5mm** ZPU-4/**37mm** Type-63/**57mm** S-60/**85mm** M-1944; **20mm** 16 M167 *Vulcan*; **23mm** 50 ZU-23-2; **37mm** 80 M-1939; (30 M-1939 unserviceable); **40mm** 60**RADAR** • **LAND RASIT** (veh, arty)**Navy 1,300****EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 4**PBR** 4 *Kurmuk***AMPHIBIOUS** • **LANDING CRAFT** 7**LCT** 2 *Sobat***LCVP** 5**LOGISTICS AND SUPPORT** 2**AG** 1**AWT** 1 *Baraka***Air Force 3,000****FORCES BY ROLE****FIGHTER**2 sqn with MiG-29SE/UB *Fulcrum***GROUND ATTACK**1 sqn with A-5 *Fantan*1 sqn with Su-25/Su-25UB *Frogfoot***TRANSPORT**Some sqn with An-26 *Curl*\* (modified for bombing); An-30 *Clank*; An-32 *Cline*; An-72 *Coaler*; An-74TK-200/300; C-130H *Hercules*; Il-76 *Candid*; Y-81 VIP unit with *Falcon* 20F; *Falcon* 50; *Falcon* 900; F-27; Il-62M *Classic***TRAINING**1 sqn with K-8 *Karakorum*\***ATTACK HELICOPTER**2 sqn with Mi-24/Mi-24P/Mi-24V/Mi-35P *Hind***TRANSPORT HELICOPTER**2 sqn with Mi-8 *Hip*; Mi-17 *Hip* H; Mi-171**AIR DEFENCE**5 bty with S-75 *Dvina* (SA-2 *Guideline*) ‡**EQUIPMENT BY TYPE****AIRCRAFT** 63 combat capable**FTR** 22: 20 MiG-29SE *Fulcrum*; 2 MiG-29UB *Fulcrum***FGA** 4 Su-24 *Fencer***ATK** 26: 15 A-5 *Fantan*; 9 Su-25 *Frogfoot*; 2 Su-25UB *Frogfoot* B**ISR** 2 An-30 *Clank***TPT** 23: **Heavy** 1 Il-76 *Candid*; **Medium** 6: 4 C-130H *Hercules*; 2 Y-8; **Light** 12: 1 An-26 *Curl*\* (modified for bombing); 2 An-32 *Cline*; 2 An-72 *Coaler*; 4 An-74TK-200; 2 An-74TK-300; 1 F-27 (VIP); **PAX** 4: 1 *Falcon* 20F (VIP); 1 *Falcon* 50 (VIP); 1 *Falcon* 900; 1 Il-62M *Classic***TRG** 15: 12 K-8 *Karakorum*\*; 3 UTVA-75**HELICOPTERS****ATK** 40: 25 Mi-24 *Hind*; 2 Mi-24P *Hind*; 7 Mi-24V *Hind* E; 6 Mi-35P *Hind***MRH** ε5 Mi-17 *Hip* H**TPT** 24: **Medium** 23: 21 Mi-8 *Hip*; 2 Mi-171; **Light** 1 Bell 205**AD** • **SAM** • **TOWED**: 90 S-75 *Dvina* (SA-2 *Guideline*) ‡**MSL** • **AAM** • **IR** R-3 (AA-2 *Atoll*) ‡; R-60 (AA-8 *Aphid*); R-73 (AA-11 *Archer*); **IR/SARH** R-23/24 (AA-7 *Apex*); **ARH** R-77 (AA-12 *Adder*)**Paramilitary 20,000****Popular Defence Force** 20,000 (org in bn 1,000); 85,000 reservists (total 102,500)

mil wing of National Islamic Front

**DEPLOYMENT****SAUDI ARABIA***Operation Restoring Hope* 3 Su-24 *Fencer***YEMEN***Operation Restoring Hope* 950; 1 mech BG; BTR-70M *Kobra* 2



## FOREIGN FORCES

All UNAMID, unless otherwise indicated

**Bangladesh** 370; 7 obs; 1 inf coy  
**Benin** UNISFA 2 obs  
**Bhutan** UNISFA 1  
**Bolivia** 2 obs  
**Burkina Faso** 806; 5 obs; 1 inf bn • UNISFA 1 obs  
**Burundi** 1; 5 obs  
**Cambodia** 2 obs • UNISFA 3 obs  
**China, People's Republic of** 231; 1 engr coy  
**Ecuador** 1; 2 obs; • UNISFA 1 obs  
**Egypt** 865; 19 obs; 1 inf bn  
**Ethiopia** 2,522; 11 obs; 3 inf bn • UNISFA 4,367; 79 obs; 1 recee coy; 1 armd coy; 1 mech inf bn; 2 inf bn; 1 hel sqn; 2 arty coy; 1 engr coy; 1 sigs coy; 1 fd hospital  
**Gambia** 213; 1 inf coy  
**Germany** 8  
**Ghana** 19; 4 obs • UNISFA 3; 2 obs  
**Guatemala** UNISFA 1; 1 obs  
**India** UNISFA 1; 2 obs  
**Indonesia** 810; 7 obs; 1 inf bn • UNISFA 1; 1 obs  
**Iran** 4 obs  
**Jordan** 15; 4 obs  
**Kenya** 112; 4 obs; 1 MP coy  
**Korea, Republic of** 2  
**Kyrgyzstan** 2 obs • UNISFA 1 obs  
**Lesotho** 2 obs  
**Malaysia** 11 • UNISFA 1 obs  
**Malawi** UNISFA 1  
**Mali** 1 obs  
**Mongolia** 70; 1 fd hospital  
**Namibia** 6; 3 obs • UNISFA 2; 2 obs  
**Nepal** 365; 9 obs; 1 SF coy; 1 inf coy  
**Nigeria** 928; 5 obs; 1 inf bn • UNISFA 1  
**Pakistan** 2,121; 9 obs; 2 inf bn; 2 engr coy; 1 med pl  
**Peru** 1; 2 • UNISFA 1 obs  
**Russia** UNISFA 1  
**Rwanda** 2,443; 5 obs; 3 inf bn • UNISFA 1; 1 obs  
**Senegal** 805; 1 inf bn  
**Sierra Leone** 2; 8 obs • UNISFA 1 obs  
**South Africa** 798; 10 obs; 1 inf bn  
**Sri Lanka** UNISFA 1; 5 obs  
**Tanzania** 813; 2 obs; 1 inf bn • UNISFA 2 obs  
**Thailand** 9; 4 obs  
**Togo** 3; 4 obs  
**Yemen, Republic of** 20; 23 obs • UNISFA 2; 4 obs  
**Zambia** 7; 5 obs • UNISFA 1  
**Zimbabwe** 2; 4 obs • UNISFA 1; 2 obs

## Tanzania TZA

Tanzanian Shilling sh		2014	2015	2016
GDP	sh	79.4tr	89.4tr	
	US\$	48.1bn	46.2bn	
<i>per capita</i>	US\$	1,029	969	
Growth	%	7.0	6.9	
Inflation	%	6.1	5.6	
Def exp	sh	749bn		
	US\$	454m		
Def bdgt [a]	sh	651bn	820bn	1.11tr
	US\$	394m	424m	
FMA (US)	US\$	0.2m		
US\$1=sh		1,651.99	1,934.34	

[a] Excludes expenditure on Ministry of Defence administration and National Service

Population 51,045,882

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	22.4%	5.4%	4.4%	3.8%	12.5%	1.3%
Female	22.0%	5.3%	4.4%	3.9%	12.9%	1.7%

## Capabilities

Tanzania's ability to revamp its ageing equipment inventory is hampered by a limited budget. This reflects a relatively benign security environment, although there remain concerns about instability in the DRC, piracy and internal stability. A buoyant relationship with key trading partner China has led to a series of procurement programmes as well as training contacts. A small tactical-transport fleet provides some intra-theatre mobility but otherwise there is limited ability to project power independently beyond its own territory. In recent years, Tanzania has regularly taken part in multinational exercises in Africa and provided some training assistance to other African forces. There are established training relationships with other external armed forces, including the US, and also for capacity-building assistance: in 2014, Washington funded the completion of a new building for the defence-intelligence organisation. Tanzania's contribution to the UN's Force Intervention Brigade in the eastern DRC, notably its special forces, will have provided many lessons for force development.

**ACTIVE 27,000 (Army 23,000 Navy 1,000 Air 3,000) Paramilitary 1,400**

*Conscript liability* National service reintroduced in 2012 for those aged 18–23. Three months basic military training combined with social service.

**RESERVE 80,000 (Joint 80,000)**

## ORGANISATIONS BY SERVICE

**Army €23,000**

**FORCES BY ROLE****SPECIAL FORCES**

1 SF unit

**MANOEUVRE****Armoured**

1 tk bde

**Light**

5 inf bde

**COMBAT SUPPORT**

4 arty bn

1 mor bn

2 AT bn

2 ADA bn

1 engr regt (bn)

**COMBAT SERVICE SUPPORT**

1 log gp

**EQUIPMENT BY TYPE†****MBT** 45: 30 T-54/T-55; 15 Type-59G**LT TK** 57+: 30 *Scorpion*; 25 Type-62; 2+ Type-63A**RECCE** 10 BRDM-2**APC (W)** 14: €10 BTR-40/BTR-152; 4 Type-92**ARTY** 344+**TOWED** 130: **122mm** 100: 20 D-30; 80 Type-54-1 (M-30);**130mm** 30 Type-59-I**GUN/MOR** **120mm** 3+ Type-07PA**MRL** 61+: **122mm** 58 BM-21; **300mm** 3+ A100**MOR** 150: **82mm** 100 M-43; **120mm** 50 M-43**AT • RCL** **75mm** Type-52 (M20)**GUNS** **85mm** 75 Type-56 (D-44)**Navy** €1,000**EQUIPMENT BY TYPE****PATROL AND COASTAL COMBATANTS** 10**PHT** 2 *Huchuan* each with 2 533mm ASTT**PB** 8: 2 *Mwitongo*; 2 *Ngunguri*; 2 *Shanghai II* (PRC); 2 VT 23m**AMPHIBIOUS** 3LCU 2 *Yuchin*LCT 1 *Kasa***Air Defence Command** €3,000**FORCES BY ROLE****FIGHTER**3 sqn with F-7/FT-7; FT-5; K-8 *Karakorum*\***TRANSPORT**1 sqn with Cessna 404 *Titan*; DHC-5D *Buffalo*; F-28 *Fellowship*; F-50; Gulfstream G550; Y-12 (II)**TRANSPORT HELICOPTER**1 sqn with Bell 205 (AB-205); Bell 412EP *Twin Huey***EQUIPMENT BY TYPE†****AIRCRAFT** 17 combat capable**FTR** 11: 9 F-7TN; 2 FT-7TN**ISR** 1 SB7L-360 *Seeker***TPT** 12: **Medium** 2 Y-8; **Light** 7: 2 Cessna 404 *Titan*; 3DHC-5D *Buffalo*; 2 Y-12(II); **PAX** 3: 1 F-28 *Fellowship*; 1

F-50; 1 Gulfstream G550

**TRG** 9: 3 FT-5 (JJ-5); 6 K-8 *Karakorum*\***HELICOPTERS****MRH** 1 Bell 412EP *Twin Huey***TPT • Light** 1 Bell 205 (AB-205)**AD****SAM**SP 2K12 *Kub* (SA-6 *Gainful*)†; S-125 *Pechora* (SA-3 *Goa*)†**MANPAD** 9K32 *Strela-2* (SA-7 *Grail*)‡**GUNS** 200**TOWED** **14.5mm** 40 ZPU-2/ZPU-4†; **23mm** 40 ZU-23;**37mm** 120 M-1939**Paramilitary** 1,400 active**Police Field Force** 1,400

18 sub-units incl Police Marine Unit

**Air Wing****AIRCRAFT • TPT • Light** 1 Cessna U206 *Stationair***HELICOPTERS****TPT • Light** 4: 2 Bell 206A *Jet Ranger* (AB-206A);2 Bell 206L *Long Ranger***TRG** 2 Bell 47G (AB-47G)/Bell 47G2**Marine Unit** 100**PATROL AND COASTAL COMBATANTS • MISC BOATS/CRAFT** some boats**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 1

**CÔTE D'IVOIRE**

UN • UNOCI 2; 2 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 1,265; 1 SF coy; 1 inf bn; 1 arty coy

**LEBANON**

UN • UNIFIL 158; 2 MP coy

**SOUTH SUDAN**

UN • UNMISS 4; 4 obs

**SUDAN**

UN • UNAMID 813; 2 obs; 1 inf bn

UN • UNISFA 2 obs

**Togo TGO**

CFA Franc BCEAO fr	2014	2015	2016
<b>GDP</b>	fr 2.27tr	2.45tr	
	US\$ 4.59bn	4.15bn	
<i>per capita</i>	US\$ 657	578	
<b>Growth</b>	% 5.0	5.4	
<b>Inflation</b>	% 0.2	1.9	
<b>Def bdg</b>	fr 42.5bn	41.8bn	
	US\$ 86m	71m	
<b>US\$1=fr</b>	493.68	589.90	

**Population** 7,552,318

Age	0–14	15–19	20–24	25–29	30–64	65 plus
<b>Male</b>	20.3%	5.1%	4.7%	4.2%	13.9%	1.4%
<b>Female</b>	20.2%	5.1%	4.7%	4.3%	14.3%	1.9%

## Capabilities

The Togolese armed forces are adequate for the internal-security roles for which they might be used. Equipment, though limited, is generally well maintained and serviceable. French forces from Senegal in 2015 trained troops for deployment on the MINUSMA mission in combat as well as counter-IED specialisms, while the French and US navies have in the past provided maritime-security training. Training was also provided under the US African Contingency Operations Training and Assistance programme.

**ACTIVE 8,550 (Army 8,100 Navy 200 Air 250)**

### Paramilitary 750

*Conscript liability* Selective conscription, 2 years

## ORGANISATIONS BY SERVICE

### Army 8,100+

#### FORCES BY ROLE

##### MANOEUVRE

###### Reconnaissance

1 arm'd recce regt

###### Light

2 cbd arms regt

2 inf regt

1 rapid reaction force

###### Air Manoeuvre

1 cdo/para regt (3 cdo/para coy)

###### Other

1 (Presidential Guard) gd regt (1 gd bn, 1 cdo bn, 2 indep gd coy)

#### COMBAT SUPPORT

1 spt regt (1 fd arty bty, 2 ADA bty, 1 engr/log/tpt bn)

#### EQUIPMENT BY TYPE

**MBT** 2 T-54/T-55

**LT TK** 9 *Scorpion*

**RECCE** 91: 3 AML-60; 7 AML-90; 30 *Bastion Patsas*; 36 EE-9 *Cascavel*; 4 M3A1; 6 M8; 3 M20; 2 VBL

**AIFV** 20 BMP-2

**APC (W)** 30 UR-416

**ARTY** 30

**SP 122mm** 6

**TOWED 105mm** 4 HM-2

**MOR 82mm** 20 M-43

**AT • RCL 75mm** Type-52 (M20)/Type-56; **82mm** Type-65 (B-10)

**GUNS 57mm** 5 ZIS-2

**AD • GUNS • TOWED** 43 **14.5mm** 38 ZPU-4; **37mm** 5 M-1939

### Navy €200 (incl Marine Infantry unit)

#### EQUIPMENT BY TYPE

**PATROL AND COASTAL COMBATANTS** 3

**PBF** 1 *Agou* (RPB 33)

**PB** 2 *Kara* (FRA *Esterel*)

## Air Force 250

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with *Alpha Jet*\*; EMB-326G\*

#### TRANSPORT

1 sqn with Beech 200 *King Air*

1 VIP unit with DC-8; F-28-1000

#### TRAINING

1 sqn with TB-30 *Epsilon*\*

#### TRANSPORT HELICOPTER

1 sqn with SA315 *Lama*; SA316 *Alouette* III; SA319 *Alouette* III

#### EQUIPMENT BY TYPE†

**AIRCRAFT** 10 combat capable

**TPT** 5: **Light** 2 Beech 200 *King Air*; **PAX** 3: 1 DC-8; 2 F-28-1000 (VIP)

**TRG** 10: 3 *Alpha Jet*\*; 4 EMB-326G\*; 3 TB-30 *Epsilon*\*

#### HELICOPTERS

**MRH** 4: 2 SA315 *Lama*; 1 SA316 *Alouette* III; 1 SA319 *Alouette* III

**TPT • Medium** (1 SA330 *Puma* in store)

### Paramilitary 750

#### Gendarmerie 750

Ministry of Interior

#### FORCES BY ROLE

2 reg sections

#### MANOEUVRE

##### Other

1 (mobile) paramilitary sqn

## DEPLOYMENT

### CÔTE D'IVOIRE

UN • UNOCI 471; 7 obs; 1 inf bn

### LIBERIA

UN • UNMIL 1; 2 obs

### MALI

UN • MINUSMA 935; 1 inf bn; 1 fd hospital

### SOUTH SUDAN

UN • UNMISS 1

### SUDAN

UN • UNAMID 3; 4 obs

### WESTERN SAHARA

UN • MINURSO 1 obs

## Uganda UGA

Ugandan Shilling Ush		2014	2015	2016
GDP	Ush	71.8tr	79.8tr	
	US\$	27.6bn	24.9bn	
<i>per capita</i>	US\$	713	625	
Growth	%	4.8	5.2	
Inflation	%	4.6	5.7	
Def bdtg	Ush	1.05tr	1.16tr	1.64tr
	US\$	402m	362m	
FMA (US)	US\$	0.2m	0.2m	0.2m
US\$1=Ush		2,599.75	3,200.47	

Population 37,101,745

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	24.2%	5.7%	4.8%	3.8%	10.3%	0.9%
Female	24.3%	5.8%	4.9%	3.9%	10.4%	1.1%

## Capabilities

Uganda's armed forces are relatively large and well equipped. They have, in recent years, seen some advanced capability acquisitions, boosting military capacity, particularly in the air force. Forces have deployed to Somalia as part of AMISOM since 2007, and in that time will have gained valuable combat experience in terms of planning and tactics, such as in counter-IED and urban patrolling on foot and with armour. A number of years targeting the Lord's Resistance Army has also ensured experience in more austere counter-insurgency tactics. Uganda is one of the largest contributors to the East Africa Standby Force, having pledged a motorised infantry battalion and special police units. There is regular training, and the country has a number of training facilities that are used by international partners as well as Ugandan troops. US training support to Uganda's forces focused in 2015 on trades including information operations, medical training and combat training for forces rotating into AMISOM.

**ACTIVE 45,000** (Ugandan People's Defence Force 45,000) Paramilitary 1,800

**RESERVE 10,000**

## ORGANISATIONS BY SERVICE

**Ugandan People's Defence Force** €40,000–45,000

### FORCES BY ROLE

#### MANOEUVRE

##### Armoured

1 armd bde

##### Light

1 cdo bn

5 inf div (total: 16 inf bde)

##### Other

1 (Special Forces Command) mot bde

#### COMBAT SUPPORT

1 arty bde

2 AD bn

### EQUIPMENT BY TYPE†

MBT 239: 185 T-54/T-55; 10 T-72; 44 T-90S

LT TK €20 PT-76

RECCE 46: 40 *Eland*; 6 *Ferret*

AIFV 31 BMP-2

APC 131

APC (W) 19: 15 BTR-60; 4 OT-64

PPV 112: 20 *Buffel*; 42 *Casspir*; 40 *Mamba*; 10 RG-33L

ARTY 333+

SP 155mm 6 ATMOS 2000

TOWED 243+: 122mm M-30; 130mm 221; 155mm 22: 4 G-5; 18 M-839

MRL 6+: 107mm (12-tube); 122mm 6+: BM-21; 6 RM-70

MOR 78+: 81mm L16; 82mm M-43; 120mm 78 *Soltam*

AD

### SAM

TOWED 4 S-125 *Pechora* (SA-3 *Goa*)

MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K310 *Igla-1* (SA-16 *Gimlet*)

GUNS • TOWED 20+: 14.5mm ZPU-1/ZPU-2/ZPU-4; 37mm 20 M-1939

ARV T-54/T-55 reported

VLB MTU reported

MW *Chubby*

## Air Wing

### FORCES BY ROLE

#### FIGHTER/GROUND ATTACK

1 sqn with MiG-21bis *Fishbed*; MiG-21U/UM *Mongol* A/B; Su-30MK2

#### TRANSPORT

1 unit with Y-12

1 VIP unit with Gulfstream 550; L-100-30

#### TRAINING

1 unit with L-39 *Albatros*†\*

#### ATTACK/TRANSPORT HELICOPTER

1 sqn with Bell 206 *Jet Ranger*; Bell 412 *Twin Huey*; Mi-17 *Hip H*; Mi-24 *Hind*; Mi-172 (VIP)

### EQUIPMENT BY TYPE

AIRCRAFT 16 combat capable

FGA 13: 5 MiG-21bis *Fishbed*; 1 MiG-21U *Mongol* A;

1 MiG-21UM *Mongol* B; 6 Su-30MK2

TPT 6: Medium 1 L-100-30; Light 4: 2 Cessna 208B; 2 Y-12; PAX 1 Gulfstream 550

TRG 3 L-39 *Albatros*†\*

### HELICOPTERS

ATK 1 Mi-24 *Hind* (2 more non-op)

MRH 5: 2 Bell 412 *Twin Huey*; 3 Mi-17 *Hip H* (1 more non-op)

TPT 3: Medium 1 Mi-172 (VIP); Light 2 Bell 206A *Jet Ranger*

### MSL

AAM • IR R-73 (AA-11 *Archer*); SARH R-27 (AA-10

*Alamo*); ARH R-77 (AA-12 *Adder*) (reported)

ARM Kh-31P (AS-17A *Krypton*) (reported)

**Paramilitary** €1,800 active

## Border Defence Unit €600

Equipped with small arms only

**Police Air Wing** €800**EQUIPMENT BY TYPE**HELICOPTERS • TPT • Light 1 Bell 206 *Jet Ranger***Marines** €400**EQUIPMENT BY TYPE**

PATROL AND COASTAL COMBATANTS • PBR 8

**Local Militia Forces****Amuka Group** €3,000; €7,000 (reported under trg) (total 10,000)**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 2; 5 obs

**SOMALIA**

AU • AMISOM 6,200; 7 inf bn

**SOUTH SUDAN**

UN • UNMISS 2

Army • 3,000

**FOREIGN FORCES**

all EUTM, unless otherwise indicated

Finland 7

Germany 8

Hungary 4

Ireland 10

Italy 98

Netherlands 6

Portugal 4

Serbia 5

Spain 13

Sweden 10

UK 5

**Zambia ZMB**

Zambian Kwacha K		2014	2015	2016
GDP	K	164bn	182bn	
	US\$	26.6bn	24.5bn	
<i>per capita</i>	US\$	1,772	1,576	
Growth	%	5.6	4.3	
Inflation	%	7.8	7.3	
Def bdg [a]	K	2.74bn	3.25bn	3.15bn
	US\$	446m	435m	

US\$1=K 6.15 7.46

[a] Excludes allocations for public order and safety

Population 15,066,266

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	23.2%	5.4%	4.6%	3.8%	12.0%	1.0%
Female	23.0%	5.4%	4.6%	3.8%	11.9%	1.3%

**Capabilities**

Ensuring territorial integrity and border security, and a commitment to international peacekeeping operations, are key tasks for the armed forces, though they struggle with ageing equipment, limited funding and the challenge of maintaining ageing weapons systems. As a landlocked nation, there is no navy, but a small number of light patrol craft are retained for riverine duties and the government has begun to create special marine units for this role. The air force has limited tactical air-transport capability and while there are plans for additional aviation assets, there is currently no independent capacity for significant power projection. Zambia is increasing its commitment to the UN mission in the Central African Republic. The services have participated in international exercises such as the US AF-RICOM exercise *Southern Accord 15*, which was hosted by Zambia.

**ACTIVE 15,100** (Army 13,500 Air 1,600) Paramilitary 1,400**RESERVE 3,000** (Army 3,000)**ORGANISATIONS BY SERVICE****Army 13,500****FORCES BY ROLE****COMMAND**

3 bde HQ

**SPECIAL FORCES**

1 cdo bn

**MANOEUVRE****Armoured**

1 armd regt (1 tk bn, 1 armd recce regt)

**Light**

6 inf bn

**COMBAT SUPPORT**

1 arty regt (2 fd arty bn, 1 MRL bn)

1 engr regt

**EQUIPMENT BY TYPE**

Some equipment†

MBT 30: 20 Type-59; 10 T-55

LT TK 30 PT-76

RECCE 70 BRDM-1/BRDM-2 (€30 serviceable)

AIFV 23 *Ratel*-20

APC (W) 33: 13 BTR-60; 20 BTR-70

ARTY 182

TOWED 61: 105mm 18 Model 56 pack howitzer; 122mm

25 D-30; 130mm 18 M-46

MRL 122mm 30 BM-21 (€12 serviceable)

MOR 91: 81mm 55; 82mm 24; 120mm 12

AT • MSL • MANPATS 9K11 *Malyutka* (AT-3 *Sagger*)RCL 12+: 57mm 12 M18; 75mm M20; 84mm *Carl Gustav*AD • SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS • TOWED 136: 20mm 50 M-55 (triple); 37mm 40

M-1939; 57mm €30 S-60; 85mm 16 M-1939 KS-12

ARV T-54/T-55 reported



**Reserve 3,000****FORCES BY ROLE****MANOEUVRE**

Light

3 inf bn

**Air Force 1,600****FORCES BY ROLE****FIGHTER/GROUND ATTACK**1 sqn with K-8 *Karakorum*\*1 sqn with MiG-21MF *Fishbed J†*; MiG-21U *Mongol A***TRANSPORT**

1 sqn with MA60; Y-12(II); Y-12(IV); Y-12E

1 (VIP) unit with AW139; CL-604; HS-748

1 (liaison) sqn with Do-28

**TRAINING**2 sqn with MB-326GB; MFI-15 *Safari***TRANSPORT HELICOPTER**1 sqn with Mi-17 *Hip H*1 (liaison) sqn with Bell 47G; Bell 205 (UH-1H *Iroquois/AB-205*)**AIR DEFENCE**3 bty with S-125 *Pechora (SA-3 Goa)***EQUIPMENT BY TYPE†**

Very low serviceability.

**AIRCRAFT 25 combat capable**FGA 10: 8 MiG-21MF *Fishbed J*; 2 MiG-21U *Mongol A*

TPT 23: Light 21: 5 Do-28; 2 MA60; 4 Y-12(II); 5 Y-12(IV); 5 Y-12E; PAX 2: 1 CL-604; 1 HS-748

TRG 39: 15 K-8 *Karakourm\**; 10 MB-326GB; 8 MFI-15 *Safari*; 6 SF-260TW**HELICOPTERS**MRH 5: 1 AW139; 4 Mi-17 *Hip H*TPT • Light 12: 9 Bell 205 (UH-1H *Iroquois/AB-205*); 3 Bell 212

TRG 5 Bell 47G

AD • SAM S-125 *Pechora (SA-3 Goa)***MSL**ASM 9K11 *Malyutka (AT-3 Sagger)*AAM • IR R-3 (AA-2 *Atoll†*); PL-2; *Python 3***Paramilitary 1,400****Police Mobile Unit 700****FORCES BY ROLE****MANOEUVRE**

Other

1 police bn (4 police coy)

**Police Paramilitary Unit 700****FORCES BY ROLE****MANOEUVRE**

Other

1 paramilitary bn (3 paramilitary coy)

**DEPLOYMENT****CENTRAL AFRICAN REPUBLIC**

UN • MINUSCA 531; 8 obs; 1 inf bn

**CÔTE D'IVOIRE**

UN • UNOCI 2 obs

**DEMOCRATIC REPUBLIC OF THE CONGO**

UN • MONUSCO 2; 17 obs

**LIBERIA**

UN • UNMIL 2 obs

**SOUTH SUDAN**

UN • UNMISS 3; 3 obs

**SUDAN**

UN • UNAMID 7; 5 obs

UN • UNISFA 1

**Zimbabwe ZWE**

United States Dollar \$ [a]	2014	2015	2016
GDP	US\$ 13.8bn	13.9bn	
per capita	US\$ 1,043	1,037	
Growth	% 3.3	1.4	
Inflation	% -0.2	-1.6	
Def bdtg	US\$ 390m	379m	381m

[a] Zimbabwe dollar demonetised in 2015

Population 14,229,541

Age	0–14	15–19	20–24	25–29	30–64	65 plus
Male	19.1%	5.6%	5.3%	5.2%	13.6%	1.4%
Female	18.7%	5.5%	5.3%	5.3%	12.9%	2.1%

**Capabilities**

The armed forces' role is to defend the nation's independence, sovereignty and territorial integrity. However, Zimbabwe's limited quantitative and qualitative military capabilities have eroded further due to economic problems. China has been the only source of defence equipment for the country's limited number of procurements. Both the EU and the US have arms embargoes in place which, the air-force commander acknowledged, have reduced air-force readiness. The armed forces have taken part intermittently in multinational training exercises with regional states, including *Blue Okavango* and *Amani Africa II* in 2015.

**ACTIVE 29,000 (Army 25,000 Air 4,000) Paramilitary 21,800**

**ORGANISATIONS BY SERVICE****Army €25,000****FORCES BY ROLE****COMMAND**

1 SF bde HQ

1 mech bde HQ

5 inf bde HQ

**SPECIAL FORCES**

1 SF regt

**MANOEUVRE****Armoured**

1 armd sqn

**Mechanised**

1 mech inf bn

**Light**

15 inf bn

1 cdo bn

**Air Manoeuvre**

1 para bn

**Other**

3 gd bn

1 (Presidential Guard) gd gp

**COMBAT SUPPORT**

1 arty bde

1 fd arty regt

1 AD regt

2 engr regt

**EQUIPMENT BY TYPE**

MBT 40: 30 Type-59†; 10 Type-69†

RECCE 115: 20 *Eland*; 15 *Ferret*†; 80 EE-9 *Cascavel* (90mm)

APC 85

APC (T) 30: 8 Type-63; 22 VTT-323

APC (W) 55 TPK 4.20 VSC ACMAT

ARTY 254

SP 122mm 12 2S1

TOWED 122mm 20: 4 D-30; 16 Type-60 (D-74)

MRL 76: 107mm 16 Type-63; 122mm 60 RM-70

MOR 146: 81mm/82mm ε140; 120mm 6 M-43

AD

SAM • MANPAD 9K32 *Strela-2* (SA-7 *Grail*)‡

GUNS • TOWED 116: 14.5mm 36 ZPU-1/ZPU-2/ZPU-4;

23mm 45 ZU-23; 37mm 35 M-1939

ARV T-54/T-55 reported

VLB MTU reported

**Air Force 4,000**

Flying hours 100 hrs/year

**FORCES BY ROLE****FIGHTER**

1 sqn with F-7 II†; FT-7†

**FIGHTER/GROUND ATTACK**1 sqn with K-8 *Karakorum*\*(1 sqn *Hawker Hunter* in store)**GROUND ATTACK/ISR**1 sqn with Cessna 337/O-2A *Skymaster*\***ISR/TRAINING**1 sqn with SF-260F/M; SF-260TP\*; SF-260W *Warrior*\***TRANSPORT**1 sqn with BN-2 *Islander*; CASA 212-200 *Aviocar* (VIP)**ATTACK/TRANSPORT HELICOPTER**1 sqn with Mi-35 *Hind*; Mi-35P *Hind* (liaison); SA316 *Alouette III*; AS532UL *Cougar* (VIP)1 trg sqn with Bell 412 *Twin Huey*, SA316 *Alouette III***AIR DEFENCE**

1 sqn

**EQUIPMENT BY TYPE**

AIRCRAFT 46 combat capable

FTR 9: 7 F-7 II†; 2 FT-7†

FGA (12 *Hawker Hunter* in store)ISR 2 O-2A *Skymaster*TPT • Light 26: 5 BN-2 *Islander*; 8 C-212-200 *Aviocar*(VIP - 2 more in store); 13 Cessna 337 *Skymaster*\*; (10 C-47 *Skytrain* in store)TRG 33: 10 K-8 *Karakorum*\*; 5 SF-260M; 8 SF-260TP\*; 5 SF-260W *Warrior*\*; 5 SF-260F**HELICOPTERS**ATK 6: 4 Mi-35 *Hind*; 2 Mi-35P *Hind*MRH 10: 8 Bell 412 *Twin Huey*; 2 SA316 *Alouette III*TPT • Medium 2 AS532UL *Cougar* (VIP)

MSL • AAM • IR PL-2; PL-5 (reported)

AD • GUNS 100mm (not deployed); 37mm (not deployed); 57mm (not deployed)

**Paramilitary 21,800****Zimbabwe Republic Police Force 19,500**

incl air wg

**Police Support Unit 2,300**

PATROL AND COASTAL COMBATANTS • PB 5: 3 Rodman 38; 2 Rodman 46 (five Rodman 790 are also operated, under 10 tonnes FLD)

**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 3 obs

**LIBERIA**

UN • UNMIL 1 obs

**SOUTH SUDAN**

UN • UNMISS 2 obs

**SUDAN**

UN • UNAMID 2; 5 obs

UN • UNISFA 1; 2 obs

**DEPLOYMENT****CÔTE D'IVOIRE**

UN • UNOCI 3 obs

**LIBERIA**

UN • UNMIL 3 obs

**SOUTH SUDAN**

UN • UNMISS 2 obs

**SUDAN**

UN • UNAMID 2; 4 obs

UN • UNISFA 1; 2 obs

Table 16 Selected Arms Procurements and Deliveries, Sub-Saharan Africa

Designation	Type	Quantity	Contract Value (Current)	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
<b>Angola (ANG)</b>								
<i>Casspir</i> NG	PPV	45	n.k.	RSA	Denel	2013	2014	Delivery status unclear
Su-30K/MK	FGA ac	12	n.k.	RUS	Government surplus	2013	2015	Ex-IND air force ac. Under test
EMB-314 <i>Super Tucano</i>	Trg ac	6	n.k.	BRZ	Embraer	2012	2013	First three delivered in early 2013
<b>Chad (CHA)</b>								
MIG-29 <i>Fulcrum</i>	FGA ac	3	n.k.	UKR	Ukroboronprom	n.k.	2013	First ac delivered in 2014
<b>Cote d'Ivoire (CIV)</b>								
<i>L'Emergence</i> -class	PBF	3	n.k.	FRA	Raidco Marine	2013	2014	Second of class commissioned in mid-2015
<b>Djibouti (DJB)</b>								
n.k.	PB	2	n.k.	JPN	n.k.	2014	2015	For coast guard; JPN-funded project for two 20m patrol boats
<b>Gabon (GAB)</b>								
Aravis	PPV	12	n.k.	FRA	Nexter	2014	2015	Will be deployed to GAB bn in CAR on MINUSCA mission
<i>Bivigou Nziengui</i> -class (ex-FRA P-400)	PCC	1	n.k.	FRA	Piriou	2014	2015	Ex-FRA navy <i>La Tapageuse</i> (P691)
OPV50	PCC	1	n.k.	FRA	Kership	2014	2016	Delivery due mid-2016
<b>Ghana (GHA)</b>								
C-295	Tpt ac	1	n.k.	Int'l	Airbus Group (Airbus Defence & Space)	n.k.	n.k.	Third ac in test in late 2015
EMB-314 <i>Super Tucano</i>	Trg ac	5	US\$88m	BRZ	Embraer	2015	n.k.	-
<b>Mali (MLI)</b>								
EMB-314 <i>Super Tucano</i>	Trg ac	6	n.k.	BRZ	Embraer	2015	n.k.	-
<b>Mauritius (MUS)</b>								
Fast Attack Craft	PBF	2	n.k.	IND	Goa Shipyard	2014	2016	For coast guard
Fast Interceptor Boats	PBF	11	n.k.	IND	Goa Shipyard	2014	n.k.	For coast guard
Do 228	MP ac	1	US\$16m	IND	HAL	2014	n.k.	-
<b>Mozambique (MOZ)</b>								
HSI 32	PCC	3	See notes	UAE	Abu Dhabi MAR (CMN)	2013	2016	Part of €200m (US\$266m) order including three 42m patrol craft; first of class launched 2015
<i>Ocean Eagle</i> 43	PCC	3	See notes	UAE	Abu Dhabi MAR (CMN)	2013	2016	Part of €200m (US\$266m) order including three 32m patrol craft; first two of class launched

Table 16 Selected Arms Procurements and Deliveries, Sub-Saharan Africa

Designation	Type	Quantity	Contract Value (Current)	Prime Nationality	Prime Contractor	Order Date	First Delivery Due	Notes
EMB-312 <i>Tucano</i>	Trg ac	3	n.k.	BRZ	Government surplus	2014	n.k.	Part of deal may include loan to buy three EMB-314 <i>Super Tucano</i>
<b>Nigeria (NGA)</b>								
<i>Centenary-class</i>	PSOH	2	US\$42m	PRC	CSIC	2012	2015	First to be built in PRC; 50% of second to be built in NGA. First of class commissioned early 2015
n.k.	PSOH	2	US\$450m	IND	Pipavav Defence and Offshore Engineering	2012	n.k.	Option for a further two vessels. First vessel reported to have completed sea trials by Nov 2014
<i>Andoni-class</i>	PB	2	N80m (US\$19m)	NGA	Nigerian Naval Dockyard	2007	2012	First of class commissioned May 2012. Second (mod) in build; delivery was due 2014
<i>Sentinel-class</i>	PB	4	n.k.	RSA	Nautic Africa	2014	n.k.	First two launched Aug 2015
<i>Manta Mk III</i>	PBF	6	n.k.	AUS	Suncraft	2012	2012	Deliveries ongoing
<i>Mi-35 Hind</i>	Atk hel	6	n.k.	RUS	Russian Helicopters	2014	2015	-
<i>Mi-171Sh Terminator</i>	Tpt hel	6+	n.k.	RUS	Russian Helicopters	2012	n.k.	Order for six placed in 2012; another order placed in 2014 for unknown quantity
<i>Mi-8/17 Hip</i>	Tpt hel	6	n.k.	RUS	Russian Helicopters	2014	2015	-
<b>Senegal (SEN)</b>								
58m OPV	PB	1	n.k.	FRA	OCEA	2015	n.k.	-
EMB-314 <i>Super Tucano</i>	Trg ac	3	n.k.	BRZ	Embraer	2013	n.k.	-
<b>Seychelles (SYC)</b>								
Do 228	MP ac	1	Donation	IND	HAL	2015	n.k.	-
<b>South Africa (RSA)</b>								
<i>Badger</i> (AMV 8x8)	APC (W)	238	R9bn (US\$900m)	FIN/RSA	Patria/Denel	2013	2016	Five variants to be produced. Five pre-production veh delivered by late 2015
<i>A-Darter</i>	AAM	n.k.	n.k.	RSA	Denel	2015	2016	Production contract signed 2015
<i>Skyshield</i>	AD	n.k.	n.k.	GER	Rheinmetall	2014	n.k.	-
<b>Zambia (ZMB)</b>								
<i>C-27J Spartan</i>	Tpt ac	2	n.k.	ITA	Finmeccanica (Alenia Aermacchi)	2015	2017	-
L-15	Trg ac	6	n.k.	PRC	AVIC (Hongdu)	2014	2015	Delivery status unclear
<i>Mi-17 Hip</i>	Tpt hel	5	n.k.	RUS	Russian Helicopters	2015	n.k.	For police

## Chapter Ten

# Country comparisons – commitments, force levels and economics

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Table 17 **Selected Training Activity 2015**

Date	Title	Location	Aim	Principal Participants
<b>North America (US and Canada)</b>				
02–13 Mar 2015	<i>RED FLAG 15-2</i>	US	Air cbt ex	NATO, NOR, US
24 Apr–23 May 2015	<i>MAPLE RESOLVE</i>	CAN	FTX	CAN, UK, US
08–12 Jun 2015	<i>CYBER GUARD 2015</i>	US	Cyber ex	US
26 Jul–05 Aug 2015	<i>PANAMAX 2015</i>	US	CPX	BRZ, CAN, CHL, COL, CRI, DOM, SLV, GUA, HND, JAM, MEX, NIC, PAN, PRY, PER, UK, US
17–28 Aug 2015	<i>RED FLAG 15–4</i>	US	Air cbt ex	ISR, JOR, SGP, US
01–10 Sep 2015	<i>DAWN BLITZ 2015</i>	US	Amph aslt ex	JPN, MEX, NZL, US
<b>Europe</b>				
01–30 Apr 2015	<i>SABER JUNCTION</i>	GER	CPX/C2	ALB, ARM, BEL, BIH, BLG, HUN, LVA, LTU, LUX, FYROM, MDA, POL, ROM, TUR, SWE, UK, US
20–30 Apr 2015	<i>INIOHOS 2015</i>	GRC	Air cbt ex	GRC, ISR, US
01 May–26 Jun 2015	<i>COMBINED RESOLVE IV</i>	GER	FTX	ALB, BLG, CRO, CZE, DNK, ITA, LVA, MDA, MNE, ROM, SER, US
04–18 May 2015	<i>DYNAMIC MONGOOSE 2015</i>	NOR	CASWEX/CASEX	CAN, ESP, FRA, GER, NOR, NLD, POL, SWE, TUR, UK, US
24 May–07 Jun 2015	<i>STEADFAST COBALT 15</i>	POL	C2/Comms/CS/NRF	19 NATO nations
05–20 Jun 2015	<i>BALTOPS 2015</i>	Baltic, POL	Amph/ADEX/ASW/MW/SURFEX	BEL, CAN, DNK, EST, FIN, FRA, GEO, GER, LVA, LTU, NLD, NOR, POL, SWE, TUR, UK, US
08–20 Jun 2015	<i>SABER STRIKE 2015</i>	EST, LVA, LTU, POL	FTX	DNK, EST, FIN, GER, LVA, LTU, NOR, POL, UK, US
10–21 Jun 2015	<i>NOBLE JUMP</i>	POL	FTX	BEL, CZE, GER, HUN, LTU, NLD, NOR, POL, US
03–12 Jul 2015	<i>BREEZE 2015</i>	Black Sea	ADEX/ASW/MW/SURFEX	BLG, ESP, NLD, POR, ROM, TUR, UK, US
31 Aug–14 Sep 2015	<i>SEA BREEZE 2015</i>	Black Sea	CASEX/NAVEX/SURFEX	BLG, GER, GRC, ITA, MDA, ROM, SWE, TUR, UK, UKR, US
12–24 Sep 2015	<i>NORTHERN COASTS</i>	GER	CSS/HADR/NAVEX	BEL, CAN, DNK, EST, FRA, GER, NOR, POL, POR, SWE, UK
03 Oct–06 Nov 2015	<i>TRIDENT JUNCTURE</i>	ITA, POR, ESP, BEL, CAN, GER, NLD, NOR	CPX/LIVEX	ALB, BEL, BLG, CAN, CRO, CZE, DNK, EST, FIN, FRA, GEO, GER, GRC, HUN, ISL, ITA, LTU, LUX, LVA, NLD, NOR, POL, POR, ROM, SVK, SVN, SWE, TUR, UK, US
19–29 Oct 2015	<i>MARITIME THEATRE MISSILE DEFENCE</i>	UK	BMD ex	AUS, CAN, ESP, FRA, GER, ITA, NLD, UK, US
<b>Russia and Eurasia</b>				
16–20 Mar 2015	<i>n.k.</i>	RUS	FTX	Snap exercise – Northern MD
06–17 Apr 2015	<i>STEPPE EAGLE 2015</i>	KAZ	FTX/PKO ex	KAZ, KGZ, TAJ, TUR, UK, US
20–31 Jul 2015	<i>SABER GUARDIAN/RAPID TRIDENT</i>	UKR	CPX/FTX	BEL, BLG, CAN, ESP, EST, GEO, GER, LTU, LVA, MDA, NOR, POL, ROM, SWE, TUR, UK, US
01–15 Aug 2015	<i>AVIADARTS</i>	RUS	Air cbt ex	BLR, KAZ, PRC, RUS
20–28 Aug 2015	<i>NAVAL INTERACTION</i>	RUS	NAVEX	PRC, RUS
23–29 Aug 2015	<i>INTERACTION 2015</i>	RUS	CSTO (KSOR) FTX	ARM, BLR, KAZ, KGZ, RUS, TAJ
07–12 Sep 2015	<i>n.k.</i>	RUS	Airborne ex	VDV snap exercise – Central MD
10–16 Sep 2015	<i>UNION SHIELD</i>	RUS	Air cbt ex/FTX	BLR, RUS
14–19 Sep 2015	<i>CENTER 2015</i>	RUS	Air ex/FTX/NAVEX	RUS
<b>Asia</b>				
09–20 Feb 2015	<i>COBRA GOLD 15</i>	THA	HADR/PSO ex	IDN, JPN, MAL, PRC, SGP, THA, US

Table 17 Selected Training Activity 2015

Date	Title	Location	Aim	Principal Participants
16–27 Feb 2015	<i>COPE NORTH 2015</i>	US (Guam)	Air ex	AUS, JPN, NZL, ROK, US
02–13 Mar 2015	<i>KEY RESOLVE</i>	ROK	FTX	ROK, US
02–24 Mar 2015	<i>FOAL EAGLE</i>	ROK	FTX	ROK, US
09–20 Mar 2015	<i>COPE TIGER</i>	THA	Air ex	SGP, THA, US
20–30 Apr 2015	<i>BALIKATAN 15</i>	PHL	Interop/HADR ex	PHL, US
01 Jun–Sep 2015	<i>STRIDE 2015</i>	PRC	FTX	Trans-military region exercise series
20 Jun–01 Jul 2015	<i>KHAAN QUEST</i>	MNG	PSO ex	AUS, BAN, BRN, CAM, CAN, FRA, GER, HUN, IDN, IND, ITA, JPN, MAL, MON, NPL, PHL, PRC, ROK, SGP, TAJ, THA, TUR, UK, US, VNM
05–21 Jul 2015	<i>TALISMAN SABRE</i>	AUS	FTX	AUS, NZL, US
Jul–07 Sep 2015	<i>FIREPOWER–2015 SHANDAN</i>	PRC	AD/Air ex	Trans-military region exercise series
09 Aug–13 Oct 2015	<i>JOINT ACTION 2015</i>	PRC	Interop FTX	Trans-military region exercise series
17–22 Sep 2015	<i>PEACE AND FRIENDSHIP</i>	MAL	NAVEX	PRC, MAL
23 Aug–late Sep 2015	<i>JUNGLE 2015</i>	PRC	FTX	PRC marines
12–23 Oct 2015	<i>SAFKAR INDO PURA</i>	SGP	FTX/Interop ex	IDN, SGP
21–28 Oct 2015	<i>BLUE CHROMITE</i>	JPN	Amph aslt ex	JPN, US
02–12 Nov 2015	<i>SINGSIAM</i>	E Indian Ocean	NAVEX	SGP, THA
<b>Middle East and North Africa</b>				
09–16 Feb 2015	<i>AFRICAN LION</i>	MOR	FTX	BEL, GER, MOR, NLD, SEN, US
03–12 Mar 2015	<i>UNION 17</i>	Gulf	NAVEX	GCC states
27 Apr–14 May 2015	<i>NOBLE DINA</i>	E Med	NAVEX	GRE, ISR, US
30 Apr–20 May 2015	<i>AFRICAN LION (II)</i>	MOR	FTX	BEL, GER, MOR, NLD, SEN, US
05–19 May 2015	<i>EAGER LION</i>	JOR	COIN/FTX	JOR, US
21–27 May 2015	<i>BEIT AL-MOQADDAS</i>	IRN	FTX	IRN regular ground forces
May–03 Jun 2015	<i>SIHAM AL-HAQ 3</i>	UAE	FTX	EGY, UAE
<b>Latin America and the Caribbean</b>				
31 May–24 Jun 2015	<i>TRADEWINDS 2015 (I and II)</i>	BLZ, St Kitts & Nevis	Amph/C2/CIMIC/COIN/CPX/CSS/FTX/ PKO	ATG, BHS, BRB, BLZ, CAN, DMC, DOM, GDA, GUY, HTI, JAM, NLD, MEX, SKN, SVG, SUR, TTO, UK, US
13–23 Jul 2015	<i>FUERZAS COMMANDO 15</i>	GUA	Spec Ops	ARG, BLZ, CHL, COL, CRI, DOM, SLV, GUA, HTI, HND, JAM, MEX, PAN, PRY, PER, SUR, URY, US
13–25 Oct 2015	<i>UNITAS 15 PACIFIC</i>	CHL	ADEX/ASWEX/EW/NAVEX/SURFEX	BRZ, COL, DOM, ECU, SLV, MEX, NZL, GUA, PAN, US
16–24 Nov 2015	<i>UNITAS 15 ATLANTIC</i>	BRZ	ADEX/ASWEX/EW/NAVEX/SURFEX	BRZ, CMR, CHI, DOM, GUA, HND, MEX, PER, SEN, US
<b>Sub-Saharan Africa</b>				
16 Feb–09 Mar 2015	<i>FLINTLOCK 2015</i>	CMR, CHA, NER, NGA, TUN	CIMIC/COIN/CSS/FTX	BEL, CAM, CAN, CHA, DNK, ESP, GER, ITA, NER, NGA, NLD, SWE, TUN, UK, US
09–28 March 2015	<i>OBANGAME EXPRESS 2015</i>	Gulf of Guinea	COIN/NAVEX	ANG, BEL, BRZ, CIV, CMR, COG, DRC, DNK, ECCAS, ECOWAS, ESP, EQG, FRA, GAB, GER, NER, GHA, NOR, PRT, Sao Tomé & Principe, TGO, TUR, UK, US
11–27 Jul 2015	<i>BLUE OKAVANGO</i>	BWA	HADR/Interop ex	ANG, BWA, LSO, MWI, MOZ, NAM, RSA, TZA, ZMB, ZWE
03–14 Aug 2015	<i>SOUTHERN ACCORD 2015</i>	ZMB	FTX/PKO	ANG, BWA, GER, MWI, NAM, NLD, TZA, UK, US, ZMB
19 Oct–07 Nov 2015	<i>AMANI AFRICA II</i>	RSA	CIMIC/FTX	ALG, ANG, BDI, BWA, DRC, EGY, ETH, GAM, GHA, KEN, LSO, MOZ, MWI, NAM, NGA, RSA, RWA, SWZ, UGA, ZMB, ZWE

Table 18 International Comparisons of Defence Expenditure and Military Personnel

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	
<b>North America</b>															
Canada	16,166	15,751	14,007	468	452	399	0.88	0.88	0.89	66	31	5			
United States	633,385	603,457	597,503	2,001	1,893	1,859	3.80	3.48	3.33	1,381	841	0			
<b>Total</b>	<b>649,551</b>	<b>619,208</b>	<b>611,510</b>	<b>1,850</b>	<b>1,751</b>	<b>1,715</b>	<b>3.51</b>	<b>3.24</b>	<b>3.13</b>	<b>1,447</b>	<b>871</b>	<b>5</b>			
<b>Europe</b>															
Albania	185	161	138	62	53	46	1.44	1.22	1.19	8	0	1			
Austria	3,230	2,683	2,051	377	311	237	0.75	0.61	0.55	23	156	0			
Belgium	4,985	4,962	3,980	447	442	351	0.95	0.93	0.87	31	0	7			
Bosnia-Herzegovina	233	225	192	60	58	50	1.30	1.24	1.23	11	0	0			
Bulgaria	759	717	600	104	99	83	1.39	1.29	1.27	31	303	16			
Croatia	800	746	674	179	167	151	1.39	1.31	1.38	17	0	3			
Cyprus	460	424	355	398	362	298	1.91	1.82	1.83	12	50	1			
Czech Republic	2,154	2,026	1,776	203	191	167	1.03	0.99	0.97	22	0	3			
Denmark	4,553	4,679	3,450	819	840	618	1.36	1.37	1.19	17	54	0			
Estonia	482	512	449	377	403	355	1.91	1.93	1.96	6	30	0			
Finland	3,812	3,654	2,989	702	670	546	1.42	1.34	1.30	22	354	3			
France	52,317	52,075	46,751	793	786	702	1.86	1.84	1.93	209	28	103			
Germany	44,172	43,101	36,686	544	532	454	1.18	1.11	1.09	179	32	0			
Greece	5,898	5,688	4,729	548	528	439	2.43	2.39	2.45	143	221	4			
Hungary	1,085	1,008	879	109	102	89	0.81	0.74	0.74	27	44	12			
Iceland	38	39	34	117	118	104	0.25	0.23	0.21	0	0	0			
Ireland	1,202	1,192	993	252	247	203	0.50	0.48	0.44	9	3	0			
Italy	25,212	24,487	21,552	410	397	348	1.18	1.14	1.18	175	18	182			
Latvia	213	296	266	105	147	134	0.69	0.93	0.96	5	8	0			
Lithuania	362	439	474	123	151	164	0.78	0.91	1.14	16	7	11			
Luxembourg	249	251	215	457	449	376	0.41	0.38	0.37	1	0	1			
Macedonia (FYROM)	137	251	108	66	120	51	1.27	2.21	1.07	8	5	0			
Malta	60	60	56	145	145	135	0.60	0.57	0.61	2	0	0			
Montenegro	66	79	68	101	122	106	1.50	1.74	1.72	2	0	10			

Table 18 International Comparisons of Defence Expenditure and Military Personnel

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Active Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	
Netherlands, The	10,344	10,665	8,901	616	632	525	1.20	1.21	1.19	36	3	3	6		
Norway	7,236	6,776	5,510	1,423	1,316	1,058	1.39	1.36	1.39	26	46	46	0		
Poland	8,967	10,168	10,308	232	263	267	1.70	1.86	2.14	99	0	0	73		
Portugal	2,772	2,583	2,176	257	239	201	1.23	1.12	1.10	33	212	212	45		
Romania	2,437	2,791	2,521	112	128	116	1.27	1.40	1.44	71	50	50	80		
Serbia	691	696	592	95	97	83	1.52	1.59	1.62	28	50	50	0		
Slovakia	995	1,042	924	183	191	170	1.02	1.04	1.07	16	0	0	0		
Slovenia	467	533	447	234	268	225	0.98	1.08	1.05	8	2	2	6		
Spain	14,622	12,634	10,754	309	265	223	1.05	0.90	0.88	122	16	16	78		
Sweden	6,490	6,297	5,261	673	648	537	1.12	1.10	1.09	30	0	0	1		
Switzerland	5,054	5,166	4,834	632	641	595	0.74	0.73	0.71	21	148	148	0		
Turkey	10,692	9,967	8,347	138	127	105	1.30	1.25	1.16	511	379	379	102		
United Kingdom	58,037	61,454	56,244	915	964	878	2.25	2.22	2.05	155	84	84	0		
<b>Total</b>	<b>281,467</b>	<b>280,187</b>	<b>246,457</b>	<b>455</b>	<b>451</b>	<b>395</b>	<b>1.40</b>	<b>1.36</b>	<b>1.36</b>	<b>2,129</b>	<b>2,301</b>	<b>2,301</b>	<b>748</b>		
<b>Russia and Eurasia</b>															
Armenia	461	469	414	150	153	135	4.15	4.03	3.90	45	210	210	4		
Azerbaijan	1,951	2,092	1,738	203	216	178	2.65	2.82	2.72	67	300	300	15		
Belarus*	681	n.k.	n.k.	71	n.k.	n.k.	0.93	n.k.	n.k.	48	290	290	110		
Georgia	411	390	307	83	79	62	2.55	2.36	2.23	21	0	0	12		
Kazakhstan	2,292	2,026	1,945	129	113	107	0.99	0.94	1.00	39	0	0	32		
Kyrgyzstan	103	92	80	19	16	14	1.40	1.25	1.12	11	0	0	10		
Moldova	25	28	23	7	8	7	0.32	0.35	0.38	5	58	58	2		
Russia [a]	66,073	64,480	51,605	464	453	362	3.18	3.47	4.18	798	2,000	2,000	489		
Tajikistan	195	195	152	25	24	19	2.29	2.11	1.89	9	0	0	8		
Turkmenistan*	612	n.k.	n.k.	120	n.k.	n.k.	1.49	n.k.	n.k.	37	0	0	0		
Ukraine	2,421	3,386	3,916	53	75	88	1.35	2.59	4.34	204	900	900	n.k.		
Uzbekistan*	1,593	n.k.	n.k.	56	n.k.	n.k.	2.79	n.k.	n.k.	48	0	0	20		
<b>Total*</b>	<b>76,819</b>	<b>76,284</b>	<b>62,682</b>	<b>271</b>	<b>269</b>	<b>221</b>	<b>2.76</b>	<b>3.03</b>	<b>3.48</b>	<b>1,331</b>	<b>3,757</b>	<b>3,757</b>	<b>701</b>		

Table 18 International Comparisons of Defence Expenditure and Military Personnel

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Active Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	
<b>Asia</b>															
Afghanistan	2,751	3,294	3,226	88	104	99	13.64	16.11	16.39	161	0	0	148		
Australia	24,458	23,876	22,764	1,099	1,061	1,001	1.63	1.65	1.83	57	23	23	0		
Bangladesh	1,715	1,956	2,225	10	12	13	1.06	1.06	1.10	157	0	0	64		
Brunei	413	568	396	993	1,343	922	2.28	3.32	3.41	7	1	1	2		
Cambodia	397	446	n.k.	26	29	n.k.	2.58	2.70	n.k.	124	0	0	67		
China	115,844	131,140	145,832	85	96	106	1.22	1.27	1.28	2,333	510	510	660		
Fiji	58	54	55	65	60	60	1.44	1.26	1.21	4	6	6	0		
India	41,896	46,484	47,956	34	38	38	2.23	2.27	2.20	1,346	1,155	1,155	1,404		
Indonesia	7,848	7,273	7,587	31	29	30	0.86	0.82	0.87	396	400	400	281		
Japan	48,709	46,107	41,013	383	363	323	0.99	1.00	1.00	247	56	56	13		
Korea, DPR of	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	1,190	600	600	189		
Korea, Republic of	31,508	33,910	33,460	644	691	681	2.41	2.40	2.40	628	4,500	4,500	5		
Laos	22	25	n.k.	3	4	n.k.	0.20	0.21	n.k.	29	0	0	100		
Malaysia	4,840	4,919	4,738	163	164	155	1.50	1.45	1.51	109	52	52	25		
Mongolia	117	107	93	40	36	31	0.93	0.89	0.75	10	137	137	8		
Myanmar	2,179	2,371	2,245	40	43	40	3.84	3.76	3.41	406	0	0	107		
Nepal	234	331	324	8	11	10	1.22	1.68	1.52	96	0	0	62		
New Zealand	2,605	2,857	2,418	597	649	545	1.41	1.45	1.42	9	2	2	0		
Pakistan	6,006	6,460	7,456	31	33	37	2.59	2.62	2.75	644	0	0	282		
Papua New Guinea	83	99	100	13	15	15	0.54	0.59	0.56	2	0	0	0		
Philippines	2,096	2,024	2,223	21	20	22	0.77	0.71	0.74	125	131	131	41		
Singapore	9,730	9,799	9,676	1,782	1,760	1,705	3.22	3.18	3.29	73	313	313	75		
Sri Lanka	1,842	1,930	1,850	85	88	84	2.73	2.58	2.33	161	6	6	62		
Taiwan	10,321	10,020	10,257	443	429	438	2.02	1.89	1.98	215	1,657	1,657	17		
Thailand	5,875	5,635	5,374	87	83	79	1.40	1.39	1.44	361	200	200	93		
Timor-Leste	67	70	73	57	58	59	1.19	1.40	1.72	1	0	0	0		
Vietnam	4,033	n.k.	n.k.	44	n.k.	n.k.	2.36	n.k.	n.k.	482	5,000	5,000	40		
<b>Total*</b>	<b>325,647</b>	<b>346,061</b>	<b>356,026</b>	<b>83</b>	<b>88</b>	<b>89</b>	<b>1.43</b>	<b>1.46</b>	<b>1.48</b>	<b>9,370</b>	<b>14,748</b>	<b>14,748</b>	<b>3,743</b>		



Table 18 International Comparisons of Defence Expenditure and Military Personnel

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Active Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	2016
<b>Middle East and North Africa</b>															
Algeria	10,405	11,863	10,837	273	306	274	4.96	5.56	6.19	130	150	187			
Bahrain	1,246	1,345	1,533	973	1,023	1,138	3.79	3.97	4.96	8	0	11			
Egypt	6,610	6,749	6,394	77	78	72	2.44	2.36	2.13	439	479	397			
Iran*	14,786	15,862	n.k.	185	196	n.k.	3.89	3.81	n.k.	523	350	40			
Iraq	16,897	18,868	21,100	487	524	569	7.27	8.44	12.78	64	0	145			
Israel	21,772	23,252	18,597	2,796	2,935	2,310	7.45	7.61	6.22	177	465	8			
Jordan	1,516	1,568	1,603	210	198	198	4.51	4.37	4.20	101	65	15			
Kuwait	4,339	4,803	n.k.	1,610	1,751	n.k.	2.47	2.78	n.k.	16	24	7			
Lebanon*	1,300	n.k.	n.k.	252	n.k.	n.k.	2.73	n.k.	n.k.	60	0	20			
Libya	4,656	n.k.	n.k.	776	n.k.	n.k.	7.11	n.k.	n.k.	n.k.	n.k.	n.k.			
Mauritania	150	n.k.	n.k.	44	n.k.	n.k.	2.91	n.k.	n.k.	16	0	5			
Morocco	3,732	3,759	3,298	114	114	99	3.48	3.42	3.20	196	150	50			
Oman	9,254	9,631	9,887	2,934	2,991	3,008	12.02	12.38	16.43	43	0	4			
Palestinian Territories	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	0	0	n.k.			
Qatar*	4,353	n.k.	n.k.	2,131	n.k.	n.k.	2.16	n.k.	n.k.	12	0	0			
Saudi Arabia	67,020	80,762	81,853	2,488	2,953	2,949	9.00	10.82	12.95	227	0	25			
Syrian Arab Republic	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	131	0	150			
Tunisia	777	926	n.k.	72	85	n.k.	1.65	1.91	n.k.	36	0	12			
UAE*	13,868	n.k.	n.k.	2,533	n.k.	n.k.	3.58	n.k.	n.k.	63	0	0			
Yemen	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	20	0	0			
<b>Total*</b>	<b>189,784</b>	<b>212,202</b>	<b>204,966</b>	<b>471</b>	<b>519</b>	<b>494</b>	<b>5.66</b>	<b>6.21</b>	<b>6.78</b>	<b>2,259</b>	<b>1,683</b>	<b>1,076</b>			
<b>Latin America and the Caribbean</b>															
Antigua and Barbuda	26	27	27	286	301	287	2.17	2.20	2.06	0	0	0			
Argentina	5,578	4,320	6,493	131	100	150	0.90	0.80	1.12	74	0	31			
Bahamas, The	64	87	102	201	271	314	0.76	1.03	1.15	1	0	0			
Barbados	35	35	33	121	121	115	0.82	0.80	0.75	1	0	0			
Belize	17	18	21	52	54	61	1.07	1.09	1.20	1	1	0			
Bolivia	373	405	435	36	38	40	1.21	1.22	1.30	34	0	37			

Table 18 International Comparisons of Defence Expenditure and Military Personnel

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Active Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	
Brazil	31,441	30,978	24,260	156	153	119	1.31	1.32	1.35	335	1,340	395	45		
Chile	4,444	3,783	3,456	258	218	197	1.61	1.47	1.44	65	40	159	10		
Colombia	13,590	13,083	9,865	297	283	211	3.58	3.46	3.60	297	35	0	27		
Costa Rica	402	423	439	86	89	91	0.82	0.85	0.85	49	39	0	15		
Cuba*	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	56	0	118	1		
Dominican Republic	371	399	446	36	39	43	0.61	0.62	0.67	40	118	25	17		
Ecuador	1,620	n.k.	1,911	105	n.k.	120	1.71	n.k.	1.93	25	10	64	25		
El Salvador	155	151	150	25	25	24	0.64	0.60	0.58	18	64	3	1		
Guatemala	260	271	275	18	18	18	0.48	0.46	0.43	3	1	0	0		
Guyana	35	38	40	48	52	55	1.18	1.24	1.26	0	0	0	0		
Haiti	n.a.	n.a.	n.a.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	11	60	8	0		
Honduras	180	221	249	21	26	28	0.97	1.13	1.25	3	1	0	0		
Jamaica	130	122	119	45	42	40	0.91	0.89	0.86	277	82	59	0		
Mexico	5,934	6,528	6,051	50	54	50	0.47	0.51	0.52	12	0	0	0		
Nicaragua	85	83	72	15	14	12	0.78	0.71	0.58	0	0	12	15		
Panama	640	719	656	180	199	179	1.58	1.64	1.38	11	165	15	77		
Paraguay	350	307	322	53	46	47	1.24	1.01	1.11	81	188	0	0		
Peru	2,754	2,553	2,275	92	85	75	1.36	1.26	1.26	2	0	0	0		
Suriname*	49	n.k.	n.k.	86	n.k.	n.k.	0.95	n.k.	n.k.	4	0	0	0		
Trinidad and Tobago	395	438	443	323	358	363	1.45	1.52	1.60	25	0	1	150		
Uruguay	466	419	517	140	126	155	0.81	0.73	0.94	115	8	2,151	1,083		
Venezuela*	5,184	4,730	1,205	182	164	41	2.37	2.29	0.91	1,539	2,151	0	0		
<b>Total*</b>	<b>74,678</b>	<b>72,190</b>	<b>60,015</b>	<b>124</b>	<b>119</b>	<b>98</b>	<b>1.27</b>	<b>1.25</b>	<b>1.21</b>						
<b>Sub-Saharan Africa</b>															
Angola	6,091	6,846	4,433	328	359	226	4.91	5.29	4.35	107	0	10	3		
Benin	86	97	n.k.	9	10	n.k.	1.04	1.12	n.k.	7	0	0	2		
Botswana	313	407	351	147	189	161	2.07	2.68	2.68	9	0	0	0		
Burkina Faso	154	159	151	9	9	8	1.26	1.27	1.33	11	0	0	0		
Burundi	66	62	62	7	6	6	2.41	2.01	2.09	20	0	0	31		

Table 18 International Comparisons of Defence Expenditure and Military Personnel

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Active Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	
Cameroon	393	402	355	17	17	15	1.33	1.27	1.24	14	0	0	9		
Cape Verde	10	12	10	19	22	18	0.56	0.64	0.61	1	0	0	0		
Central African Rep*	52	n.k.	n.k.	10	n.k.	n.k.	3.36	n.k.	n.k.	7	0	0	1		
Chad*	209	n.k.	n.k.	19	n.k.	n.k.	1.61	n.k.	n.k.	30	0	0	10		
Congo, Republic of*	367	n.k.	n.k.	80	n.k.	n.k.	2.72	n.k.	n.k.	10	0	0	2		
Côte d'Ivoire	751	810	846	34	35	36	2.42	2.40	2.71	25	0	0	n.k.		
Dem Republic of the Congo	427	461	738	6	6	9	1.31	1.28	1.89	134	0	0	0		
Djibouti*	11	n.k.	n.k.	14	n.k.	n.k.	0.77	n.k.	n.k.	10	0	0	3		
Equatorial Guinea*	8	n.k.	n.k.	11	n.k.	n.k.	0.04	n.k.	n.k.	1	0	0	0		
Eritrea*	78	n.k.	n.k.	13	n.k.	n.k.	2.27	n.k.	n.k.	202	120	0	0		
Ethiopia	358	393	399	4	4	4	0.75	0.72	0.63	138	0	0	0		
Gabon	282	196	197	172	117	116	1.60	1.08	1.43	5	0	0	2		
Gambia*	10	n.k.	n.k.	5	n.k.	n.k.	1.15	n.k.	n.k.	1	0	0	0		
Ghana	295	312	248	12	12	9	0.62	0.81	0.66	16	0	0	0		
Guinea*	40	n.k.	n.k.	4	n.k.	n.k.	0.65	n.k.	n.k.	10	0	0	3		
Guinea-Bissau*	26	n.k.	n.k.	16	n.k.	n.k.	2.57	n.k.	n.k.	4	0	0	2		
Kenya	971	1,018	942	22	23	21	1.77	1.67	1.49	24	0	0	5		
Lesotho	48	49	44	25	25	22	2.12	2.22	2.14	2	0	0	0		
Liberia	33	28	17	8	7	4	1.70	1.41	0.86	2	0	0	0		
Madagascar	74	72	57	3	3	2	0.70	0.67	0.60	14	0	0	8		
Malawi	24	62	36	1	4	2	0.44	1.03	0.56	5	0	0	2		
Mali	302	355	469	19	22	28	2.72	2.93	4.28	6	0	0	8		
Mauritius	233	285	240	177	214	179	1.96	2.26	2.07	0	0	0	3		
Mozambique	33	382	152	1	15	6	0.21	2.29	0.89	11	0	0	0		
Namibia	411	617	574	188	281	259	3.17	4.53	4.46	9	0	0	6		
Niger*	72	n.k.	n.k.	4	n.k.	n.k.	0.96	n.k.	n.k.	5	0	0	5		
Nigeria	2,348	2,228	1,884	14	13	10	0.45	0.39	0.38	80	0	0	82		
Rwanda	84	81	91	7	7	7	1.11	1.03	1.07	33	0	0	2		
Senegal	249	241	216	19	18	15	1.66	1.54	1.54	14	0	0	5		

Table 18 **International Comparisons of Defence Expenditure and Military Personnel**

	Defence Spending current US\$ m			Defence Spending per capita (current US\$)			Defence Spending % of GDP			Active Armed Forces (000)		Estimated Reservists (000)		Active Paramilitary (000)	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2016	2016	2016	2016	2016	
Seychelles	13	n.k.	n.k.	141	n.k.	n.k.	0.91	n.k.	n.k.	0	0	0	0	0	
Sierra Leone	15	15	13	3	3	2	0.31	0.31	0.31	9	0	0	0	0	
Somalia	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	n.k.	17	0	0	0	0	
South Africa	4,214	3,953	3,506	80	75	65	1.15	1.13	1.11	67	0	0	0	15	
South Sudan	862	1,044	1,346	78	90	112	5.62	7.30	10.45	185	0	0	0	0	
Sudan	1,892	n.k.	n.k.	54	n.k.	n.k.	2.84	n.k.	n.k.	244	0	0	0	20	
Tanzania	333	394	424	7	8	8	0.75	0.82	0.92	27	80	0	0	1	
Togo	72	86	71	10	12	9	1.65	1.87	1.71	9	0	0	0	1	
Uganda	366	403	362	11	11	10	1.43	1.46	1.45	45	10	10	10	2	
Zambia	377	446	435	27	30	29	1.41	1.68	1.78	15	3	3	3	1	
Zimbabwe	356	390	379	27	28	27	2.64	2.82	2.73	29	0	0	0	22	
<b>Total*</b>	<b>23,409</b>	<b>25,174</b>	<b>21,648</b>	<b>25</b>	<b>27</b>	<b>22</b>	<b>1.40</b>	<b>1.44</b>	<b>1.36</b>	<b>1,615</b>	<b>213</b>	<b>213</b>	<b>213</b>	<b>264</b>	
<b>Summary</b>															
North America	649,551	619,208	611,510	1,850	1,751	1,715	3.51	3.24	3.13	1,447	871	871	871	5	
Europe	281,467	280,187	246,467	455	451	395	1.40	1.36	1.36	2,129	2,301	2,301	2,301	748	
Russia and Eurasia	76,819	76,284	62,682	271	269	221	2.76	3.03	3.48	1,331	3,757	3,757	3,757	701	
Asia	325,647	346,061	356,026	83	88	89	1.43	1.46	1.48	9,370	14,748	14,748	14,748	3,743	
Middle East and North Africa	189,784	212,202	204,966	471	519	494	5.66	6.21	6.78	2,259	1,683	1,683	1,683	1,076	
Latin America and the Caribbean	74,678	72,190	60,015	124	119	98	1.27	1.25	1.21	1,539	2,151	2,151	2,151	1,083	
Sub-Saharan Africa	23,409	25,174	21,648	25	27	22	1.40	1.44	1.36	1,615	213	213	213	264	
<b>Global totals</b>	<b>1,621,355</b>	<b>1,631,306</b>	<b>1,563,304</b>	<b>229</b>	<b>228</b>	<b>216</b>	<b>2.16</b>	<b>2.12</b>	<b>2.14</b>	<b>19,690</b>	<b>25,724</b>	<b>25,724</b>	<b>25,724</b>	<b>7,619</b>	

\* Estimates

[a] 'National Defence' budget chapter. Excludes other defence-related expenditures included under other budget lines (e.g. pensions) – see Table 7, p. 170.

## Selected Non-State Armed Groups: Observed Equipment Holdings

*The Military Balance* details below information about the observed capacities of selected non-state groups. It is intended to complement the assessments carried within the written and data sections of *The Military Balance*, as well as other IISS products such as the Armed Conflict Database and the *Armed Conflict Survey*. This 'observed equipment', which should not be taken as an exhaustive list of equipment in each inventory, has been assessed by the IISS as being present within a particular area of operations. While in many cases it is possible to attribute the equipment operator, in other cases it has proven difficult to ascertain precise ownership.

*The Military Balance* does not detail in its country inventories vehicles commonly called 'technicals' (tch), but for some non-state groups these – often modified civilian vehicles – can constitute a principal manoeuvre capability and as such are relevant to informed assessments of inventory holdings.

### EASTERN UKRAINE SEPARATIST FORCES

It has proven problematic to apportion equipment ownership to either of the main separatist entities in the Donetsk and Luhansk oblasts, and as such this list reflects equipment that has been generally observed as employed in support of the separatist cause in eastern Ukraine.

#### EQUIPMENT BY TYPE

**MBT** T-64BV; T-64B; T-64BM+; T-72B1; T-72BA

**RECCE** BDRM-2

**AIFV** BMD-1, BMD-2; BMP-1; BMP-2; BTR-4

**APC**

**APC (W)** BTR-60; BTR-70; BTR-80

**APC (T)** MT-LB; BTR-D GT-MU; PTS-2

**ARTY**

**SP** 2S1; 2S3; 2S7; 2S19+

**TOWED** 122mm D30; 152mm 2A65; 203mm 2S7

**GUN/MOR • 120mm • SP** 2S9 **TOWED:** 2B16 *Nona-K*

**MRL** BM-21

**MOR** 120mm 2B11 82mm 2B14

**AT**

**MSL** 9K115 *Metis* (AT-7 *Saxhorn*); 9K135 *Kornet* (AT-14 *Spriggan*)

**RCL** SPG-9

**GUNS** 100mm MT-12

**AD**

**SAM • SP** 9K35 *Strela-10* (SA-13 *Gopher*); 9K33 *Osa* (SA-8 *Gecko*)

**MANPAD** 9K32M *Strela-2M* (SA-7B *Grail*); 9K38 *Igla* (SA-18 *Grouse*); GROM

**GUNS:**

**SP** 30mm 2S6; 23mm ZU-23-2 (tch/on MT-LB)

**TOWED** 14.5mm ZPU-2; 57mm S-60

### HIZBULLAH (LEBANON)

Hizbullah's support for President Assad in Syria has seen the organisation take on a more conventional military role, with the acquisition of heavy equipment from the Syrian Arab Army. It also maintains a substantive inventory of rockets and missiles in southern Lebanon, reportedly bolstered by reserve stocks transferred from Syria. Estimates of Hizbullah's personnel strength suggest around 7,000–10,000 active forces with an additional 20,000 reserves. Between 4,000 and 8,000 are estimated to be committed to operations in Syria.

#### EQUIPMENT BY TYPE

**MBT** T-72

**ARTY • MRL** 122mm BM-21; 240mm *Fadjr* 3; 330mm *Fadjr* 5; 610mm *Zelzal* 2 (reported)

**AT • MSL • MANPATS** 9K111 *Malyutka* (AT-3 *Sagger*); 9K111 *Fagot* (AT-4 *Spigot*); 9K115-2 *Metis-M* (AT-13 *Saxhorn* 2); 9K135 *Kornet* (AT-14 *Spriggan*); *Milan*

**MSL • SRBM** *Fateh* 110/M-600 (reported); SS-1D *Scud C* (reported); SS-1E *Scud D* (reported)

**AD • SAM • MANPAD** some possible

**UAV** some

### PESHMERGA (including Zeravani)

The equipment displayed below for Peshmerga forces operating in northern Iraq includes that of the Zeravani police units of the Kurdistan Regional Government. It reflects equipment delivered as international military assistance arrived to bolster Kurdish forces fighting ISIS. The Peshmerga's force strength is estimated at 150,000.

#### EQUIPMENT BY TYPE

**MBT** T-54; T-55; T-62

**RECCE** EE-9 *Cascavel*

**AIFV** 2+ EE-11 *Urutu*

**APC**

**APC (T)** MT-LB; YW-701 (Type-63)

**APC (W)** M1117 ASV; *Wer'wolf* MkII

**PPV** HMMWV; M1114 (up-armoured HMMWV); ILAV *Cougar* 6x6; Otokar APV; IAG *Guardian*; Streit *Spartan*; *Caiman*; *Maxxpro*; *Reva*; up to 14 *Dingo* 1

**ARTY**

**SP** 122mm 2S1

**TOWED** 87.6mm 1+ 25 pdr; 122mm 6+ D-30

**MRL** 107mm Type 63 (tch); 122mm BM-21 (inc mod); HM20

**MOR** 60mm M224; 81mm M252; 120mm M120; 130mm M-46/Type-59; 152mm D-20

**AT**

**MSL • MANPATS** HJ-8; 9M14 *Malyutka* (AT-3 *Sagger*); 9K113 *Konkurs* (AT-5 *Spandrel*); 9K135 *Kornet* (AT-14 *Spriggan*); up to 60 *Milan*

**RCL** 73mm SPG-9; 88mm *Breda Folgore*; 84mm up to 43 *Carl Gustav*; up to 1,000 AT-4; 105mm M40

**RL** 110mm up to 400 *Panzerfaust* 3



## AD

## GUNS

SP 14.5mm ZPU-1 (tch); ZPU-2 (tch); ZPU-4 (tch)  
 20mm 53T2 *Tarasque* (tch); 23mm ZU-23-2 (tch/on MT-LB); 57mm ZSU-57; S-60 (tch)  
 TOWED 14.5mm ZPU-1; ZPU-2; ZPU-4; 20mm 53T2  
*Tarasque*; 57mm S-60

ARV 1+ Type-653

## AIRCRAFT

Reported access to KRG transport/utility helicopters

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## ISLAMIC STATE OF IRAQ AND AL-SHAM (ISIS)

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Whilst ISIS remains primarily a lightly armed organisation, based around irregular infantry and technical utility vehicles, its successful offensives have allowed the group to take possession of numerous armoured vehicles and artillery pieces from the Iraqi and Syrian security forces. Although allied airstrikes, and a shortage of trained personnel, spare parts and ammunition, have limited their ability to operate this equipment on a routine basis, ISIS is still capable of employing elements of this arsenal for specific operations. The equipment displayed below reflects types observed in operation in either Syria, Iraq or both. While there is some crossover between the two theatres, some notable equipment types captured in Iraq have yet to be seen in operation in Syria. These are marked below with \*. ISIS's total fighting strength is estimated at 20,000–35,000, of whom 10,000–15,000 are estimated to be operating in Iraq.

## EQUIPMENT BY TYPE

MBT M1A1 *Abrams*+\*; T-55; T-62; T-72AV; T-72M1

RECCE BRDM-2

AIFV BMP-1; BTR-4\*

## APC

APC (T) M113\*; MT-LB

APC (W) M1117 *ASV*\*

PPV ILAV *Cougar*\*; *Dzik*-3\*

## ARTY

SP 122mm 2S1

TOWED 122mm D-30; 130mm M-46/Type-59; 155mm  
 M198\*

MRL 107mm Type-63; 122mm BM-21

MOR 120mm M120

## AT

MSL • MANPATS 9K113 *Konkurs* (AT-5 *Spandrel*);

9K115 *Metis* (AT-7 *Saxhorn*); 9K135 *Kornet* (AT-14

*Spriggan*); *Milan*

RCL 73mm SPG-9; 90mm M-79 *Osa* (reported); 106mm

M40A1\*

## AD

SAM • MANPAD FN-6; 9K32 *Strela-2* (SA-7 *Grail*)‡; 9K34 *Strela-3* (SA-14 *Gremlin*)

## GUNS

SP 14.5mm ZPU (tch); 23mm ZSU-23-4; ZSU-23 (tch);

57mm S-60 (tch)

TOWED 23mm ZU-23; 57mm S-60

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## BOKO HARAM

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The equipment displayed below should not be considered exhaustive given changes in the group's operational locations, the fluid nature of ongoing combat with Nigeria's armed forces and the MNJTF, and also the flexible and devolved nature of Boko Haram itself, which has a number of factions and splinter groups.

## EQUIPMENT BY TYPE

MBT T-55; Vickers Mk3

LT TANK *Scorpion*

RECCE AML-60; ECR-90 (reported)

## APC

APC (T) 4K-7FA *Steyr*; MT-LB

APC (W) AVGP *Cougar* (mod)

PPV Otokar *Cobra*; Streit *Spartan*

ARTY 105mm M56; 122mm D-30; 155mm FH-77B

(reported)

AD • SP 14.5mm ZPU-2 (tch); 23mm ZU-23-2 (tch)

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## SUDAN PEOPLE'S LIBERATION ARMY (SPLA) – IN OPPOSITION (SOUTH SUDAN)

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The equipment displayed below for SPLA–IO forces is a reflection of the shared heritage with government armed forces, the SPLA. Both sides originated in the national army, and so share the same basic equipment and tactics: large-scale infantry equipped with heterogeneous small arms; vehicle-mounted anti-aircraft guns; and simple anti-armour and artillery weapons.

## EQUIPMENT BY TYPE

MBT T-55

APC (W) *Typhoon*

## ARTY

TOWED 122mm M30 (M1938)

MRL 122mm BM-21; 107mm Type-63

MOR 120mm Type 55 look-a-like

## AT

RCL 57mm M18 (reported); 73mm SPG-9; 82mm B-10 (reported)

## AD

GUNS 23mm ZU-23-2 (tch)

## PART TWO

# Explanatory Notes

*The Military Balance* provides an assessment of the armed forces and defence expenditures of 171 countries and territories. Each edition contributes to the provision of a unique compilation of data and information, enabling the reader to discern trends by studying editions as far back as 1959. The data in the current edition is accurate according to IISS assessments as at November 2015, unless specified. Inclusion of a territory, country or state in *The Military Balance* does not imply legal recognition or indicate support for any government.

### GENERAL ARRANGEMENT AND CONTENTS

The introduction is an assessment of global defence developments and key themes in the 2016 edition. Next, three analytical essays focus on armoured-vehicle developments, the Chinese ballistic-missile sector and cyber deterrence. A graphical section follows, analysing comparative defence statistics by domain, as well as key trends in defence economics.

Regional chapters begin with an assessment of key military issues facing each area, and regional defence economics. They also include graphical analysis of selected equipment. These are followed by country-specific analysis of defence policy and capability issues, and defence economics, and then military-capability and defence-economics data for regional countries, in alphabetical order. Selected Arms Procurements and Deliveries tables complete each region.

The book closes with comparative and reference sections containing data on military exercises, comparisons of expenditure and personnel statistics, and assessments of observed equipment for selected non-state armed groups.

### THE MILITARY BALANCE WALL CHART

The theme for *The Military Balance 2016* wall chart is missile defence in the Gulf region. The chart displays significant defensive and offensive systems held by Iran, GCC states and US forces stationed in the region.

### USING THE MILITARY BALANCE

The country entries assess personnel strengths, organisation and equipment holdings of the world's armed forces. Force-strength and equipment-inventory data are based on the most accurate data available, or on the best esti-

### Abbreviations and Definitions

Qualifier	
'At least'	Total is no less than the number given
'Up to'	Total is at most the number given, but could be lower
'About'	Total could be higher than given
'Some'	Precise inventory is unavailable at time of press
'In store'	Equipment held away from front-line units; readiness and maintenance varies
Billion (bn)	1,000 million (m)
Trillion (tr)	1,000 billion
\$	US dollars unless otherwise stated
€	Estimated
*	Aircraft counted by the IISS as combat capable
-	Part of a unit is detached/less than
+	Unit reinforced/more than
†	IISS assesses that the serviceability of equipment is in doubt <sup>a</sup>
‡	Equipment judged obsolete (weapons whose basic design is more than four decades old and which have not been significantly upgraded within the past decade) <sup>a</sup>

<sup>[a]</sup> Not to be taken to imply that such equipment cannot be used

mate that can be made. In estimating a country's total capabilities, old equipment may be counted where it is considered that it may still be deployable.

The data presented reflects judgements based on information available to the IISS at the time the book is compiled. Where information differs from previous editions, this is mainly because of changes in national forces, but it is sometimes because the IISS has reassessed the evidence supporting past entries. Given this, care must be taken in constructing time-series comparisons from information given in successive editions.

### COUNTRY ENTRIES

Information on each country is shown in a standard format, although the differing availability of information and differences in nomenclature result in some variations. Country entries include economic, demographic and military data. Population figures are based on demographic statistics taken from the US Census Bureau. Data on ethnic and religious minorities is also provided in some country

entries. Military data includes personnel numbers, length of conscript service where relevant, outline organisation, number of formations and units, and an inventory of the major equipment of each service. Details of national forces stationed abroad and of foreign forces stationed within the given country are also provided.

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## ARMS PROCUREMENTS AND DELIVERIES

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Tables at the end of the regional texts show selected arms procurements (contracts and, in selected cases, major development programmes that may not yet be at contract stage) and deliveries listed by country buyer, together with additional information including, if known, the country supplier, cost, prime contractor and the date on which the first delivery was due to be made. While every effort has been made to ensure accuracy, some transactions may not be fulfilled or may differ – for instance in quantity – from those reported. The information is arranged in the following order: strategic systems; land; sea; air.

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## DEFENCE ECONOMICS

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Country entries include defence expenditures, selected economic-performance indicators and demographic aggregates. All country entries are subject to revision each year as new information, particularly regarding defence expenditure, becomes available. The information is necessarily selective. In the ‘country comparisons’ section on pp. 481–92, there are also international comparisons of defence expenditure and military personnel, giving expenditure figures for the past three years in per capita terms and as a % of GDP. The aim is to provide an accurate measure of military expenditure and the allocation of economic resources to defence.

Individual country entries show economic performance over the past two years and current demographic data. Where this data is unavailable, information from the last available year is provided. Where possible, official defence budgets for the current and previous two years are shown, as well as an estimate of actual defence expenditures for those countries where true defence expenditure is thought to be higher than official budget figures suggest. Estimates of actual defence expenditure, however, are only made for those countries where there is sufficient data to justify such a measurement. Therefore, there will be several countries listed in *The Military Balance* for which only an official defence-budget figure is provided but where, in reality, true defence-related expenditure is almost certainly higher.

All financial data in the country entries is shown in both national currency and US dollars at current year – not constant – prices. US-dollar conversions are generally, but

not invariably, calculated from the exchange rates listed in the entry. In some cases a US-dollar purchasing-power parity (PPP) rate is used in preference to official or market exchange rates and this is indicated in each case.

## Definitions of terms

Despite efforts by NATO and the UN to develop a standardised definition of military expenditure, many countries prefer to use their own definitions (which are often not made public). In order to present a comprehensive picture, *The Military Balance* lists three different measures of military-related spending data.

- For most countries, an official defence-budget figure is provided.
- For those countries where other military-related outlays, over and above the defence budget, are known or can be reasonably estimated, an additional measurement referred to as defence expenditure is also provided. Defence-expenditure figures will naturally be higher than official budget figures, depending on the range of additional factors included.
- For NATO countries, an official defence-budget figure as well as a measure of defence expenditure (calculated using NATO’s definition) is quoted.

NATO’s military-expenditure definition (the most comprehensive) is cash outlays of central or federal governments to meet the costs of national armed forces. The term ‘armed forces’ includes strategic, land, naval, air, command, administration and support forces. It also includes other forces if these forces are trained, structured and equipped to support defence forces and are realistically deployable. Defence expenditures are reported in four categories: Operating Costs, Procurement and Construction, Research and Development (R&D) and Other Expenditure. Operating Costs include salaries and pensions for military and civilian personnel; the cost of maintaining and training units, service organisations, headquarters and support elements; and the cost of servicing and repairing military equipment and infrastructure. Procurement and Construction expenditure covers national equipment and infrastructure spending, as well as common infrastructure programmes. R&D is defence expenditure up to the point at which new equipment can be put in service, regardless of whether new equipment is actually procured. Foreign Military Aid (FMA) contributions are also noted.

For many non-NATO countries the issue of transparency in reporting military budgets is fundamental. Not every UN member state reports defence-budget data (even fewer report real defence expenditures) to their electorates,

the UN, the IMF or other multinational organisations. In the case of governments with a proven record of transparency, official figures generally conform to the standardised definition of defence budgeting, as adopted by the UN, and consistency problems are not usually a major issue. The IISS cites official defence budgets as reported by either national governments, the UN, the OSCE or the IMF.

For those countries where the official defence-budget figure is considered to be an incomplete measure of total military-related spending, and appropriate additional data is available, the IISS will use data from a variety of sources to arrive at a more accurate estimate of true defence expenditure. The most frequent instances of budgetary manipulation or falsification typically involve equipment procurement, R&D, defence-industrial investment, covert weapons programmes, pensions for retired military and civilian personnel, paramilitary forces and non-budgetary sources of revenue for the military arising from ownership of industrial, property and land assets.

Percentage changes in defence spending are referred to in either nominal or real terms. Nominal terms relate to the percentage change in numerical spending figures, and do not account for the impact of price changes (i.e. inflation) on defence spending. By contrast, real terms account for inflationary effects, and may therefore be considered a more accurate representation of change over time.

The principal sources for national economic statistics cited in the country entries are the IMF, the Organisation for Economic Cooperation and Development, the World Bank and three regional banks (the Inter-American, Asian and African Development banks). For some countries, basic economic data is difficult to obtain. Gross Domestic Product (GDP) figures are nominal (current) values at market prices. GDP growth is real, not nominal, growth, and inflation is the year-on-year change in consumer prices.

### Calculating exchange rates

Typically, but not invariably, the exchange rates shown in the country entries are also used to calculate GDP and defence-budget and defence-expenditure dollar conversions. Where they are not used, it is because the use of exchange-rate dollar conversions can misrepresent both GDP and defence expenditure. For some countries, PPP rather than market exchange rates are sometimes used for dollar conversions of both GDP and defence expenditures. Where PPP is used, it is annotated accordingly.

The arguments for using PPP are strongest for Russia and China. Both the UN and IMF have issued caveats concerning the reliability of official economic statistics on transitional economies, particularly those of Russia, and some Eastern European and Central Asian countries. Non-reporting, lags in the publication of current statis-

tics and frequent revisions of recent data (not always accompanied by timely revision of previously published figures in the same series) pose transparency and consistency problems. Another problem arises with certain transitional economies whose productive capabilities are similar to those of developed economies, but where cost and price structures are often much lower than world levels. No specific PPP rate exists for the military sector, and its use for this purpose should be treated with caution. Furthermore, there is no definitive guide as to which elements of military spending should be calculated using the limited PPP rates available. The figures presented here are only intended to illustrate a range of possible outcomes depending on which input variables are used.

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## GENERAL DEFENCE DATA

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### Personnel

The 'Active' total comprises all servicemen and women on full-time duty (including conscripts and long-term assignments from the Reserves). When a gendarmerie or equivalent is under control of the defence ministry, they may be included in the active total. Only the length of conscript liability is shown; where service is voluntary there is no entry. 'Reserve' describes formations and units not fully manned or operational in peacetime, but which can be mobilised by recalling reservists in an emergency. Some countries have more than one category of reserves, often kept at varying degrees of readiness. Where possible, these differences are denoted using the national descriptive title, but always under the heading of 'Reserves' to distinguish them from full-time active forces. All personnel figures are rounded to the nearest 50, except for organisations with under 500 personnel, where figures are rounded to the nearest ten.

### Other forces

Many countries maintain forces whose training, organisation, equipment and control suggest they may be used to support or replace regular military forces; these are called 'paramilitary'. They include some forces that may have a constabulary role. These are detailed after the military forces of each country, but their personnel numbers are not normally included in the totals at the start of each entry.

### Non-state armed groups

*The Military Balance* includes some detail on selected non-state groups that are militarily significant armed actors, detailing observed military equipment. Some may be aligned with national or regional governments or religious or ethnic groups. They may pose a threat to state integrity or to international stability. For more information, see the

## Units and formation strength

Company	100–200
Battalion	500–1,000
Brigade	3,000–5,000
Division	15,000–20,000
Corps or Army	50,000–100,000

IISS Armed Conflict Database (<http://acd.iiss.org>) or the *Armed Conflict Survey*.

## Cyber

*The Military Balance* includes detail on selected national cyber capacities, particularly those under the control of, or designed to fulfil the requirements of, defence organisations. Capabilities are not assessed quantitatively. Rather, national organisations, legislation, national-security strategies etc. are noted, where appropriate, to indicate the level of effort states are devoting to this area. Generally, civil organisations are not traced here, though in some cases these organisations could have dual civil–military roles.

## Forces by role and equipment by type

Quantities are shown by function (according to each nation's employment) and type, and represent what are believed to be total holdings, including active and reserve operational and training units. Inventory totals for missile systems relate to launchers and not to missiles. Equipment held 'in store' is not counted in the main inventory totals.

## Deployments

*The Military Balance* mainly lists permanent bases and operational deployments, including peacekeeping operations, which are often discussed in the regional text. Information in the country-data sections details, first, deployments of troops and, second, military observers and, where available, the role and equipment of deployed units.

## Training activity

Selected exercises, which involve two or more states and are designed to improve interoperability or test new doctrine, forces or equipment, are detailed in tables on pp. 482–83. (Exceptions may be made for particularly important exercises held by single states that indicate significant capability or equipment developments.)

## LAND FORCES

To make international comparison easier and more consistent, *The Military Balance* categorises forces by role and translates national military terminology for unit and formation sizes. Typical personnel strength, equipment

holdings and organisation of formations such as brigades and divisions vary from country to country. In addition some unit terms, such as 'regiment', 'squadron', 'battery' and 'troop', can refer to significantly different unit sizes in different countries. Unless otherwise stated these terms should be assumed to reflect standard British usage where they occur.

## NAVAL FORCES

Classifying naval vessels according to role is complex. A post-war consensus on primary surface combatants revolved around a distinction between independently operating cruisers, air-defence escorts (destroyers) and anti-submarine-warfare escorts (frigates). However, new ships are increasingly performing a range of roles. For this reason, *The Military Balance* has drawn up a classification system based on full-load displacement (FLD) rather than a role classification system. These definitions will not necessarily conform to national designations.

## AIR FORCES

Aircraft listed as combat capable are assessed as being equipped to deliver air-to-air or air-to-surface ordnance. The definition includes aircraft designated by type as bomber, fighter, fighter/ground attack, ground attack, and anti-submarine warfare. Other aircraft considered to be combat capable are marked with an asterisk (\*). Operational groupings of air forces are shown where known. Typical squadron aircraft strengths can vary both between aircraft types and from country to country. When assessing missile ranges, *The Military Balance* uses the following range indicators:

- Short-Range Ballistic Missile (SRBM): less than 1,000km;
- Medium-Range Ballistic Missile (MRBM): 1,000–3,000km;
- Intermediate-Range Ballistic Missile (IRBM): 3,000–5,000km;
- Intercontinental Ballistic Missile (ICBM): over 5,000km.

## ATTRIBUTION AND ACKNOWLEDGEMENTS

The International Institute for Strategic Studies owes no allegiance to any government, group of governments, or any political or other organisation. Its assessments are its own, based on the material available to it from a wide variety of sources. The cooperation of governments of all listed countries has been sought and, in many cases, received. However, some data in *The Military Balance* is estimated. Care is taken to ensure that this data is as accurate and free from bias as possible. The Institute owes a considerable debt to a number of its own members, consultants and all those who help



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## Principal Land Definitions

### Forces by role

**Command:** free-standing, deployable formation headquarters (HQs).

**Special Forces (SF):** elite units specially trained and equipped for unconventional warfare and operations in enemy-controlled territory. Many are employed in counter-terrorist roles.

**Manoeuvre:** combat units and formations capable of manoeuvring include:

**Reconnaissance:** combat units and formations whose primary purpose is to gain information.

**Armoured:** armoured formations are principally equipped with main battle tanks (MBTs) and heavy armoured infantry fighting vehicles (AIFVs) to provide mounted close-combat capability.

**Mechanised:** mechanised formations use lighter armoured vehicles than armoured formations, and fewer, if any, tanks. They have less mounted firepower and protection, but can usually deploy more infantry than armoured formations.

**Light:** light formations may have few, if any, organic armoured vehicles. Some may be motorised and equipped with soft-skinned vehicles. Dismounted infantry constitute a primary capability.

**Air Manoeuvre:** formations and units trained and equipped for delivery by transport aircraft and/or helicopters. Some may have integral aviation assets.

**Aviation:** army units and formations organically equipped with helicopters and/or fixed-wing aircraft.

**Amphibious:** amphibious forces are trained and equipped to project force from the sea.

**Mountain:** formations and units trained and equipped to operate in mountainous terrain.

**Other Forces:** specifically trained and equipped 'jungle' or 'counter-insurgency' brigades and security units such as Presidential Guards, or formations permanently employed in training or demonstration tasks.

**Combat Support (CS):** includes artillery, engineers, air defence, intelligence, EOD and other CS not integral to manoeuvre formations. They support combat units and formations to enable them to fight and manoeuvre.

**Combat Service Support (CSS):** includes construction, logistics, maintenance, medical, supply and transport formations and units.

### Equipment by type

**Light Weapons:** include all small arms, machine guns, grenades and grenade launchers and unguided man-portable anti-armour and support weapons. These weapons have proliferated so much and are sufficiently easy to manufacture or copy that listing them would be impractical.

**Crew-Served Weapons:** crew-served recoilless rifles, man-portable ATGW, MANPAD and mortars of greater than 80mm calibre are listed, but the high degree of proliferation and local manufacture of many of these weapons means that estimates of numbers held may not be reliable.

### Armoured Fighting Vehicles (AFVs):

**Main Battle Tank (MBT):** armoured, tracked combat vehicles, armed with a turret-mounted gun of at least 75mm calibre and weighing at least 25 metric tonnes unladen. Lighter vehicles that meet the first three criteria are considered light tanks.

**Reconnaissance:** combat vehicles designed and equipped to enable reconnaissance tasks.

**Armoured Infantry Fighting Vehicle (AIFV):** armoured combat vehicles designed and equipped to transport an infantry squad and armed with a cannon of at least 20mm calibre.

**Armoured Personnel Carrier (APC):** lightly armoured combat vehicles designed and equipped to transport an infantry squad but either unarmed or armed with a cannon of less than 20mm calibre.

**Protected Patrol Vehicle (PPV):** role-specific armoured vehicles designed to protect troops from small arms, RPGs and roadside-bomb threats. Most have little or no cross-country mobility and are not designed for combined-arms manoeuvre.

**Artillery:** weapons (including guns, howitzers, gun/howitzers, multiple-rocket launchers, mortars and gun/mortars) with a calibre greater than 100mm for artillery pieces and 80mm and above for mortars, capable of engaging ground targets with indirect fire.

**Anti-Tank (AT):** guns, guided weapons and recoilless rifles designed to engage armoured vehicles and battle-field hardened targets.

**Air Defence (AD):** guns and missiles designed to engage fixed-wing, rotary-wing and unmanned aircraft.

**Combat Support and Combat Service Support Equipment:** includes assault bridging, engineer tanks, armoured recovery vehicles and armoured ambulances. Civilian equipment is excluded.

### Principal Naval Definitions

*To aid comparison between fleets, the following definitions, which do not conform to national definitions, are used:*

**Submarines:** all vessels designed to operate primarily under water. Submarines with a dived displacement below 250 tonnes are classified as midget submarines; those below 500 tonnes are coastal submarines.

**Principal surface combatants:** all surface ships designed for combat operations on the high seas, with an FLD above 1,500 tonnes. Aircraft carriers, including helicopter carriers, are vessels with a flat deck primarily designed to carry fixed- and/or rotary-wing aircraft, without amphibious capability. Other principal surface combatants include cruisers (with an FLD above 9,750 tonnes), destroyers (with an FLD above 4,500 tonnes) and frigates (with an FLD above 1,500 tonnes).

**Patrol and coastal combatants:** surface vessels designed for coastal or inshore operations. These include corvettes, which usually have an FLD between 500 and 1,500 tonnes and are distinguished from other patrol vessels by their heavier armaments. Also included in this category are offshore-patrol ships, with an FLD greater than 1,500 tonnes; patrol craft, which have an FLD between 250 and 1,500 tonnes; and patrol boats with an FLD between ten and 250 tonnes. Vessels with a top speed greater than 35 knots are designated as 'fast'.

**Mine warfare vessels:** all surface vessels configured primarily for mine laying or countermeasures. Countermeasures vessels are either: sweepers, which are designed to locate and destroy mines in an area; hunters, which are designed to locate and destroy individual mines; or countermeasures vessels, which combine both roles.

**Amphibious vessels:** vessels designed to transport personnel and/or equipment onto shore. These include landing helicopter assault vessels, which can embark fixed- and/or rotary-wing air assets as well as landing craft; landing helicopter docks, which can embark rotary-wing or VTOL assets and have a well dock; landing platform helicopters, which have a primary role of launch and recovery platform for rotary-wing or VTOL assets with a dock to store equipment/personnel for amphibious operations; and landing platform docks,

which do not have a through deck but do have a well dock. Landing ships are amphibious vessels capable of ocean passage and landing craft are smaller vessels designed to transport personnel and equipment from a larger vessel to land or across small stretches of water. Landing ships have a hold; landing craft are open vessels.

**Auxiliary vessels:** ocean-going surface vessels performing an auxiliary military role, supporting combat ships or operations. These generally fulfil five roles: under-way replenishment (such as tankers and oilers); logistics (such as cargo ships); maintenance (such as cable-repair ships or buoy tenders); research (such as survey ships); and special purpose (such as intelligence-collection ships and ocean-going tugs).

**Yard craft/miscellaneous vessels:** surface vessels performing a support role in coastal waters or to ships not in service. These vessels often have harbour roles, such as tugs and tenders. Other miscellaneous craft, such as royal yachts, are also included.

**Weapons systems:** weapons are listed in the following order: land-attack missiles, anti-ship missiles, surface-to-air missiles, torpedo tubes, anti-submarine weapons, CIWS, guns and aircraft. Missiles with a range less than 5km and guns with a calibre less than 57mm are generally not included.

**Organisations:** naval groupings such as fleets and squadrons frequently change and are shown only where doing so would aid qualitative judgements.

## Principal Aviation Definitions

**Bomber (Bbr):** comparatively large platforms intended for the delivery of air-to-surface ordnance. Bbr units are units equipped with bomber aircraft for the air-to-surface role.

**Fighter (Ftr):** aircraft designed primarily for air-to-air combat, which may also have a limited air-to-surface capability. Ftr units are equipped with aircraft intended to provide air superiority, which may have a secondary and limited air-to-surface capability.

**Fighter/Ground Attack (FGA):** multi-role fighter-size platforms with significant air-to-surface capability, potentially including maritime attack, and at least some air-to-air capacity. FGA units are multi-role units equipped with aircraft capable of air-to-air and air-to-surface attack.

**Ground Attack (Atk):** aircraft designed solely for the air-to-surface task, with limited or no air-to-air capability. Atk units are equipped with fixed-wing aircraft.

**Attack Helicopter (Atk hel):** rotary-wing platforms designed for delivery of air-to-surface weapons, and fitted with an integrated fire-control system.

**Anti-Submarine Warfare (ASW):** fixed- and rotary-wing platforms designed to locate and engage submarines, many with a secondary anti-surface-warfare capability. ASW units are equipped with fixed- or rotary-wing aircraft.

**Anti-Surface Warfare (ASuW):** ASuW units are equipped with fixed- or rotary-wing aircraft intended for anti-surface-warfare missions.

**Maritime Patrol (MP):** fixed-wing aircraft and unmanned aerial vehicles (UAVs) intended for maritime surface surveillance, which may possess an anti-surface-warfare capability. MP units are equipped with fixed-wing aircraft or UAVs.

**Electronic Warfare (EW):** fixed- and rotary-wing aircraft and UAVs intended for electronic countermeasures. EW units are equipped with fixed- or rotary-wing aircraft or UAVs.

**Intelligence/Surveillance/Reconnaissance (ISR):** fixed- and rotary-wing aircraft and UAVs intended to provide radar, visible-light or infrared imagery, or a mix thereof. ISR units are equipped with fixed- or rotary-wing aircraft or UAVs.

**Combat/Intelligence/Surveillance/Reconnaissance (CISR):** aircraft and UAVs that have the capability to deliver air-to-surface weapons, as well as undertake ISR tasks. CISR units are equipped with armed aircraft and/or UAVs for ISR and air-to-surface missions.

**COMINT/ELINT/SIGINT:** fixed- and rotary-wing platforms and UAVs capable of gathering electronic (ELINT), communication (COMINT) or signals intelligence (SIGINT). COMINT units are equipped with fixed- or rotary-wing aircraft or UAVs intended for the communications-intelligence task. ELINT units are equipped with fixed- or rotary-wing aircraft or UAVs used for gathering electronic intelligence. SIGINT units are equipped with fixed- or rotary-wing aircraft or UAVs used to collect signals intelligence.

**Airborne Early Warning (& Control) (AEW (&C)):** fixed- and rotary-wing platforms capable of providing airborne early warning, with a varying degree of onboard command-and-control depending on the platform. AEW(&C) units are equipped with fixed- or rotary-wing aircraft.

**Search-and-Rescue (SAR):** units are equipped with fixed- or rotary-wing aircraft used to recover military personnel or civilians.

**Combat Search-and-Rescue (CSAR):** units are equipped with armed fixed- or rotary-wing aircraft for recovery of personnel from hostile territory.

**Tanker (Tkr):** fixed- and rotary-wing aircraft designed for air-to-air refuelling. Tkr units are equipped with fixed- or rotary-wing aircraft used for air-to-air refuelling.

**Tanker Transport (Tkr/Tpt):** platforms capable of both air-to-air refuelling and military airlift.

**Transport (Tpt):** fixed- and rotary-wing aircraft intended for military airlift. Light transport aircraft are categorised as having a maximum payload of up to 11,340kg; medium up to 27,215kg; and heavy above 27,215kg. Medium transport helicopters have an internal payload of up to 4,535kg; heavy transport helicopters greater than 4,535kg. PAX aircraft are platforms generally unsuited for transporting cargo on the main deck. Tpt units are equipped with fixed- or rotary-wing platforms to transport personnel or cargo.

**Trainer (Trg):** a fixed- and rotary-wing aircraft designed primarily for the training role, some also have the capacity to carry light to medium ordnance. Trg units are equipped with fixed- or rotary-wing training aircraft intended for pilot or other aircrew training.

**Multi-role helicopter (MRH):** rotary-wing platforms designed to carry out a variety of military tasks including light transport, armed reconnaissance and battlefield support.

**Unmanned Aerial Vehicles (UAVs):** remotely piloted or controlled unmanned fixed- or rotary-wing systems. Light UAVs are those weighing 20–150kg; medium: 150–600kg; and large: more than 600kg.

# Reference

Table 19 **List of Abbreviations for Data Sections**

<b>AAA</b> anti-aircraft artillery	<b>ARC</b> cable repair ship	<b>comms</b> communications
<b>AAM</b> air-to-air missile	<b>ARD</b> auxiliary repair dry dock	<b>coy</b> company
<b>AAR</b> search-and-rescue vessel	<b>ARG</b> amphibious ready group	<b>CPX</b> command post exercise
<b>AAV</b> amphibious assault vehicle	<b>ARH</b> active radar homing	<b>CS</b> combat support
<b>AB</b> airborne	<b>ARL</b> airborne reconnaissance low	<b>CSAR</b> combat search and rescue
<b>ABM</b> anti-ballistic missile	<b>ARM</b> anti-radiation missile	<b>CSS</b> combat service support
<b>ABU</b> sea-going buoy tender	<b>armd</b> armoured	<b>CT</b> counter-terrorism
<b>ac</b> aircraft	<b>ARS</b> rescue and salvage ship	<b>CV/H/L/N/S</b> aircraft carrier/helicopter/light/ nuclear powered/VSTOL
<b>ACV</b> air cushion vehicle/armoured combat vehicle	<b>arty</b> artillery	<b>CW</b> chemical warfare/weapons
<b>ACS</b> crane ship	<b>ARV</b> armoured recovery vehicle	<b>DD/G/H/M</b> destroyer/with ASHM/with hangar/with SAM
<b>AD</b> air defence	<b>AS</b> anti-submarine/submarine tender	<b>DDS</b> dry deck shelter
<b>ADA</b> air defence artillery	<b>ASCM</b> anti-ship cruise missile	<b>def</b> defence
<b>adj</b> adjusted	<b>ASHM</b> anti-ship missile	<b>det</b> detachment
<b>AE</b> auxiliary, ammunition carrier	<b>aslt</b> assault	<b>div</b> division
<b>AEM</b> missile support ship	<b>ASM</b> air-to-surface missile	<b>ECM</b> electronic countermeasures
<b>AEV</b> armoured engineer vehicle	<b>ASR</b> submarine rescue craft	<b>ELINT</b> electronic intelligence
<b>AEW</b> airborne early warning	<b>ASTT</b> anti-submarine torpedo tube	<b>elm</b> element/s
<b>AFDL</b> auxiliary floating dry dock small	<b>ASW</b> anti-submarine warfare	<b>engr</b> engineer
<b>AFS</b> logistics ship	<b>ASuW</b> anti-surface warfare	<b>EOD</b> explosive ordnance disposal
<b>AFSB</b> afloat forward staging base	<b>AT</b> tug/anti-tank	<b>eqpt</b> equipment
<b>AG</b> misc auxiliary	<b>ATBM</b> anti-tactical ballistic missile	<b>est</b> estimate(d)
<b>AGB</b> icebreaker	<b>ATF</b> tug, ocean going	<b>EW</b> electronic warfare
<b>AGE</b> experimental auxiliary ship	<b>ATGW</b> anti-tank guided weapon	<b>excl</b> excludes/excluding
<b>AGF</b> command ship	<b>ATK</b> attack/ground attack	<b>exp</b> expenditure
<b>AGHS</b> hydrographic survey vessel	<b>AVB</b> aviation logistic support ship	<b>FAC</b> forward air control
<b>AGI</b> intelligence collection vessel	<b>avn</b> aviation	<b>fd</b> field
<b>AGM</b> space tracking vessel	<b>AWT</b> water tanker	<b>FF/G/H/M</b> fire-fighting/frigate/with ASHM/ with hangar/with SAM
<b>AGOR</b> oceanographic research vessel	<b>AX</b> training craft	<b>FGA</b> fighter ground attack
<b>AGOS</b> oceanographic surveillance vessel	<b>AXL</b> training craft (light)	<b>FLD</b> full-load displacement
<b>AGS</b> survey ship	<b>AXS</b> training craft (sail)	<b>flt</b> flight
<b>AH</b> hospital ship	<b>BA</b> budget authority (US)	<b>FMA</b> Foreign Military Assistance
<b>AIFV</b> armoured infantry fighting vehicle	<b>Bbr</b> bomber	<b>FS/G/H/M</b> corvette/with ASHM/with hangar/ with SAM
<b>AK</b> cargo ship	<b>BCT</b> brigade combat team	<b>Ftr</b> fighter
<b>aka</b> also known as	<b>bde</b> brigade	<b>FTX</b> field training exercise
<b>AKEH</b> dry cargo/ammunition ship	<b>bdgt</b> budget	<b>FY</b> fiscal year
<b>AKL</b> cargo ship (light)	<b>BG</b> battle group	<b>GBU</b> guided bomb unit
<b>AKR</b> roll-on/roll-off cargo ship	<b>BMD</b> ballistic missile defence	<b>gd</b> guard
<b>AKSL</b> stores ship (light)	<b>BMEWS</b> ballistic missile early warning system	<b>GDP</b> gross domestic product
<b>ALCM</b> air-launched cruise missile	<b>bn</b> battalion/billion	<b>GLCM</b> ground-launched cruise missile
<b>amph</b> amphibious/amphibian	<b>bty</b> battery	<b>GLMS</b> Guided Missile Launching System
<b>AO</b> oiler	<b>C2</b> command-and-control	<b>GNP</b> gross national product
<b>AOE</b> fast combat support ship	<b>casevac</b> casualty evacuation	<b>gp</b> group
<b>AOR</b> fleet replenishment oiler with RAS capability	<b>cav</b> cavalry	<b>HA/DR</b> humanitarian assistance/disaster relief
<b>AORH</b> oiler with hel capacity	<b>cbt</b> combat	<b>hel</b> helicopter
<b>AORL</b> replenishment oiler (light)	<b>CBRN</b> chemical, biological, radiological, nuclear, explosive	<b>how</b> howitzer
<b>AORLH</b> oiler light with hel deck	<b>cdo</b> commando	<b>HQ</b> headquarters
<b>AOS</b> auxiliary oiler, small	<b>C/G/H/M/N/L</b> cruiser/guided missile/with hangar/with missile/nuclear-powered/light	<b>HUMINT</b> human intelligence
<b>AOT</b> oiler transport	<b>CISR</b> combat ISR	<b>HWT</b> heavyweight torpedo
<b>AOTL</b> auxiliary oiler transport light	<b>CIMIC</b> civil-military cooperation	<b>hy</b> heavy
<b>AP</b> armour-piercing/anti-personnel/transport	<b>CIWS</b> close-in weapons system	<b>IBU</b> inshore boat unit
<b>APB</b> barracks ship	<b>COIN</b> counter-insurgency	<b>ICBM</b> intercontinental ballistic missile
<b>APC</b> armoured personnel carrier	<b>comd</b> command	
<b>AR</b> repair ship	<b>COMINT</b> communications intelligence	



<b>IMINT</b> imagery intelligence	<b>MS/A/C/D/I/O/R</b> mine sweeper/auxiliary/ coastal/drone/inshore/ocean	<b>SP</b> self-propelled
<b>imp</b> improved	<b>msl</b> missile	<b>Spec Ops</b> special operations
<b>incl</b> includes/including	<b>Mtn</b> mountain	<b>SPAAGM</b> self-propelled anti-aircraft gun and missile system
<b>indep</b> independent	<b>MW</b> mine warfare	<b>spt</b> support
<b>inf</b> infantry	<b>n.a.</b> not applicable	<b>sqn</b> squadron
<b>INS</b> inertial navigation system	<b>n.k.</b> not known	<b>SRBM</b> short-range ballistic missile
<b>int</b> intelligence	<b>NBC</b> nuclear biological chemical	<b>SS</b> submarine
<b>IOC</b> Initial Operating Capability	<b>NCO</b> non-commissioned officer	<b>SSA</b> submersible auxiliary support vessel
<b>IR</b> infrared	<b>nm</b> nautical mile	<b>SSAN</b> submersible auxiliary support vessel (nuclear)
<b>IR imaging</b> infrared	<b>nuc</b> nuclear	<b>SSBN</b> nuclear-powered ballistic-missile submarine
<b>IRBM</b> intermediate-range ballistic missile	<b>O &amp; M</b> operations and maintenance	<b>SSC</b> coastal submarine
<b>ISD</b> in-service date	<b>obs</b> observation/observer	<b>SSG</b> guided-missile submarine
<b>ISR</b> intelligence, surveillance and reconnaissance	<b>OCU</b> operational conversion unit	<b>SSGN</b> nuclear-powered guided-missile submarine
<b>ISTAR</b> intelligence, surveillance, target acquisition and reconnaissance	<b>op/ops</b> operational/operations	<b>SSK</b> attack submarine with ASW capability (hunter-killer)
<b>LACM</b> land-attack cruise missile	<b>OPFOR</b> opposition training force	<b>SSM</b> surface-to-surface missile
<b>LC/A/AC/D/H/M/PA/PL/T/U/VP</b> landing craft/ assault/air cushion/dock/heavy/medium/ personnel air cushion/personnel large/tank/ utility/vehicles and personnel	<b>org</b> organised/organisation	<b>SSN</b> nuclear-powered attack submarine
<b>LCC</b> amphibious command ship	<b>para</b> paratroop/parachute	<b>SSW</b> midget submarine
<b>LGB</b> laser-guided bomb	<b>PAX</b> passenger/passenger transport aircraft	<b>str</b> strength
<b>LHA</b> landing ship assault	<b>PB/C/F/I/R</b> patrol boat/coastal/fast/inshore/ riverine	<b>Surv</b> surveillance
<b>LHD</b> amphibious assault ship	<b>PC/C/F/G/H/I/M/O/R/T</b> patrol craft/coastal with ASHM/fast/guided missile/with hangar/inshore/with CIWS missile or SAM/ offshore/riverine/torpedo	<b>sy</b> security
<b>LIFT</b> lead-in fr trainer	<b>pdr</b> pounder	<b>t</b> tonnes
<b>LKA</b> amphibious cargo ship	<b>pers</b> personnel	<b>tac</b> tactical
<b>Inchr</b> launcher	<b>PG/G/GF/H</b> patrol gunboat/guided missile/ fast attack craft/hydrofoil	<b>temp</b> temporary
<b>log</b> logistic	<b>PGM</b> precision-guided munitions	<b>tk</b> tank
<b>LP/D/H</b> landing platform/dock/helicopter	<b>PH/G/M/T</b> patrol hydrofoil/with ASHM/ missile/torpedo	<b>tkr</b> tanker
<b>LRIP</b> Low-rate initial production	<b>pl</b> platoon	<b>TMD</b> theatre missile defence
<b>LS/D/L/LH/M/T</b> landing ship/dock/logistic/ logistic helicopter/medium/tank	<b>PKO</b> peacekeeping operations	<b>torp</b> torpedo
<b>Lt</b> light	<b>PPP</b> purchasing-power parity	<b>tpt</b> transport
<b>LWT</b> lightweight torpedo	<b>PPV</b> protected patrol vehicle	<b>tr</b> trillion
<b>maint</b> maintenance	<b>PRH</b> passive radar-homing	<b>trg</b> training
<b>MANPAD</b> man-portable air-defence system	<b>prepo</b> pre-positioned	<b>TRV</b> torpedo recovery vehicle
<b>MANPATS</b> man-portable anti-tank system	<b>PSO/H</b> peace support operations/offshore patrol vessel over 1,500 tonnes/with hangar	<b>TT</b> torpedo tube
<b>MBT</b> main battle tank	<b>PTF</b> semi-submersible vessel	<b>UAV</b> unmanned aerial vehicle
<b>MC/C/I/O</b> mine countermeasure coastal/ inshore/ocean	<b>ptn</b> pontoon bridging	<b>UCAV</b> unmanned combat air vehicle
<b>MCD</b> mine countermeasure diving support	<b>qd</b> quadrillion	<b>utl</b> utility
<b>MCM</b> mine countermeasures	<b>quad</b> quadruple	<b>UUV</b> unmanned undersea vehicle
<b>MCMV</b> mine countermeasures vessel	<b>R&amp;D</b> research and development	<b>veh</b> vehicle
<b>MD</b> military district	<b>RCL</b> recoilless launcher/ramped craft logistic	<b>VLB</b> vehicle launched bridge
<b>MDT</b> mine diving tender	<b>recce</b> reconnaissance	<b>VLS</b> vertical launch system
<b>mech</b> mechanised	<b>regt</b> regiment	<b>VSHORAD</b> very short-range air defence
<b>med</b> medium/medical	<b>RIB</b> rigid inflatable boat	<b>wfu</b> withdrawn from use
<b>medevac</b> medical evacuation	<b>RL</b> rocket launcher	<b>wg</b> wing
<b>MGA</b> machine gun artillery	<b>ro-ro</b> roll-on, roll-off	<b>WLIC</b> inland construction tenders
<b>MH/C/D/I/O</b> mine hunter/coastal/drone/ inshore/ocean	<b>RRC/F/U</b> rapid-reaction corps/force/unit	<b>WMD</b> weapon(s) of mass destruction
<b>mil</b> military	<b>RV</b> re-entry vehicle	<b>WTGB</b> US Coast Guard Icebreaker tugs
<b>MIRV</b> multiple independently targetable re-entry vehicle	<b>rvn</b> riverine	<b>YAC</b> royal yacht
<b>mk</b> mark (model number)	<b>SAM</b> surface-to-air missile	<b>YAG</b> yard craft, miscellaneous
<b>ML</b> minelayer	<b>SAR</b> search and rescue	<b>YDG</b> degaussing
<b>MLU</b> mid-life update	<b>SARH</b> semi-active radar homing	<b>YDT</b> diving tender
<b>mne</b> marine	<b>sat</b> satellite	<b>YFB</b> ferry boat
<b>mod</b> modified/modification	<b>SDV</b> swimmer delivery vehicles	<b>YFL</b> launch
<b>mor</b> mortar	<b>SEAD</b> suppression of enemy air defence	<b>YFRT</b> range support tenders
<b>mot</b> motorised/motor	<b>SF</b> special forces	<b>YP</b> yard patrol craft
<b>MP</b> maritime patrol/military police	<b>SHORAD</b> short-range air defence	<b>YPC</b> oil spill response vessel
<b>MR</b> maritime reconnaissance/motor rifle	<b>SIGINT</b> signals intelligence	<b>YPT</b> torpedo recovery vessel
<b>MRBM</b> medium-range ballistic missile	<b>sigs</b> signals	<b>YTB</b> harbour tug
<b>MRH</b> multi-role helicopter	<b>SLBM</b> submarine-launched ballistic missile	<b>YTL</b> light harbour tug
<b>MRL</b> multiple rocket launcher	<b>SLCM</b> submarine-launched cruise missile	<b>YTM</b> medium harbour tug
	<b>SLEP</b> service life extension programme	<b>YTR</b> firefighting vessel
		<b>YTT</b> torpedo trials craft
		<b>YY</b> general yard craft

Table 20 **Index of Country/Territory Abbreviations**

<b>AFG</b> .....	Afghanistan	<b>GAM</b> .....	Gambia	<b>NPL</b> .....	Nepal
<b>ALB</b> .....	Albania	<b>GEO</b> .....	Georgia	<b>NZL</b> .....	New Zealand
<b>ALG</b> .....	Algeria	<b>GER</b> .....	Germany	<b>OMN</b> .....	Oman
<b>ANG</b> .....	Angola	<b>GF</b> .....	French Guiana	<b>PT</b> .....	Palestinian Territories
<b>ARG</b> .....	Argentina	<b>GHA</b> .....	Ghana	<b>PAN</b> .....	Panama
<b>ARM</b> .....	Armenia	<b>GIB</b> .....	Gibraltar	<b>PAK</b> .....	Pakistan
<b>ATG</b> .....	Antigua and Barbuda	<b>GNB</b> .....	Guinea-Bissau	<b>PER</b> .....	Peru
<b>AUS</b> .....	Australia	<b>GRC</b> .....	Greece	<b>PHL</b> .....	Philippines
<b>AUT</b> .....	Austria	<b>GRL</b> .....	Greenland	<b>POL</b> .....	Poland
<b>AZE</b> .....	Azerbaijan	<b>GUA</b> .....	Guatemala	<b>PNG</b> .....	Papua New Guinea
<b>BDI</b> .....	Burundi	<b>GUI</b> .....	Guinea	<b>PRC</b> .....	China, People's Republic of
<b>BEL</b> .....	Belgium	<b>GUY</b> .....	Guyana	<b>PRT</b> .....	Portugal
<b>BEN</b> .....	Benin	<b>HND</b> .....	Honduras	<b>PRY</b> .....	Paraguay
<b>BFA</b> .....	Burkina Faso	<b>HTI</b> .....	Haiti	<b>PYF</b> .....	French Polynesia
<b>BGD</b> .....	Bangladesh	<b>HUN</b> .....	Hungary	<b>QTR</b> .....	Qatar
<b>BHR</b> .....	Bahrain	<b>IDN</b> .....	Indonesia	<b>ROC</b> .....	Taiwan (Republic of China)
<b>BHS</b> .....	Bahamas	<b>IND</b> .....	India	<b>ROK</b> .....	Korea, Republic of
<b>BIH</b> .....	Bosnia-Herzegovina	<b>IRL</b> .....	Ireland	<b>ROM</b> .....	Romania
<b>BIOT</b> .....	British Indian Ocean Territory	<b>IRN</b> .....	Iran	<b>RSA</b> .....	South Africa
<b>BLG</b> .....	Bulgaria	<b>IRQ</b> .....	Iraq	<b>RUS</b> .....	Russia
<b>BLR</b> .....	Belarus	<b>ISL</b> .....	Iceland	<b>RWA</b> .....	Rwanda
<b>BLZ</b> .....	Belize	<b>ISR</b> .....	Israel	<b>SAU</b> .....	Saudi Arabia
<b>BOL</b> .....	Bolivia	<b>ITA</b> .....	Italy	<b>SDN</b> .....	Sudan
<b>BRB</b> .....	Barbados	<b>JAM</b> .....	Jamaica	<b>SEN</b> .....	Senegal
<b>BRN</b> .....	Brunei	<b>JOR</b> .....	Jordan	<b>SER</b> .....	Serbia
<b>BRZ</b> .....	Brazil	<b>JPN</b> .....	Japan	<b>SGP</b> .....	Singapore
<b>BWA</b> .....	Botswana	<b>KAZ</b> .....	Kazakhstan	<b>SLB</b> .....	Solomon Islands
<b>CAM</b> .....	Cambodia	<b>KEN</b> .....	Kenya	<b>SLE</b> .....	Sierra Leone
<b>CAN</b> .....	Canada	<b>KGZ</b> .....	Kyrgyzstan	<b>SLV</b> .....	El Salvador
<b>CAR</b> .....	Central African Republic	<b>KWT</b> .....	Kuwait	<b>SOM</b> .....	Somalia
<b>CHA</b> .....	Chad	<b>LAO</b> .....	Laos	<b>SSD</b> .....	South Sudan
<b>CHE</b> .....	Switzerland	<b>LBN</b> .....	Lebanon	<b>STP</b> .....	São Tomé and Príncipe
<b>CHL</b> .....	Chile	<b>LBR</b> .....	Liberia	<b>SUR</b> .....	Suriname
<b>CIV</b> .....	Côte d'Ivoire	<b>LBY</b> .....	Libya	<b>SVK</b> .....	Slovakia
<b>CMR</b> .....	Cameroon	<b>LKA</b> .....	Sri Lanka	<b>SVN</b> .....	Slovenia
<b>COG</b> .....	Republic of Congo	<b>LSO</b> .....	Lesotho	<b>SWE</b> .....	Sweden
<b>COL</b> .....	Colombia	<b>LTU</b> .....	Lithuania	<b>SYC</b> .....	Seychelles
<b>CPV</b> .....	Cape Verde	<b>LUX</b> .....	Luxembourg	<b>SYR</b> .....	Syria
<b>CRI</b> .....	Costa Rica	<b>LVA</b> .....	Latvia	<b>TGO</b> .....	Togo
<b>CRO</b> .....	Croatia	<b>MDA</b> .....	Moldova	<b>THA</b> .....	Thailand
<b>CUB</b> .....	Cuba	<b>MDG</b> .....	Madagascar	<b>TJK</b> .....	Tajikistan
<b>CYP</b> .....	Cyprus	<b>MEX</b> .....	Mexico	<b>TKM</b> .....	Turkmenistan
<b>CZE</b> .....	Czech Republic	<b>MHL</b> .....	Marshall Islands	<b>TLS</b> .....	Timor-Leste
<b>DJB</b> .....	Djibouti	<b>MLI</b> .....	Mali	<b>TTO</b> .....	Trinidad and Tobago
<b>DNK</b> .....	Denmark	<b>MLT</b> .....	Malta	<b>TUN</b> .....	Tunisia
<b>DOM</b> .....	Dominican Republic	<b>MMR</b> .....	Myanmar	<b>TUR</b> .....	Turkey
<b>DPRK</b> .....	Korea, Democratic People's Republic of	<b>MNE</b> .....	Montenegro	<b>TZA</b> .....	Tanzania
<b>DRC</b> .....	Democratic Republic of the Congo	<b>MNG</b> .....	Mongolia	<b>UAE</b> .....	United Arab Emirates
<b>ECU</b> .....	Ecuador	<b>MOR</b> .....	Morocco	<b>UGA</b> .....	Uganda
<b>EGY</b> .....	Egypt	<b>MOZ</b> .....	Mozambique	<b>UK</b> .....	United Kingdom
<b>EQG</b> .....	Equatorial Guinea	<b>MRT</b> .....	Mauritania	<b>UKR</b> .....	Ukraine
<b>ERI</b> .....	Eritrea	<b>MUS</b> .....	Mauritius	<b>URY</b> .....	Uruguay
<b>ESP</b> .....	Spain	<b>MWI</b> .....	Malawi	<b>US</b> .....	United States
<b>EST</b> .....	Estonia	<b>MYS</b> .....	Malaysia	<b>UZB</b> .....	Uzbekistan
<b>ETH</b> .....	Ethiopia	<b>NAM</b> .....	Namibia	<b>VEN</b> .....	Venezuela
<b>FIN</b> .....	Finland	<b>NCL</b> .....	New Caledonia	<b>VNM</b> .....	Vietnam
<b>FJI</b> .....	Fiji	<b>NER</b> .....	Niger	<b>YEM</b> .....	Yemen, Republic of
<b>FLK</b> .....	Falkland Islands	<b>NGA</b> .....	Nigeria	<b>ZMB</b> .....	Zambia
<b>FRA</b> .....	France	<b>NIC</b> .....	Nicaragua	<b>ZWE</b> .....	Zimbabwe
<b>FYROM</b> .....	Macedonia, Former Yugoslav Republic	<b>NLD</b> .....	Netherlands		
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Bahrain BHR	322	Iceland ISL	108	Poland POL	127
Bangladesh BGD	235	India IND	250	Portugal PRT	129
Barbados BRB	379	Indonesia IDN	256	Qatar QTR	349
Belarus BLR	181	Iran IRN	327	Romania ROM	132
Belgium BEL	78	Iraq IRQ	331	Russia RUS	189
Belize BLZ	379	Ireland IRL	109	Rwanda RWA	462
Benin BEN	430	Israel ISR	333	Saudi Arabia SAU	350
Bolivia BOL	380	Italy ITA	110	Senegal SEN	463
Bosnia-Herzegovina BIH	80	Jamaica JAM	402	Serbia SER	134
Botswana BWA	431	Japan JPN	260	Seychelles SYC	464
Brazil BRZ	382	Jordan JOR	336	Sierra Leone SLE	465
Brunei BRN	237	Kazakhstan KAZ	185	Singapore SGP	286
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Burundi BDI	433	Korea, Republic of ROK	267	Somalia SOM	466
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Democratic Republic of the Congo DRC	440	Mauritania MRT	343	Tunisia TUN	355
Denmark DNK	89	Mauritius MUS	457	Turkey TUR	147
Djibouti DJB	442	Mexico MEX	403	Turkmenistan TKM	203
Dominican Republic DOM	394	Moldova MDA	187	Uganda UGA	475
Ecuador ECU	395	Mongolia MNG	274	Ukraine UKR	204
Egypt EGY	324	Montenegro MNE	120	United Arab Emirates UAE	357
El Salvador SLV	397	Morocco MOR	344	United Kingdom UK	151
Equatorial Guinea EQG	443	Mozambique MOZ	457	United States US	38
Eritrea ERI	444	Multinational Organisations	121	Uruguay URY	413
Estonia EST	91	Myanmar MMR	275	Uzbekistan UZB	207
Ethiopia ETH	445	Namibia NAM	458	Venezuela VEN	415
Fiji FIJ	249	Nepal NPL	277	Vietnam VNM	296
Finland FIN	92	Netherlands NLD	122	Yemen, Republic of YEM	359
France FRA	94	New Zealand NZL	278	Zambia ZMB	476
Gabon GAB	446	Nicaragua NIC	406	Zimbabwe ZWE	477
Gambia GAM	447				