



Military Balance in Southeast Asia

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Southeast Asia is a region of vast untapped natural resources, home to some of the world's most important maritime trade routes and an area with a significant number of longstanding territorial disputes, in particular in the South China Sea.

In the last few years the geopolitical balance in the region has begun to shift, primarily in response to China's economic and military rise, but also as a result of the perception that US interest in the region has waned since 9/11. While relations with China have been generally positive, there has been an increasing anxiety among Southeast Asian states over China's military assertiveness in the region, and in particular the inclusion of the South China Sea in those areas that China considers constitute its "core interests".

As a result many countries have sought to reinvigorate relations with the US and other global powers in order to balance the hegemonic rise of China; while at the same time significantly increasing defence spending and pursuing ambitious modernisation programmes for their respective militaries. Such developments have led many to argue that the region is on the brink of a potential arms race as states look to defend their national interests in the region and in particular their access to energy and other natural resources.

This paper examines the military balance of power in Southeast Asia and specifically at the military capabilities and priorities of six regional actors: Thailand, Malaysia, Indonesia, Philippines, Vietnam and Singapore. It should be read in conjunction with Library Research Paper RP11/78, [Southeast Asia: a political and economic introduction](#).

Claire Taylor

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Contributing Authors: Tom Rutherford, Social and General Statistics Section

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Summary

While territorial disputes between countries within the region have long existed, in some cases for generations, the current military balance of power in Southeast Asia has its roots in the Cold War. During this period longstanding alliances, primarily with the US, were formed in order to counterbalance the rise of communism in the region, supported by Russia and China. As a consequence the US has long been regarded as a guarantor of stability and security by many countries in the region.

In the last few years, however, it has been widely acknowledged that the geopolitical balance in Southeast Asia has begun to shift, primarily in response to China's economic and military rise, but also coupled with the perception that US interest in the region has waned since 9/11. While relations with China are generally positive, there has been particular anxiety among Southeast Asian states over China's increasing military assertiveness both in terms of the modernisation of its military forces and the expansion of China's "core interests" to include the South China Sea, a region of vast untapped natural resources and longstanding territorial disputes. In addition, the region is also home to some of the world's busiest shipping lanes and therefore maritime security and freedom of navigation is increasingly a strategic priority. For the future, all of these issues are considered vital in shaping the military balance of power in the region.

As a result many countries have been seeking to reinvigorate their security relationships, with both the US and other global powers in order to counterbalance China's rise. In turn, the US in particular has repeatedly stated its commitment to re-engaging with the region and strengthening its diplomatic and military ties, having recognised the Asia-Pacific as growing in strategic significance in the 21st century. On a more practical level those countries have also been positioning themselves as the potential suppliers of military equipment as many countries in the region seek to modernise in response to the changing security environment. Fuelled by a period of substantial economic growth, Southeast Asia is predicted to become one of the largest defence markets in the world over the next few years, prompting a number of observers to argue that the region is on the brink of a potential arms race.

Thailand – The main security focus for Thailand at present is on maintaining internal security. On a regional basis, Thailand has a longstanding security relationship with the United States, having become treaty allies in 1954 with the signing of the Manila Pact which created the South East Asia Treaty Organisation. Although that organisation was eventually disbanded in the 1970s the pact, including its defence guarantees under article IV, remains in force. Today the country is considered one of the US' closest allies in Southeast Asia.

Following the military coup in 2006 that ousted the then Prime Minister Thaksin Shinawatra, defence expenditure in Thailand increased significantly and analysts have suggested that this overall trend is likely to continue for the next few years. Significant defence investment has allowed the Thai government to embark on a major modernisation programme that will supplement and in certain cases replace its ageing Cold War assets and allow it to retain strategic parity with its neighbours. Due to the very limited capacity of the domestic defence industrial base, however, those modernisation plans will remain reliant on foreign suppliers which Thailand has been seeking to diversify in recent years.

Among the most significant procurement programmes to date has been the purchase of combat aircraft, airborne early warning and control aircraft and an integrated command and control system. Thailand has also been seeking to procure its first fleet of tactical submarines in order to shore up its littoral defence and regional force projection capabilities.

Malaysia – Malaysia launched its new defence policy in November 2010 and reiterated the country's key strategic priorities as: territorial defence, the defence of the South China Sea

Exclusive Economic Zone, sea and air lanes between East Malaysia and the Malaysian Peninsular and the Malacca and Singapore Straits.

Along with Indonesia, Malaysia is widely considered to be a major emerging market economy and GDP had been forecast to climb by an average 5% per annum to 2015. As such analysts have estimated that defence expenditure could grow by 48% to \$5.8 billion by 2015.

Malaysia initiated its military reform and modernisation programme several years ago. However, past economic difficulties have meant that its modernisation ambitions have not always been matched with adequate resources. As such Malaysia has made progress in certain areas including the maritime sphere with the procurement of two tactical submarines and the expansion of its frigate fleet; while in other areas progress has been minimal after several programmes have been postponed or scaled down due to a lack of funds.

Going forward, however, military modernisation is a key part of Malaysia's agenda and given forecast economic growth over the next five years many of those delayed programmes are now expected to be prioritised. The Government has already announced its intention to expand its naval fleet and replace its fast jet combat aircraft. In order to support that modernisation programme, advancing Malaysia's indigenous defence industry over the next 10 years has also been identified as a priority, largely through the use of offset/industrial participation. However, the ability of the Malaysian defence industrial base to absorb any new technologies acquired through partnering arrangements agreed under the offset policy, has been questioned by some analysts. Malaysia's approach to modernisation has also often been criticised as incoherent as new procurement programmes have failed to take interoperability with existing equipment into account.

Indonesia – Indonesia has the second largest coastline in the world and is situated on a number of key strategic maritime routes. Along with internal security, littoral defence and maritime security are therefore significant security concerns. While it has a number of unresolved disputes of both its maritime and land borders, unlike many of its neighbours Indonesia has no outstanding sovereignty claims in the South China Sea.

Indonesia's military is dominated by its ground forces and it widely uses its extensive reserve and paramilitary forces in order to supplement its military capabilities, particularly in the maritime sphere. However, its military assets are becoming increasingly obsolete. It has been estimated that the average age of equipment in service is between 25 and 40 years old, while operational effectiveness has been significantly diminished due to a lack of funds and the imposition of the US arms embargo against Indonesia in 1999.

As a result of strong economic growth, defence expenditure has increased significantly in the last two years, making Indonesia's defence budget the second largest among its regional neighbours. In July 2011 the Indonesian President publicly vowed to raise military expenditure to 1.5% GDP by 2014.

On that basis, the Government's plans for military modernisation over the next decade are ambitious with investment in the Navy highlighted as the military's greatest priority. The Navy already operates two Type-209 submarines and has announced that it will purchase two more platforms over the next two years to enhance its littoral defence capabilities. Indonesia also has ambitious plans for its Air Force, in particular its fast jet combat aircraft fleet. In the last few years Indonesia has acquired several platforms from Russia and Brazil and in February 2011 the US agreed to sell Indonesia 24 second hand F-16C/D aircraft to supplement its newly acquired fleet. That deal is currently pending Congressional approval and if it proceeds will represent the first major defence contract between the two countries since the lifting of the US arms embargo in 2005.

Yet many of these plans have been labelled as over-ambitious. Modernising the military to regional standards will be expensive, and many analysts have argued that the government is yet to deliver on its promises of significant investment in defence and on the revitalisation of its indigenous defence industry, which is a fundamental building block of Indonesia's modernisation plans.

Philippines – The Philippines has a number of ongoing territorial disputes in the South China Sea and the surrounding region. Despite relatively positive diplomatic and trading relations between China and the Philippines, tensions between the two countries have escalated over 2011 following a number of incidents between Chinese and Philippine naval vessels. However, it is counterinsurgency operations in the south that have dominated strategic thinking thus far, and continue to do so. From a regional perspective, the Philippines has historically relied upon the United States for its security, largely through the 1951 *US-Philippines Mutual Defense Treaty*. There has been some debate, however, over the extent to which the treaty obliges the US to intervene in any future territorial disputes that the Philippines may have with its neighbours, particularly in the South China Sea.

Given that the military's main focus is on counterinsurgency operations in the south of the country, the balance between the three Services, in terms of manpower and assets, is skewed in favour of ground forces which have received the majority of funding over the last few years. In contrast the Navy and the Air Force have suffered from a decade of neglect, despite the Philippines having one of the world's largest maritime borders.

The Philippines has been seeking to modernise its Armed Forces since 1995 when its Capability Upgrade Programme was signed into law. Prior to 2010, however, that programme had been hampered by a lack of investment and the absence of any domestic defence manufacturing capabilities. Upon election in 2010 the new government immediately pledged to reverse the decade of overall decline in defence spending. However, many analysts have suggested that until serious efforts are made to downsize the Army, move away from a focus on counterinsurgency capabilities and free up badly needed resources for the Navy and Air Force, then modernisation will make slow progress.

Yet, the first signs of potential investment in the Navy and Air Force have been noted. Identified as a national priority, funds are expected to be allocated to the purchase of a number of helicopter-capable patrol ships, patrol aircraft and an air defence radar system for deployment around the Spratly Islands; while the Philippines recently acquired a former US Coast Guard Hamilton-class Cutter. The country is understood to be seeking to purchase a further two vessels of this class and has expressed an interest in procuring a submarine fleet before the end of the decade in order to bolster its ability to patrol Philippine territorial waters. Given the more pressing need to revitalise the Navy's surface fleet over the next few years, however, it remains unclear as to whether the submarine proposal will receive priority funding.

Vietnam – Vietnam's immediate strategic priorities are focused on its territorial integrity, disputed territories in the South China Sea and increasingly its access to oil and gas reserves in the region. It has ongoing border issues with Cambodia and Laos, while an unresolved dispute between Vietnam and Cambodia remains over the sovereignty of several offshore islands. However, it is Vietnam's relations with China over the last few decades that have been the most fractious, in particular in relation to competing claims in the South China Sea.

As such Vietnam has moved quickly over the last few years to engage with other external actors, notably ASEAN, India, the United States and the West more generally. While intended to elevate its international standing and gain some strategic allies in the region, Vietnam's efforts to engage with other global powers has also been motivated by the need to access advanced defence markets. Fuelled by a rapidly growing economy Vietnam has embarked on a significant modernisation programme for its Armed Forces and in January 2011 the

Vietnamese government designated military modernisation as one of its five core objectives over the next five years, and particularly in relation to its ability to defend its interests in the South China Sea.

Defence spending has subsequently increased and its historically close relationship with Russia has allowed the military to make some significant purchases of advanced capabilities, with the Air Force and Navy being the biggest beneficiaries. The decision to acquire a full-size submarine fleet has been regarded as particularly significant.

Singapore – Singapore is geographically located astride several key international shipping lanes at the southern tip of the Malay Peninsula; while its economic and strategic importance far outweighs its small size. As a result of its history and strategic location, Singapore does not have any outstanding territorial disputes in the South China Sea or with China in particular. Singapore has sought to maintain a strong regional balance through ensuring good relations with its neighbours, encouraging US engagement in the region and ensuring the development of strong regional institutions such as ASEAN. Alongside Thailand and the Philippines, Singapore is one of the US' longest standing allies in the region and has been regarded as the US' partner of choice given its advanced military capabilities and economic importance. Unlike the Philippines, however, Singapore has relied upon its own military forces to ensure security and the pursuit of its national interests.

In 2000 the government committed to spending up to 6% of GDP on the defence budget every year, in order to maintain a “capable and operationally ready” military. Defence expenditure in Singapore has subsequently accounted for approximately 25-30% of total Government expenditure each year and over the last decade has averaged between 4 and 5.5% of GDP. On that basis, Singapore's defence budget far exceeds all of its regional neighbours.

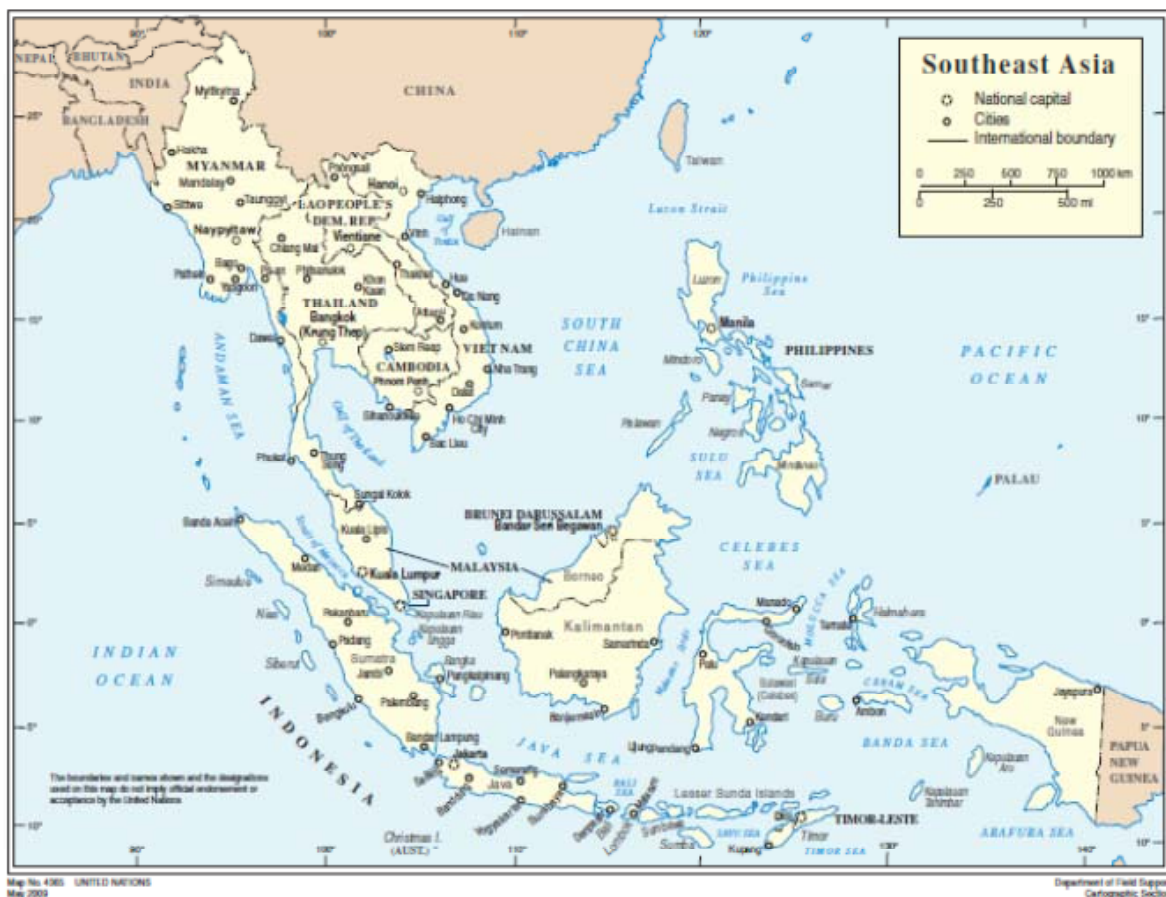
The size of the active military is small and highly dependent upon national service conscripts. Yet extensive investment in Singapore's military capabilities and infrastructure has provided it with one of the most advanced militaries in the region and an advanced defence industrial complex, thereby offsetting any inferiority it suffers in terms of manpower.

Given the current modernisation programmes of its regional neighbours Singapore is considered likely to continue this level of investment and pursue further modernisation initiatives in order to retain the technological capability gap that it has built up over the last few decades. For the future, the Air Force is looking to procure a next generation fighter aircraft and is already a security partner in the F-35 Joint Strike Fighter programme. The Navy has also outlined a requirement for the acquisition of a next generation submarine fleet, largely in response to the advanced submarine programmes increasingly being operated or acquired by both China and its regional neighbours.

1 Regional Overview

1.1 Balance of Power

While territorial disputes between countries within the region have long existed, in some cases for generations, the current military balance of power in Southeast Asia has its roots in the Cold War. During this period longstanding alliances were formed with many countries, but primarily with the US, in order to counter balance the rise of communism in the region, supported by Russia and China. Several key treaties were signed in the late 1940s and early 1950s which still carry resonance today, including the 1954 Manila Pact which established the South East Asia Treaty Organisation (SEATO) and the 1951 *US-Philippines Mutual Defense Treaty*. On the basis of those treaties several countries, most notably Thailand, the Philippines and Singapore, have received US military assistance and training for a number of decades, while the US has maintained significant forward deployed military forces in the region. The Five Power Defence Arrangements were also agreed in 1971 after the withdrawal of British forces from Malaysia and Singapore, and provide for the participating Member States (UK, Australia, Malaysia, Singapore and New Zealand) to consult in the event of an external threat to, or an attack on, either Malaysia or Singapore (see section 2.3 for further details). As a consequence the US, and to a lesser extent the presence of other regional and global powers, has long been regarded as a guarantor of stability and security by many countries in the region.



In the last few years that dynamic has begun to take on increasing importance. It has been widely acknowledged that the geopolitical balance in Southeast Asia has begun to shift, primarily in response to China's economic and military rise, coupled with the perception that US interest in the region has waned, in particular since 9/11 and the subsequent conflicts in Iraq and Afghanistan.

While relations between the Southeast Asian states and China are generally positive, there has been particular anxiety over China's increasing military assertiveness both in terms of the modernisation of its military forces,¹ including the development of major new naval base on Hainan Island, and the expansion of China's "core interests" to include the South China Sea, a region of vast untapped natural resources and longstanding territorial disputes (see below). As a result, the Association of South East Asian Nations (ASEAN) Member States have sought to reinvigorate their security relationships, not only with the US, but also with other powers such as India and Russia, in order to counterbalance China and maintain stability in the region.

The US, Russia and India, have in turn also been seeking to enhance ties with countries in Southeast Asia in order to counter the influence of China in the region. At the ASEAN Regional Forum in July 2010 US Secretary of State, Hillary Clinton, referred to the US as a "Pacific power" and stated that the US had a "national interest" in freedom of navigation, the respect for international law and unimpeded, lawful commerce in the South China Sea. Since then the Obama administration has repeatedly stated its commitment to re-engaging with the region and strengthening its diplomatic and military ties, having recognised the Asia-Pacific as growing "in strategic significance in the 21st century".² In response to recent confrontations in the South China Sea, the US has also frequently expressed its concerns and called for "all sides to exercise self restraint".³ In November 2011 the US Navy pledged to increase its presence in South East Asia and from 2012 will deploy a contingent of US marines to Northern Australia. India has recently also been seeking to enhance ties with Southeast Asia as part of its 'Look East' policy which was introduced more than a decade ago. Over the last few years India has increased the number of trade agreements it has with countries in the region and significantly enhanced its military-to-military co-operation with countries like Vietnam and Malaysia.

At a strategic level, enhancing those relationships has been regarded as essential for balancing the hegemonic rise of China. At a more practical level, however, those countries have also been positioning themselves as the potential suppliers of military equipment, as many countries in the region seek to modernise their military forces in response to the changing security environment and in recognition of the need to take responsibility for securing their own national interests. Modernisation has also been fuelled by a period of substantial economic growth in the region. According to SIPRI, arms sales to Southeast Asia nearly doubled between 2005 and 2009, compared to the five previous years, with weapons sales to Malaysia increasing by 722%, Singapore by 146% and Indonesia by 84%.⁴ Indeed, Southeast Asia has been predicted to become one of the largest defence markets in the world over the next few years. Priority assets have been identified as submarines, littoral defence⁵ capabilities such as frigates and patrol vessels, and paramilitary forces which have increasingly been used, particularly by China, to assert its maritime authority in the region.⁶ The submarine market for the Asia-Pacific region has been estimated at a potential \$41 billion over the next decade, with Southeast Asian countries procuring approximately 14-15%

¹ China's military posture is examined in Library Research Paper RP08/15, *China's Military Posture*. Recent military developments in China are also set out in the Pentagon's *Annual report to Congress: Military and Security Developments Involving the People's Republic of China 2011*.

² "United States committed to strengthening Asia-Pacific defence relations", *Jane's Defence Weekly*, 25 November 2010. See also "America's Pacific Century" an editorial piece by the US Secretary of State in *Foreign Policy Magazine*, October 2011.

³ US Department of State, *Remarks with Philippines Foreign Secretary Albert del Rosario after their meeting*, 23 June 2011

⁴ SIPRI press release, 15 March 2010: <http://www.sipri.org/media/pressreleases/2010/100315armstransfers>

⁵ Littoral defence is the defence of coastline and territorial waters usually out to the limits of the Exclusive Economic Zone (EEZ).

⁶ See "Behind recent gunboat diplomacy in the South China Sea", *Strategic Comments*, August 2011 and "Policing the waves: maritime paramilitaries in the Asia-Pacific", *Survival*, January 2011

of those assets at a cost of \$4.7 billion.⁷ A report from the Lexington Institute in November 2011 commented:

US arms sales and technology investments with the region will be an important factor in ensuring a balance of powers in the region and dissuading China from using force to achieve its policy objectives.⁸

Such developments have prompted a number of observers, including European Council President Herman Van Rompuy, to argue that the region is on the brink of a potential arms race. During a speech to the University of Zurich Mr Van Rompuy stated:

Whereas Europe used to be the most dangerous continent in the past century... the focus of security analysts and hard power strategic planners has recently moved towards developments in Asia and the Pacific [...]

They do not yet observe a full-blown arms race, but in terms of military spending and confrontational psychology, the premises of an arms race are there.⁹

An article in *Jane's Intelligence Review* in April 2011 also noted:

Arms purchases may not yet be defined as an arms race, as they lack the rapidity often associated with such dynamics, but they are a reaction to the shifting strategic landscape. This has been combined with a delicate rebalancing of the political dynamics in the region, as states begin to hedge against China's more dominant position by reaffirming relationships with the United States that were waning.¹⁰

These issues are examined in greater detail in each country profile below; while overall Chinese and US relations with the region is examined in greater detail in Library Research Paper RP11/78, [Southeast Asia: a political and economic introduction](#).

1.2 ASEAN Regional Forum

The Association of South East Asian Nations (ASEAN) is the primary organisation in the Southeast Asia region, through which its ten Member States seek to promote diplomatic, economic and security co-operation.¹¹

While economic and diplomatic relations with China are currently at the top of ASEAN's list of strategic priorities, enhanced security co-operation has been a longstanding objective as an effective means of achieving stability in the region.

The ASEAN Regional Forum (ARF) was established in 1994 and is the primary multilateral mechanism through which peace and security issues in the Asia-Pacific region are discussed. The Forum's members include all of the ASEAN Member States plus Australia, Bangladesh, Canada, China, the EU, India, Japan, Mongolia, New Zealand, Pakistan, Papua New Guinea, Russia, Sri Lanka, South Korea, North Korea, East Timor and the US.

In 1995 an ARF Concept Paper set out a three-stage approach to the development of the forum. The initial focus was intended to be on establishing confidence building measures, followed by greater efforts toward preventive diplomacy and then eventually establishing a conflict resolution capability for the forum.

⁷ See "Underwater aspirations break the surface in SE Asia", *Jane's Navy International*, 7 October 2011

⁸ Lexington Institute, 9 November 2011

⁹ "EU President urges trade to halt Asia-Pacific militarisation", *Agence France Presse*, 9 November 2011

¹⁰ "Waves of concern – Southeast Asian states plan naval defences", *Jane's Intelligence Review*, 14 April 2011

¹¹ Further information about ASEAN is available in Library Research Paper RP11/78, [Southeast Asia: a political and economic introduction](#).

Since its inception, the forum has focused primarily on confidence building and therefore efforts to develop effective preventive diplomacy mechanisms and the capacity for conflict management remain at a very early stage.

At the ARF Ministerial Meeting in July 2009 leaders endorsed a Vision Statement¹² which set out a framework for the ARF up to 2020. Among its main objectives were:

- Strengthening the ARF's role in raising awareness of security challenges facing the region.
- Developing preventive diplomacy mechanisms with respect to issues that require a regional response such as non-traditional, trans-boundary and inter-state security challenges, including terrorism and transnational crime, disaster relief, maritime security and non-proliferation.
- Maintaining comprehensive approaches to regional security issues, including developing codes of conduct, guidelines, common operating procedures and best practice, in addition to establishing effective interoperable collective responses and enhanced capabilities through joint exercises in specific areas of activity.
- Encouraging greater participation in ARF activities, in particular in the area of defence and security.¹³

In order to implement that Vision Statement a number of specific areas for greater co-operation, including disaster relief, counter-terrorism, maritime security, non-proliferation and disarmament, regional peacekeeping operations, and defence dialogue between participating Member States, were agreed at the Ministerial meetings in July 2010. Work on enhancing confidence building and preventive diplomacy measures and developing the institutional basis of the ARF was also outlined.

At the 2011 ARF Ministerial meeting in Bali, Member States also agreed a *Work Plan for Preventive Diplomacy*. The primary objective of this Work Plan is to prevent disputes and conflicts from arising between ARF Member States that could potentially pose a threat to regional peace and security, and where they do so, to prevent them from escalating into armed confrontation.

However, in a RUSI commentary piece, Brijesh Khemlani has observed that:

the burgeoning arms trade also comes at the expense of ASEAN's relative inability to craft a viable security architecture in the region. Political spats, long-running insurgencies and territorial disputes cloud the region's security matrix, fuelling the arms splurge.¹⁴

1.3 Territorial Disputes in the South China Sea

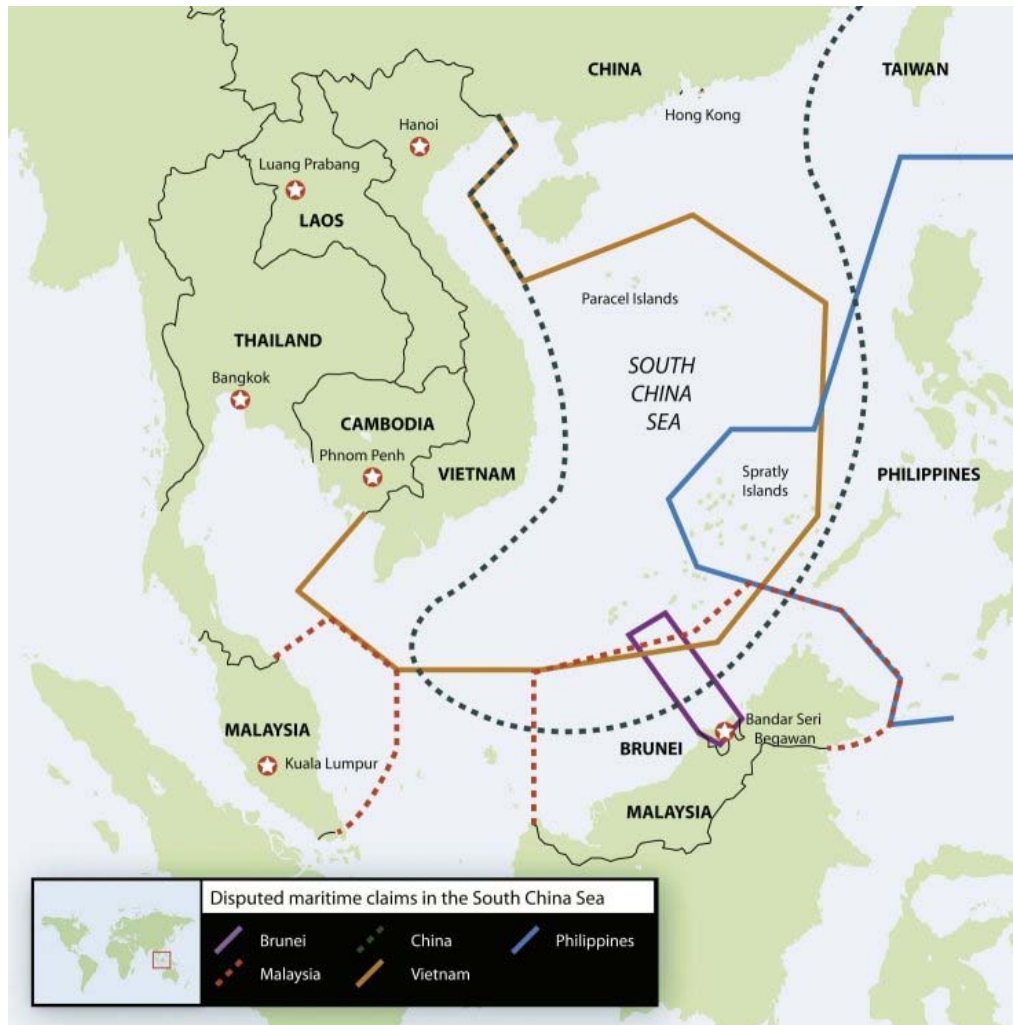
There are a myriad of territorial disputes among the countries of Southeast Asia. Many land borders have yet to be demarcated, while several disputes continue over maritime boundaries. The latter in particular have received increasing attention over the last few years due to the untapped natural resources that are thought to exist within regional waters and the South China Sea specifically. Some Chinese journalists are reported to have dubbed the South China Sea a "second Persian Gulf", estimating that the region could contain more than

¹² A copy of that Vision Statement is available online at: <http://www.asean.org/Doc-ARF-Vision-Statement.pdf>

¹³ For several years Malaysia has been an advocate of greater defence industrial co-operation between ASEAN Member States (see section 2.3).

¹⁴ Brijesh Khemlani, "Southeast Asia's arms race", *RUSI Commentary*, October 2011

50 billion tonnes of crude oil and more than 20 trillion cubic metres of natural gas.¹⁵ In addition to the numerous border disputes, the region is also home to some of the world's busiest shipping lanes. It has been estimated that approximately half of the world's oil and a quarter of all global maritime trade passes through the Straits of Malacca.¹⁶ Indeed 85% of China's imported oil passes through the region.¹⁷ Maritime security and freedom of navigation is therefore increasingly becoming a strategic priority.



Source: IHS/Jane's

Shown above, China has laid claim to approximately 80% of the South China Sea.¹⁸ However, the exclusive economic zones of Malaysia, Indonesia, Brunei, Philippines and Vietnam also lie within the same region. More specifically:

- The maritime boundaries of the Gulf of Tonkin are disputed by China and Vietnam
- Sovereignty of the Spratly Islands is contested by China, Taiwan, Vietnam, Brunei, Malaysia and the Philippines. In 2009 Vietnam and Malaysia filed papers with the UN

¹⁵ "Behind recent gunboat diplomacy in the South China Sea", *Strategic Comments*, August 2011

¹⁶ US Energy Information Administration, *World Oil Transit Chokepoints: Malacca*, 2011

¹⁷ Bradford, Manicom, Simon and Quartaro, *Maritime security in Southeast Asia: US, Japanese, Regional and Industrial Strategies*, November 2010

¹⁸ This demarcation line was reportedly first highlighted in a 1947 map of the South China Sea which had been produced by the Nationalist Kuomintang.

delineating their claims. China also set out its claim in formal notes to the UN Secretary General in 2009; while the Philippines followed suit with a diplomatic note to the UN in April 2011.

Currently Vietnam occupies 21 islands, the Philippines and Malaysia eight apiece, China seven and Taiwan one, albeit the largest island, Itu Aba. Brunei does not occupy any of the islands, although it does claim sovereignty over two. The occupied islands all have some form of either military or paramilitary presence on them and recently disputant countries have been entrenching their positions on the islands by expanding their military assets. Taiwan for example has recently completed construction of a runway on Itu Aba; while Malaysia has also built a runway on Swallow Reef.¹⁹

- Sovereignty of the Paracel Islands is contested by China, Taiwan and Vietnam. China maintains a military garrison in the islands, including a detachment of naval infantry equipped with main battle tanks, anti-aircraft artillery and surface-to-air missile batteries.
- The Scarborough Reef, to the west of the Philippines, is claimed by the Philippines, China and Taiwan.

In the past those disputes have, on occasion, led to minor confrontations. The most notable military clashes were between China and Vietnam over the Paracel and Spratly Islands in 1974 and 1988, both of which are thought to lie above major oil and gas deposits and are surrounded by rich fishing grounds.

In 2002 China and ASEAN nations agreed a *Declaration on the Conduct of Parties in the South China Sea*. Under that declaration all Parties agreed to seek peaceful solutions to disputes within the region. In 2005 a further declaration, also signed by China, was issued in which participating countries agreed to exercise self-restraint in the conduct of activities that would complicate or escalate disputes in the South China Sea. In 2010, however, China was reported to have identified the South China Sea as one of the country's 'core interests' and in August 2010 a Chinese expedition planted a flag on the ocean floor near the Spratly and Paracel Islands.²⁰ The build-up of military assets in the Spratly Islands has also led a number of commentators to conclude that there is an "unwillingness" on the part of each disputant country to enter into any meaningful negotiation.²¹

Guidelines for implementing the declaration were agreed at the ASEAN Regional Forum in July 2011 following a spate of incidents that have led to rising tension in the region. China in particular has been viewed as increasingly assertive, on occasion forcing non-Chinese vessels out of what it considers to be its territorial waters and sabotaging the work of exploration vessels in the area. In August 2011 China said that it "opposes complicating and internationalising the issue of the South China Sea and insists on resolving disputes [with its neighbours] through consultation and negotiations."²² That statement was regarded, however, as a subtle message to the United States regarding recent efforts to strengthen its diplomatic and military relationships with both established allies in the region and countries such as Vietnam, with which the US has had a chequered past. In November 2011 China went on to propose that a legally binding code of conduct should be negotiated.

¹⁹ "Waves of concern – Southeast Asian states plan naval defences", *Jane's Intelligence Review*, 14 April 2011

²⁰ "Chinese flag planting causes swell in disputed area of South China Sea", *Jane's Navy International*, 1 September 2010

²¹ "Waves of concern – Southeast Asian states plan naval defences", *Jane's Intelligence Review*, 14 April 2011

²² "Hotline to ease Vietnam-China tensions", *Jane's Defence Weekly*, 7 September 2011

However, with the rising demand for energy and other natural resources a number of analysts have argued that those unresolved disputes, combined with China's increasing assertiveness, may become a key element in determining the future military balance of power in the region, as countries seek to modernise and expand their Armed Forces in order to protect their national interests, and engage other international partners, such as the US, in order to balance the hegemonic rise of China. As an article in *Jane's Intelligence Weekly* has argued:

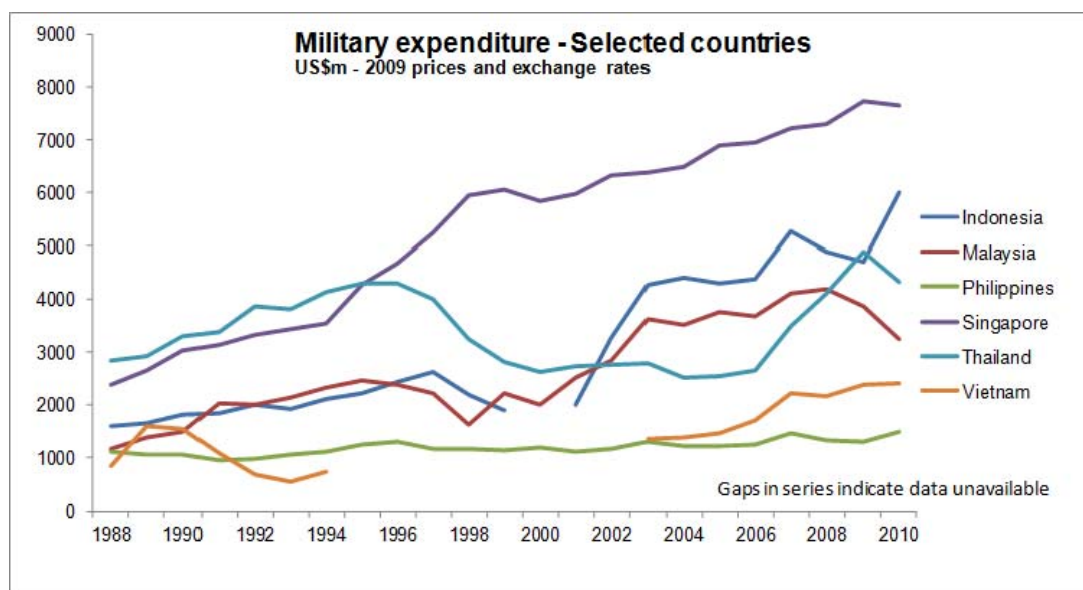
Increasing Chinese assertiveness over the area may be backfiring by propelling Southeast Asian countries to seek protection from the US. The complexity of the matter underscored by the number of claimants involved, means the issues are unlikely to be resolved any time soon. However, the likelihood of military conflict over the issue remains slim. China does not want a conflict in the South China Sea. All countries bordering the contested waters are ASEAN members and mutual economic interests will act as a strong disincentive for conflict.²³

2 Country Comparisons

2.1 Defence Expenditure across the Region

As outlined above, the shifting geo-strategic balance in the region combined with rapidly expanding economies in many countries, has prompted a significant rise in defence spending over the last few years and the beginnings of what many view as a potential arms race. The financial crisis in 2008-09 slowed down defence spending in certain cases, but more often than not defence expenditure has continued to rise in many countries despite strategic and domestic political uncertainty. Countries have become increasingly aware of the need to defend their own sovereign interests, specifically retaining access to energy and other natural resources.

Between 2001 and 2010 the annual defence budgets of Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam were as follows:



²³ "China and Vietnam pledge to solve South China sea dispute peacefully", *Jane's Intelligence Weekly*, 27 June 2011

With the exception of Singapore and Thailand, defence spending as a percentage of GDP has, however, remained reasonably static.

Military Spending (% of GDP)

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Indonesia	0.6	1.1	1.3	1.2	1.1	1.1	1.2	1	0.9
Malaysia	2.1	2.2	2.6	2.2	2.3	2.1	2.1	2	2
Philippines	1	1	1	0.9	0.9	0.9	0.9	0.8	0.8
Singapore	5	5.1	5.1	4.5	4.4	4	3.7	3.9	4.3
Thailand	1.5	1.4	1.3	1.1	1.1	1.1	1.3	1.6	1.9
Vietnam			2.1	2	1.9	2.1	2.5	2.3	2.5
Australia	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9
China P. R.	2.1	2.2	2.1	2.1	2.0	2.0	2.1	2.0	2.2
Japan	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0

Source: SIPR

The figures for China are for estimated total military expenditure, including estimates for items not included in the official defence budget.

The figures for Japan are for adopted budget before 2004 and from 2009-2013. The figures include the budgeted amount for the Special Action Committee on Okinawa (SACO) and exclude military pensions.

Defence spending in each country has been earmarked to rise, in some cases significantly, as each country seeks to modernise.

2.2 Thailand²⁴

The biggest defence and security focus for Thailand at present is on maintaining internal security. The Army has long played a significant, if often contested, role in domestic politics and on several occasions in 2010 it was deployed to lead efforts to contain anti-government protests. Toward the end of that year, 30,000 troops, including 10,000 personnel belonging to the army paramilitary border force were deployed to the volatile regions in the predominantly Muslim south of the country where there is a rumbling insurgency.

The potential for tension on the Malaysian, Cambodian and Burmese borders also remains a concern. In late 2010, Thai Armed Forces personnel stepped up border patrols along the Thai-Burmese border in order to prevent incursions by Burmese ethnic minority insurgents, while security in the Andaman Sea was also tightened. Illegal immigrants, drugs trafficking and the movement of refugees across the border are particular issues of concern and around 150,000 Burmese refugees are thought to live in camps on the Thai side of the border. The murder of 13 Chinese nationals on the Mekong River near the border of Thailand, Laos and Burma in October 2011 has also focused attention on increasing insecurity in that region.²⁵ Thailand and Cambodia also remain in



Source: US State Department

²⁴ Figures are taken from the International Institute for Strategic Studies, *Military Balance 2011*

²⁵ "River rage – China seeks to calm troubled Mekong waters", *Jane's Intelligence Review*, 10 November 2011. On 31 October 2011 China, Burma, Laos and Thailand reached an agreement on improving joint security in the area, including the sharing of intelligence and conducting joint patrols and law enforcement.

dispute over maritime boundaries in the Gulf of Thailand which is believed to hold untapped oil and gas reserves.²⁶

There has also been increasing tension along the border with Cambodia over the disputed ownership of the Preah Vihear temple. This dispute was thought to have been resolved by an ICJ ruling in 1962 that the Temple belongs to Cambodia. Thailand accepted the ruling at the time but has recently revived the debate following a UNESCO decision in 2008 to declare the Temple a World Heritage Site. Military clashes between Thai and Cambodian forces were reported in February and April 2011.²⁷ In late September 2011 Thailand and Cambodia agreed to comply with a July 2011 ruling by the International Court of Justice which obliged both parties to withdraw their troops from the region. The two sides also consented to allow Indonesian observers to monitor the ceasefire.²⁸

Piracy in the Straits of Malacca, which is a major international shipping route, also remains a concern.

International Engagement

On the international stage Thailand is a long term member of the UN and contributor to UN peacekeeping operations and since the end of the Cold War has sought to maintain a strategic balance between its relationships with the US, China, Australia, Japan, the EU and ASEAN.

United States

Thailand has a longstanding security relationship with the United States and the country is considered one of the US' closest allies in Southeast Asia, alongside Japan, Australia, South Korea, Singapore and the Philippines. Thailand and the US became treaty allies in 1954 with the signing of the Manila Pact²⁹ which created the South East Asia Treaty Organisation (SEATO). Primarily created to block further communist gains in Southeast Asia, SEATO was eventually disbanded in the 1970s after many member states lost interest and withdrew from the organisation. However, the pact, including its defence guarantees under article IV, remains in force. Article IV states:

1. Each Party recognizes that aggression by means of armed attack in the treaty area against any of the Parties or against any State or territory which the Parties by unanimous agreement may hereafter designate, would endanger its own peace and safety, and agrees that it will in that event act to meet the common danger in accordance with its constitutional processes. Measures taken under this paragraph shall be immediately reported to the Security Council of the United Nations.

2. If, in the opinion of any of the Parties, the inviolability or the integrity of the territory or the sovereignty or political independence of any Party in the treaty area or of any other State or territory to which the provisions of paragraph 1 of this Article from time to time apply is threatened in any way other than by armed attack or is affected or threatened by any fact or situation which might endanger the peace of the area, the Parties shall consult immediately in order to agree on the measures which should be taken for the common defense.

²⁶ Thailand and Vietnam reached an agreement over their boundaries in 1991

²⁷ See "Thai-Cambodia clashes damage Preah Vihear temple", *BBC News Online*, 6 February 2011

²⁸ "Thailand and Cambodia agree on troop pullout from disputed border area", *Jane's Intelligence Weekly*, 23 September 2011

²⁹ Formal title: *Southeast Asia Collective Defense Treaty*. Signatories include the US, UK, France, Australia, New Zealand, Thailand and the Philippines.

3. It is understood that no action on the territory of any State designated by unanimous agreement under paragraph 1 of this Article or on any territory so designated shall be taken except at the invitation or with the consent of the government concerned.

It is this pact, and the Thanat-Rusk Communiqué of 1962, that constitutes the basis of the US security commitments to Thailand.³⁰

Since the 1950s Thailand has received US military equipment, training and assistance in the construction and maintenance of military facilities. Indeed, more Thai military personnel have been trained under the US International Military Education and Training (IMET) programme than any other country.³¹ The US and Thailand have also established a joint exercise programme which engages all of the Services of each nation and averages approximately 40 exercises per year. US Pacific Command also has 122 personnel stationed in Thailand.

In December 2003, Thailand was designated as a major non-NATO ally of the United States,³² a distinction which allows more access to U.S. foreign aid and military assistance, including credit guarantees for major weapons purchases. It also allows for the transfer of used US naval ships and aircraft to Thailand.

Australia

Defence relations between Thailand and Australia date back to the Second World War. Australia was also one of the original signatories of the Manila Pact which remains in force. Throughout the last 50 years both countries have engaged in reciprocal port visits by naval vessels, military exchanges and military technical training and assistance. It wasn't until 1972, however, that arrangements were formalised through the Defence Cooperation programme. The focus of that programme is now on regular senior officer visits, seminars and workshops, individual education and training courses for Thai armed forces personnel at Australian Defence schools, colleges and universities; annual combined exercises across all military disciplines, logistics systems and support and science and technology development. There is also an annual bilateral dialogue on regional security issues. Military personnel from Thailand and Australia have deployed together in UN operations in Cambodia, Somalia and East Timor and in coalition operations in Iraq. Thai military personnel have also served directly under an Australian military commander as part of the International Force in East Timor, while Australian forces have also served under the Thai military commander of the UN transitional Authority in East Timor.

UK

The UK was also one of the original signatories of the Manila Pact, which the UK subsequently ratified in 1955. The UK has not renounced or withdrawn from the treaty and therefore, technically, is still a Party to it.³³ However, many analysts consider the US, Australia and New Zealand to be the only States Parties that retain any practical commitment under the treaty after the UK and France refused to get involved in the US military intervention in Vietnam.

³⁰ In the early 1960s the then Thai Foreign Minister, Thanat Khoman, had expressed the belief that the Manila Pact would not adequately protect Thailand in the event of a Communist invasion. The Thanat-Rusk Communiqué therefore specified that the US regarded the preservation of the independence and integrity of Thailand as essential to its own national interests and that it would aid Thailand in resisting Communist aggression. An important part of the Communiqué was the need for consultation and joint decision making on matters of security. The text of the Communiqué is available in the [Department of State Bulletin, 26 March 1962](#).

³¹ US Department of State Background Note, last updated 28 January 2011

³² *ibid*

³³ Foreign and Commonwealth Office Treaty Section

Defence co-operation with the UK is primarily focused on the provision of small scale technical assistance to the Royal Thai Armed Forces, including peacekeeping and Rules of Engagement training for military personnel, and professional rights-based training for the police.

China

Over the last few years China and Thailand have sought to increase their military ties and as a result Thailand is increasingly considered to have emerged as one of China's closest partners in the region.³⁴ At a practical level, that co-operation has focused largely on military exchanges between the two countries; while Thailand is the only country in Southeast Asia that hosts regular joint exercises with Chinese military forces. Since 2007 those exercises have focused on joint training between each country's Army Special Forces. However, that programme of joint exercises was expanded in November 2010 when Chinese and Thai marine forces personnel completed their first joint training exercise. Analysts have noted, however, that any hostilities over disputed territories in the South China Sea would involve Chinese naval infantry, and therefore the joint exercises have been observed with some caution by other Southeast Asian nations. One observer noted:

Exercises such as this serve two purposes. They strengthen military-to-military ties with Thailand in a spirit of co-operative openness. At the same time, they are a clear announcement of China's growing interests and military presence in the wider region.³⁵

As outlined below, Thailand has also increased the level of defence industrial co-operation with China since a 2008 agreement on the transfer of base missile technologies to Thailand was agreed between the two countries.

Thailand has also signed defence co-operation agreements with Russia,³⁶ South Korea³⁷ and more recently with India in April 2011 which focused on maritime security in the Indian Ocean and collaboration in space and defence science technologies.³⁸ However, a number of those agreements have yet to bear significant fruit, most notably the agreements between Thailand and South Korea and Russia (see below).

International Deployments

Thailand is a long term member of the United Nations and has been a consistent contributor to peacekeeping operations. As of 31 October 2011, Thailand was the 30th largest contributor to UN peacekeeping operations, with 849 personnel deployed in three countries.³⁹

- Darfur (UNAMID) – 9 experts and 820 troops.
- Haiti (MINUSTAH) – 10 police personnel.
- East Timor (UNMIT) – 10 police personnel.

³⁴ "China and Thailand strengthen defence ties", *Jane's Defence Weekly*, 2 December 2010

³⁵ "China expands exercises with Thailand", *Jane's Defence Weekly*, 26 October 2010

³⁶ Russia and Thailand first signed an MOU on defence collaboration in 2003 which was followed up by a further MOU in 2005.

³⁷ South Korea and Thailand signed an MOU on defence procurement and industrial collaboration in August 2008 which was intended to facilitate the bidding of South Korean companies for a number of Thai military requirements.

³⁸ The two countries also suggested that a formal Memorandum of Understanding could be established at a later date.

³⁹ <http://www.un.org/en/peacekeeping/resources/statistics/contributors.shtml>

It also has one offshore patrol craft and one auxiliary oiler, with helicopter capacity deployed with Combined Task Force-151, conducting anti-piracy operations in the Gulf of Aden and off the coast of Somalia.

Thailand also contributed forces to the initial reconstruction phase of Operation *Enduring Freedom* in Afghanistan (largely engineers), and to initial operations in Iraq (medical personnel and engineers).

Defence Expenditure

Following the military coup in 2006 that ousted the then Prime Minister Thaksin Shinawatra, defence expenditure in Thailand increased significantly. In 2007 the defence budget increased almost 32% on the previous year, with further increases over the following two years. Overall, between 2006 and 2009 the defence budget almost doubled in size from \$2.6 billion to \$4.9 billion, or 1.9% of GDP. In comparison the budget, according to SIPRI, saw a relative decrease between 2001 and 2006.

Among its immediate Southeast Asian neighbours Thailand had the third largest defence budget in 2010. Despite the economic slowdown resulting in a cut in the defence budget for that year of approximately \$571 million, analysts have suggested that the overall trend witnessed since 2006 will continue for the next few years. In order to offset the previous year's budgetary decline, the budget for 2011 was reportedly set at \$5.6 billion, an increase of \$1.3 billion on 2010 figures.⁴⁰

In the longer term, however, it is unclear whether these levels of military expenditure will be maintained. A new government under Prime Minister Yingluck is considered likely to affect both the military's priorities and its funding levels, as the attitude toward the military of the newly elected Prime Minister and Government has not yet been fully established. Indeed the defence budget for 2012 has already been earmarked to fall slightly to \$5.5 billion with the majority of spending allocated to the Royal Thai Army. While the government has not provided any justification for the small decrease, it is thought to be part of government efforts to reduce Thailand's budget deficit significantly by 2015, as opposed to a reaction to the recent flooding in the country.⁴¹

The government has indicated that in future years it expects the defence budget to rise with a budget increase of 10% forecast for 2013.⁴²

Military Capabilities

Thailand's military forces are configured predominantly for internal security and defence of its land, airspace and territorial waters. However, it also possesses the potential for regional power projection through its maritime and air assets, although many have questioned the full capabilities of Thailand's aircraft carrier in this regard (see below).

Military Spending of Thailand 2001-2010

	US \$m (Constant, 2009 prices)	% change on previous year	% of GDP
2001	2,747	4.1%	1.5
2002	2,755	0.3%	1.4
2003	2,802	1.7%	1.3
2004	2,528	-9.8%	1.1
2005	2,547	0.8%	1.1
2006	2,654	4.2%	1.1
2007	3,498	31.8%	1.3
2008	4,115	17.6%	1.6
2009	4,907	19.2%	1.9
2010	4,336	-11.6%	N/A

Source: SIPRI
N/A - Not Available

⁴⁰ "Regional overview, *Jane's Defence Weekly*, 11 May 2011

⁴¹ "Thailand cuts 2012 defence budget", *Jane's Defence Weekly*, 15 November 2011

⁴² *ibid*

Thailand's ground forces are sizeable, comprising 62% of the overall Regular force. Navy and Air Force personnel make up approximately 23% and 15% respectively. Of those naval personnel, 23,000 are marine forces. Reserve forces are equally significant, giving Thailand the third largest military, in terms of overall manpower, among its Southeast Asian neighbours.⁴³

Current Military Manpower

	Army	Navy	Air Force	Total
Active	190,000	69,860	46,000	305,860
(of which conscripts)	70,000	25,849		
Paramilitary				113,700
Reserve Forces				200,000
Paramilitary Reserves				45,000

Source: IISS, *Military Balance 2011*

Like its manpower, the Royal Thai Army's assets are also considerable, albeit ageing. Mostly acquired from the West during the Cold War, the Army possesses approximately 283 M-48 and M-60 main battle tanks; 465 M-41, Scorpion and Stingray light tanks; 32 reconnaissance vehicles; 950 armoured personnel carriers and in excess of 2,479 artillery pieces. The Army also has a number of intelligence, surveillance and reconnaissance aircraft, transport aircraft, unmanned air vehicles, Cobra attack helicopters, Black Hawk helicopters, and approximately 167 transport helicopters including the Chinook. Six air defence battalions are also equipped with surface-to-air missiles and other artillery.

Naval forces are divided among 5 naval bases along the coasts of the Andaman Sea, Straits of Malacca and the Gulf of Thailand. Assets comprise 11 principal surface combatants, including one aircraft carrier capable of carrying nine of the AV-8A forward ground attack version of the Harrier aircraft and 6 anti-submarine warfare helicopters, and 10 frigates, six of which are equipped with anti-ship and surface-to-air missiles.⁴⁴ Thailand also possesses 82 patrol and coastal combatants, including 7 corvettes (two of which are equipped with anti-ship and surface-to-air missiles), and an array of patrol vessels, some of which are equipped with anti-ship missiles, 10 mine warfare/countermeasures vessels, 24 amphibious landing ships and craft, and 14 logistics and support vessels. Marine forces are equipped with amphibious assault vehicles, armoured personnel carriers and artillery.

However, the capabilities of Thailand's aircraft carrier have been questioned since it was originally acquired in the 1990s. Commissioned into the Royal Thai Navy in 1997, Thailand was immediately immersed in the Asian financial crisis of the same year. A lack of funds subsequently resulted in the carrier remaining alongside at the Sattahip naval base for much of its operational life. Deployment of the carrier has been limited to disaster relief operations, occasional training days at sea and for transporting and hosting the Thai Royal family. The latter in particular has led many analysts to criticise the retention of the carrier, labelling it "the world's most expensive royal yacht".⁴⁵

The Navy also has a fleet air arm consisting of 39 combat capable aircraft, including the AV-8A Harrier, the TA-7 Corsair light attack aircraft, the Orion P-3A maritime patrol aircraft, reconnaissance and transport aircraft. It also possesses a number of anti-submarine warfare, transport and maritime reconnaissance helicopters.

There are four air divisions comprising eight squadrons of fighter aircraft, three squadrons of attack aircraft, two squadrons of intelligence, surveillance and reconnaissance (ISR) and electronic intelligence aircraft, and several squadrons of transport aircraft (mainly Hercules

⁴³ In comparison, China has a total active force of nearly 2.3 million, 660,000 paramilitary forces and a further 510,000 Reserves.

⁴⁴ The frigate themselves are Chinese manufactured but fitted with Western-sourced engines and other systems.

⁴⁵ [Military Today: Thai Naval Forces](#)

C-130 variants), including transport helicopters (including the Super Puma and Cougar MKII). Fast jet aircraft are primarily variants of the F-5, the F-16 and the AU-23A light attack aircraft. In early 2011 six JAS-39 Gripen aircraft, out of a total fleet of 12, entered service to replace some of the ageing F-5s.

Paramilitary forces are divided between the Border Patrol Police, Marine Police, Police Aviation and the provincial Police Force. Paramilitary Reserves also form the National Security Volunteer Corps and Thahan Phran (Hunter Soldiers).

Modernisation Programme

Many of Thailand's military assets are from the Cold War era and are becoming increasingly obsolete and expensive to maintain. In the last five years, however, the doubling of the defence budget, despite the small decline experienced in 2010 as a result of the global recession, has allowed the Thai government to embark on a major modernisation programme that will supplement and in certain cases replace that equipment and allow it to retain strategic parity with its neighbours. Due to the very limited capacity of the domestic defence industrial base, however, those modernisation plans will remain reliant on foreign suppliers which Thailand has been seeking to diversify in recent years.

Among the most significant procurement programmes to date has been the purchase of 12 Gripen combat aircraft to replace some of its fleet of ageing F-5 aircraft, a Saab 340 Airborne early warning and control (AEWAC) aircraft, a Saab 340 transport/training aircraft and an integrated command and control system. Six of those Gripen aircraft, along with the AEWAC and transport/training aircraft were delivered in the first half of 2011, while the remaining Gripens are due to enter service between 2013 and 2017. An agreement was also reached in October 2010 for 18 of the Air Force's F-16 fleet to be upgraded in the United States over a three year period. Both deals have been regarded as significant, as together they will provide Thailand with an advanced fast jet aircraft capability for the next 20-30 years and allow the country to retain strategic parity with neighbouring air forces in the region. Thailand has also been investing heavily in its air defence systems over the last few years and in November 2011 announced the acquisition of a new military radar system that will be integrated into the Royal Thai Navy and Royal Thai Air Force's coastal and air defence network.

In tandem with the modernisation priorities of most countries in Southeast Asia, Thailand has also been seeking to procure its first fleet of tactical submarines in order to shore up its littoral defence and regional force projection capabilities. In March 2011 the then Deputy Prime Minister commented that:

The acquisition is necessary for the Royal Thai Navy because countries in the immediate region – who could pose a threat – all have submarines. If we don't acquire submarines it will be difficult to protect our sovereignty and we will be at a disadvantage. We have natural resources and interests at sea that need protecting.⁴⁶

That same month the Navy announced that it would procure six Type-206A second-hand diesel-electric submarines from Germany in a deal worth \$220 million. However, many analysts considered the deal to be merely a stop gap measure, as the submarines are only expected to have an in-service life of 10 years once they are commissioned in 2013. The recent procurement of an advanced submarine capability with an estimated in-service life of at least 25 years by both Malaysia and Vietnam, and the rumoured interest of Burma in

⁴⁶ "Sub purchase is in response to regional naval build-up, says Thailand", *Jane's Defence Weekly*, 31 March 2011

purchasing a second-hand capability from China was considered likely to force the Thai navy into seeking a more permanent, long-term solution.⁴⁷

Indeed, despite the comments by the then Deputy Prime Minister in March, the previous Thai government blocked the Navy's purchase of the submarines following a Cabinet meeting in May 2011. The then Prime Minister reportedly suggested that the Navy should focus on the potential acquisition of new submarines, comparable to those recently purchased by Malaysia (see below). Following the election of the new government, the Navy resubmitted its proposals for the purchase of the Type 206A. However, that submission was rejected in September with a request for additional details relating to cost and transparency. It is thought possible that the Navy may revisit a previous proposal made by South Korea for the purchase of the Type-209 submarine, which was turned down in favour of the purchase of the ex-German Navy submarines.⁴⁸ China has also offered to sell Thailand two Song-class submarines, although they would require extensive modernisation in order to achieve operational status.⁴⁹

A new amphibious landing platform dock that is being built for the Navy by Singapore is also scheduled for delivery in 2012, along with the first of a new class of domestically manufactured offshore patrol vessel. Several deals have also been signed with Saab and Raytheon in early 2011 for the upgrade of the frigate fleet as part of a mid-life refit programme. Under those agreements the vessels will be equipped with new surface-to-air missiles that will increase the range of the ships' air defence capabilities, new communications, combat management, fire control, surveillance and electronic warfare systems.

As part of the Royal Thai Army's *Modernisation Plan: Vision 2020* the Army is also on track to procure 100 Oplot main battle tanks from Ukraine to replace its ageing M-41 tanks, in a deal worth £230 million,⁵⁰ and a second batch of Ukrainian manufactured armoured personnel carriers (121 vehicles) to supplement the initial batch of 102 vehicles which Thailand purchased in 2007 and which are expected to enter service by 2012. Plans to upgrade the Army's Scorpion light tanks and purchase large numbers of counter-insurgency items such as firearms and bulletproof jackets were also set down in the modernisation plan.

In 2008 Thailand and China also signed an agreement on the sale of base technologies that would allow the Royal Thai Army to develop and manufacture a range of missiles and rockets, including multiple rockets launchers, anti-ship and anti-tank missiles and surface-to-air, air-to-ground and air-to-air missiles. The deal was viewed as an indication of Thailand's increasingly closer ties with Beijing, and its willingness to broaden its defence supplier base. Indeed, in August 2011 the Thai Government was also reportedly in talks with China over the purchase of up to six anti-submarine warfare helicopters in response to the build up of submarine capabilities in the region.⁵¹

Russia also secured its first major military sale to Thailand in February 2011 with the sale of three multi-mission helicopters to the Royal Thai Army. The Army had suggested that a further three helicopters could be purchased from Russia in the near future if sufficient funds can be allocated by the Government. The Army is understood to have a requirement for 36 helicopters to replace its ageing inventory which has been further diminished following a series of fatal helicopter crashes in July 2011. However, in early October 2011 the Government announced the purchase approval for two additional UH-60M Black Hawk

⁴⁷ "Regional matters", *Jane's Defence Weekly*, 11 May 2011

⁴⁸ See "Thai visit expected to enhance South Korea defence ties", *Jane's Defence Industry*, 30 March 2011

⁴⁹ "PLA Navy troops in first joint exercise with Thai marines", *Jane's Navy International*, 16 November 2010

⁵⁰ On current expectations the Royal Thai Army will take delivery of the new Oplot tanks in 2013-14.

⁵¹ "Thailand considers Chinese helicopter purchase", *Jane's Navy International*, 4 August 2011

helicopters; while the acquisition of eight Eurocopter Fennec light attack/utility helicopters was announced in September 2011. Both deals are expected to boost the Army's armed reconnaissance capabilities, although they have raised a question mark over any future Russian helicopter deal.

The uncertainty generated by the recent election of a new Prime Minister who may not prove to be as supportive of the military is, however, considered likely to have an impact on the progress of Thailand's modernisation programme, both in terms of funding and in terms of political will.

2.3 Malaysia

Malaysia is active on the international stage, but like the majority of its neighbours its main foreign policy focus is on its regional sphere of influence, and in particular through ASEAN. For several years Malaysia has been a consistent advocate of greater defence co-operation through the ASEAN Regional Forum, although that objective has received minimal support from the other ASEAN nations, in particular Singapore and Indonesia.



Source: University of Texas Map Collection

Malaysia has a number of unresolved land and maritime border issues with Indonesia, which have sporadically led to disagreements. Disputes exist over boundaries in the Ambalat Sea, which is thought to be rich in oil reserves, and along the land borders of Sabah and Sarawak provinces in Borneo. A dispute over the islands of Sipadan and Ligitan in the Celebes Sea was resolved in 2002 after the International Court of Justice awarded sovereignty of the islands to Malaysia.

Relations between Malaysia and Indonesia soured in 2009 when there was a military confrontation over the disputed maritime demarcation zones off the coast of Sabah in northern Borneo. The Philippines also maintains a dormant claim on Sabah. Separatist violence in Thailand's predominantly Muslim southern provinces has also prompted Malaysia to closely monitor the border in order to stem any cross-border terrorist activities.

Along with China, Vietnam and the Philippines, Malaysia also lays claim to the Spratly Islands, while maritime security in the Malacca Strait have become an increasing priority. Historically Malaysia has also had territorial disputes with Singapore. The most recent regarding the islands of Pedra Branca, Middle Rocks and South Ledge were referred to the ICJ in 2003. In a 2008 judgement the ICJ awarded sovereignty of the first to Singapore, the second to Malaysia and awarded shared sovereignty over the third.

Malaysia launched its new defence policy in November 2010 and reiterated the country's key strategic priorities as: territorial defence, the defence of the South China Sea Economic

Exclusion Zone, sea and air lanes between East Malaysia and the Malaysian Peninsular and the Malacca and Singapore Straits.⁵²

Five Power Defence Arrangements (FPDA)

The Five Power Defence Arrangements (FPDA) were agreed in 1971 by the UK, Australia, Malaysia, Singapore and New Zealand.⁵³ Through the FPDA the five member nations undertook a commitment to consult in the event of an external threat to, or an attack on, either Malaysia or Singapore. However, there is no specific commitment in the FPDA for military intervention in such an event.

The most visible element of the FPDA is the Headquarters of the Integrated Area Defence System (HQ IADS) which is based in Butterworth, Malaysia. It is commanded by a Royal Australian Air Force Vice Marshal, and comprises over 40 personnel from all five nations and across all three Services. One of the main roles of HQ IADS is to organise and co-ordinate an annual exercise and training programme involving all five FPDA nations.

The FPDA is the region's longest active defence agreement and is regarded in the UK as the basis for defence co-operation between the UK and Malaysia and for furthering wider security interests in the region. Defence Ministers from each participating nation meet every three years to discuss issues of relevance to the FPDA, while Chiefs of Staff meet every two years.

In 2000 the decision was taken to adapt the annual exercise programme to embrace the concept of "joint operations". As such, exercises are now conducted among all five nations on a tri-service basis at both the operational and tactical level. Malaysia has benefitted from this approach in particular as it has necessitated improvements in operational capabilities and interoperability. A roadmap aimed at helping participating nations develop those capabilities further, and with the aim of achieving full operational capability by 2011, was endorsed by Ministers in 2003.

In response to international events a further decision was taken in 2004 to expand the training programme to include exercises against 'non conventional' threats such as terrorism, piracy and trafficking, which are regarded as a particular problem in the region. Emphasis has also been placed on joint humanitarian assistance and disaster relief operations. Exercise Bersama Lima, which was held in Malaysia at the end of November 2011, marked the 40th anniversary of the FPDA.

While the UK's defence relationship with Malaysia is focused on the FPDA, there is also a strong bilateral link, in particular between each country's Army. In addition to the FPDA annual exercises, the bilateral programme of security co-operation includes exchanges on peace support operations, counter-terrorism and maritime security and humanitarian assistance and disaster relief. Members of the Malaysian Armed Forces also participate in training courses in the UK, including at the Royal Military Academy Sandhurst. In July 2011 the UK and Malaysia signed a series of accords relating to transport, energy, research and development and defence education that commentators have suggested could lead to greater defence collaboration in the longer term.⁵⁴

⁵² "US keen to extend military ties with Malaysia", *Jane's Defence Weekly*, 10 November 2010

⁵³ Largely as a result of the withdrawal of British troops from Malaysia and Singapore by the end of 1971. Up until this point both countries had relied heavily on Britain to guarantee their security.

⁵⁴ "UK, Malaysia look to reinvigorated defence partnership", *Jane's Defence Industry*, 14 July 2011

Bilateral Relations

The defence relationship between Malaysia and Australia dates back to World War Two.⁵⁵ In recent times the relationship has been underpinned by the FPDA and the Malaysia-Australia Joint Defence Programme (MAJDP) which was established in 1992. It includes annual combined field exercises, the training of Malaysian military personnel in Australia, and the secondment of Armed Forces personnel from each country's military to the other. Australia is also the only country to have forces permanently deployed in Malaysia. The Australian Air Force has a small contingent of personnel and one maritime patrol aircraft based at Butterworth air base, while the Army retains one infantry company in the country.

Malaysia and the United States co-operate on defence and security issues and undertake military exchanges, joint exercises and visits. In the last year or so, the US has renewed efforts to strengthen the military relationship. Many analysts have viewed this renewed interest as a response to China's growing influence in Southeast Asia; while others have suggested that it provides legitimacy to US efforts to reach out to the Muslim world. Closer military ties with the US are also seen as providing Malaysia with more leverage in dealing with regional security issues.⁵⁶ Specifically, the US is understood to want to hold more military exercises with Malaysia, as well as expand co-operation in counter-terrorism, non-proliferation, maritime security and humanitarian and disaster relief.

Malaysia has also concluded a number of bilateral partnership agreements with India and Pakistan over the last few years which have included commitments to enhance defence co-operation. India in particular has provided significant support to the Malaysian Air Force with the training of air and ground crew for the Su-30MKM fast jet aircraft. Future co-operation on this basis is also considered likely as and when Malaysia expands its fast jet fleet (see below).

Defence Expenditure

Malaysia currently has the fourth largest defence budget among its neighbours in the region. However, along with Indonesia, Malaysia is widely considered to be a major emerging market economy and indeed GDP had been forecast to climb by an average 5% per annum to 2015. Partly as a result of this estimated increase in GDP, and to offset the decreases in defence spending incurred in 2009-2010 as a result of the financial crisis, analysts had estimated that defence expenditure would grow by 48% to \$5.8 billion by 2015.⁵⁷ The defence budget for 2011 was earmarked at approximately £4.4 billion.

Yet a relative slowdown in the national economy in the first half of 2011 from 7.2% in 2010 to 4.4%⁵⁸ has raised questions over the ability to commit significant increases to military expenditure over the next few years. Indeed, in October 2011 the government

Military Spending of Malaysia 2001-2010

	US \$m (Constant, 2009 prices)	% change on previous year	% of GDP
2001	2,513	24.4%	2.1
2002	2,855	13.6%	2.2
2003	3,640	27.5%	2.6
2004	3,513	-3.5%	2.3
2005	3,758	7.0%	2.3
2006	3,678	-2.1%	2.1
2007	4,107	11.7%	2.1
2008	4,199	2.2%	2.0
2009	3,881	-7.6%	2.0
2010	3,259	-16.0%	N/A

Source: SIPRI

N/A - Not Available

⁵⁵ A detailed history of the defence relationship between Malaysia and Australia is available from the Malaysian Embassy in Australia: [History of the Malaysia-Australia Defence Relationship](#)

⁵⁶ See "Close US-Malaysia military ties mutually beneficial", *Asia News Network*, 18 June 2011

⁵⁷ "Navigating the emerging markets: Malaysia", *Jane's Industry Quarterly*, 20 May 2011

⁵⁸ "BAE Systems looks to Malaysia as Global Combat Ship partner", *Jane's Defence Weekly*, 18 November 2011

announced a defence budget for 2012 of \$4.3 billion, a slight decrease on 2011, which is expected to represent approximately 1.4% of GDP.⁵⁹

The modernisation programme of the Armed Forces has been affected for several years by inadequate investment compared to its procurement ambitions. It has already been estimated by *Jane's* that development costs associated with acquisition and maintenance will fall by 15% over the coming year, with the majority of those costs reportedly assigned to the Air Force, followed by the Navy and then the Army.⁶⁰ What impact this will have on longer term procurement plans remains to be seen (see below).

Manpower and Assets⁶¹

Under current rationalisation plans, the size of the Army is expected to reduce over the next few years to 60-70,000 personnel. Like many of its neighbours, Malaysia relies heavily on its reserve and paramilitary forces for supplementing its military manpower. In addition to Regular forces, there are 51,600 reservists, 97% of which are Army reserves, and a further 244,700 paramilitary reservists. On that basis, Malaysia has the fifth largest force, in terms of overall manpower, in the region.

Current Military Manpower

	Army	Navy	Air Force	Total
Active	80,000	14,000	15,000	109,000
Paramilitary				24,600
Reserves	50,000	1,000	600	51,600
Paramilitary Reserves				244,700

Assets across all three services are largely a mixture of Western

Source: IISS, *Military Balance 2011*

and former Soviet/Russian technologies. The Army is equipped with approximately 50 PT-91M main battle tanks,⁶² 90 Scorpion light tanks,⁶³ approximately 394 reconnaissance vehicles, 44 armoured infantry vehicles, 731 armoured personnel carriers, several hundred artillery pieces and anti-tank missiles, an array of amphibious landing craft, and transport helicopters. The extent of the Army's manpower and assets reflects its focus on internal security.

Naval and air assets, however, are largely configured for the defence of territorial waters and airspace, and limited regional power projection. Naval forces are divided among one naval HQ at Lumut on the Strait of Malacca, and three regional commands on the east coast, west coast and on the island of Borneo, comprising six bases (with a further two under construction) in total. The Navy does not possess any aircraft carriers or destroyers and therefore its 'blue water' expeditionary capability is limited.⁶⁴ However, outside of its own borders, Malaysia's military priority is its immediate sphere of influence, largely the security of the South China Sea and the Strait of Malacca, and this is reflected in its fleet of two tactical Scorpene submarines which entered service in 2010, eight frigates (four of which are guided missile frigates), four mine warfare/countermeasures vessels, one amphibious landing ship and approximately 115 landing craft. It also has 37 patrol and coastal combatants, four of which are corvettes equipped with anti-ship missiles, 15 support ships providing an at-sea

⁵⁹ "BAE Systems looks to Malaysia as Global Combat Ship partner", *Jane's Defence Weekly*, 18 November 2011

⁶⁰ "Malaysia proposes slimmed down FY12 defence budget", *Jane's Defence Weekly*, 10 October 2011

⁶¹ Figures are taken from the International Institute for Strategic Studies, *Military Balance 2011*

⁶² Manufactured for export in Poland and based on the original Soviet T-72 tank. These entered service with the Malaysian Army in September 2010.

⁶³ Designed and manufactured in the UK.

⁶⁴ 'Blue water' is a term used in maritime geography to refer to the deep waters of the open ocean. A 'blue water force' has the ability to project and sustain naval force across the open ocean.

replenishment capability, a small contingent of anti-submarine warfare helicopters and one unit of Special Forces marine commandos.

The Malaysian Air Force is equipped with 82 combat capable aircraft, a mixture of US F-5 and ex-Soviet MiG-29 fighter aircraft, US F/A-18D and Russian Su-30MKM forward ground attack aircraft and Hawk Mk108 and Mk208 training aircraft. It also has a number of intelligence and surveillance assets, including several unmanned aerial vehicles (UAVs) and one squadron of maritime patrol aircraft; tanker/transport aircraft, largely variants of the Hercules C-130 and an array of maritime reconnaissance and transport helicopters.

Paramilitary forces are configured for general police operations (18,000 personnel), maritime enforcement (4,500), marine police operations (2,100) air policing operations and customs and border patrol. The Police-General Operations Force is equipped with reconnaissance and armoured personnel vehicles while those forces dedicated to the surveillance of territorial waters and airspace are well equipped with over 200 patrol and coastal combatant vessels, maritime patrol aircraft, helicopters and light aircraft.

As outlined above, the Australian Air Force also has a small contingent of personnel and one maritime patrol aircraft based in Malaysia, while the Army retains one infantry company in the country.

International Deployments

Malaysia has been a longstanding and consistent contributor to UN peacekeeping operations. As of 31 October 2011, it had 1,206 personnel deployed making it the 20th largest contributor to UN operations. Those personnel were deployed in:

- Western Sahara (MINURSO) – 7 experts.
- Democratic Republic of Congo (MONUSCO) – 17 experts.
- Darfur (UNAMID) – 42 police personnel, 3 experts and 12 troops.
- Lebanon (UNIFIL) – 882 troops.
- Liberia (UNMIL) – 6 experts.
- South Sudan (UNMISS) – 5 police personnel and 2 experts.
- East Timor (UNMIT) – 88 police personnel, 140 formed police units and 2 experts.⁶⁵

Malaysia also currently has 46 military medical personnel deployed as part of the International Security Assistance Force in Afghanistan.⁶⁶ A contingent of approximately 30 personnel deployed in October 2010 initially for a period of one year. In August 2011 the Malaysian government announced that it would extend its medical mission in Afghanistan until 2014 and that there would be a small increase in the number of deployed personnel up to 59.

Since 2008 Malaysia has also contributed to the anti-piracy operations in the Gulf of Aden.

Modernisation Programme

Malaysia initiated its military reform and modernisation programme several years ago, which has put it slightly ahead of most of its neighbours in this regard (with the exception of

⁶⁵ <http://www.un.org/en/peacekeeping/resources/statistics/contributors.shtml>

⁶⁶ ISAF fact sheet 20 October 2011

Singapore). However, Malaysia's economic difficulties prior to 2010 meant that its modernisation ambitions have not always been matched with adequate resources. As such, Malaysia has made progress in certain areas, including the maritime sphere, with the procurement of two tactical submarines and the expansion of its frigate fleet; while in other areas progress has been minimal after several programmes have been postponed or scaled down due to a lack of funds.⁶⁷

Yet modernisation is still a key part of Malaysia's agenda and given the overall upturn in Malaysia's economic outlook over the last few years, it is expected to be the focus of the next few years. In 2011, for example, approximately \$1 billion of the approximately \$4.4 billion defence budget was expected to be made available for procurement, while overall spending on procurement between 2010 and 2015 is expected to total \$8.8 billion.⁶⁸ Many of those programmes delayed due to lack of funding are now expected to be prioritised. Indeed, the Government has already announced its intention to expand its naval fleet with the procurement of six littoral combat ships under its Second Generation Patrol Vessel programme and between three and five Multipurpose Support Ships in a possible deal worth up to \$1 billion. Malaysia has also reportedly indicated an interest in partnering with BAE Systems on the UK's Global Combat Ship (Type 26 frigate) project.⁶⁹ In addition to the 18 Su-30MKM fast jet aircraft that it procured from Russia between 2003 and 2009,⁷⁰ the Air Force is currently in the process of selecting a new multi-role combat aircraft (MRCA) to replace the MiG-29N which are scheduled to be withdrawn from service in 2015. The Typhoon, F/A-18E/F, the Rafale, the JAS 39 Gripen and the SU-35 have all been earmarked as possibilities in the \$1.5 billion deal,⁷¹ despite the fact that the Air Force already operates five different types of fast jet aircraft, including the Hawk training aircraft. Industrial participation, which, as discussed below, is a core element of Malaysia's plan to become an advanced economy by 2020, is likely to play a major role in the selection of a preferred bidder. In November 2011 Malaysia requested the purchase of 20 AIM-9X-2 Block II Sidewinder short-range air-to-air missiles from the US government, in a deal reportedly worth \$52 million. Purchase of the upgraded missile is thought to be part of an upgrade programme for its existing fleet of F/A-18D and F-5 fast jet aircraft, prior to the purchase of the MRCA.

The Air force is also in the process of procuring four Airbus A400M transport aircraft, due to be delivered in 2015-16, and 12 Eurocopter Cougar multirole helicopters, which will be delivered in 2012-13. It also has a requirement for between four and eight airborne early warning and control system aircraft. In April 2011 the Army also announced its intention to procure 257 armoured combat vehicles from the Turkish company FNSS, although they will be manufactured under licensed production in Malaysia. Requirements for attack helicopters and a new artillery system for the Army are still in the pipeline. The possibility of procuring 20 armoured personnel carriers from Indonesia as an urgent operational requirement for Malaysian troops operating in Lebanon has also recently been discussed.

While Malaysia's status as an emerging market is considered likely to support the military modernisation agenda in the short term, the longer term prospects are not yet clear. As outlined above, a slowdown in the national economy has raised questions over the likelihood of significant increases in defence spending over the next five to ten years; while Malaysia's military modernisation programme has often been criticised as incoherent, as new procurement programmes have failed to take interoperability with existing equipment into

⁶⁷ The Multipurpose support ship programme and the Multirole Combat aircraft programme are two examples of projects that were postponed due to lack of funding.

⁶⁸ "Briefing: A market set to make its mark", *Jane's Defence Weekly*, 27 May 2011

⁶⁹ "BAE Systems looks to Malaysia as Global Combat Ship partner", *Jane's Defence Weekly*, 18 November 2011

⁷⁰ The SU-30MKM was ordered in 2003, with the last of the aircraft delivered in August 2009.

⁷¹ The contract could potentially be worth up to \$3.6 billion if additional aircraft are ordered.

account, or have not formed part of an overarching and consistent defence strategy. Tim Huxley, Executive Director of IISS-Asia, noted:

Malaysia's decisions seem too often to be taken on a piecemeal basis, resulting in eccentric procurement decisions and an eclectic range of incompatible equipment.⁷²

The diversity of its suppliers and procurement relationships has, in particular, led to logistic and support problems in addition to high costs associated with the procurement of small numbers of assets that require their own maintenance and supply chains.

Arguably, procurement priorities have to some degree been determined by Malaysia's response to geopolitical shifts in the region and its perception of threats closer to home, including its unresolved border disputes, increases in piracy and trafficking, and a general desire to retain military parity with Singapore. As a result, Malaysia has maintained a broad network of suppliers, and programmes such as those in the maritime sphere have previously flourished, while others, as outlined above, have stalled due to lack of investment which the Malaysian government is now seeking to reinvigorate. Malaysia's determination to develop its own defence industrial base, in particular those companies owned by ethnic Malays,⁷³ has also had an impact as procurement choices have been skewed by political and industrial participation issues rather than being the most cost effective or interoperable solution.

Defence Industrial Base

Unlike many of its neighbours (with the exception of Singapore and Indonesia), Malaysia has developed a fledgling defence industrial base with specific capability in maintenance, repair and overhaul, electronics, simulation and advanced composites. However, the defence industrial base is still considered relatively low-technology. Estimates published in 2009 suggested that Malaysia's indigenous contribution to defence procurement programmes was approximately 25% and that 90% of military equipment used by the Armed Forces was of foreign design.⁷⁴ Therefore, advancing indigenous defence manufacturing capabilities over the next 10 years is a core element of Malaysia's 'Vision 2020' plan to develop the country into an advanced economy by the end of the decade.⁷⁵

The objective is to improve the defence and aerospace sector primarily through the use of offset/industrial participation. At present Malaysia's offset policy is for contracts worth more than \$14.4 million to provide offset of at least 50% of the total value of the contract. However, given Malaysia's economic development plans over the next ten years, many analysts had expected the offset obligations in defence contracts to become even more significant with emphasis placed on technology transfer and facilitation into bidding contractors' global supply chains.⁷⁶ Indeed, in its updated defence offset policy, which was published in October 2011, the development of the indigenous defence industry will be prioritised. The threshold for offset contracts has been increased marginally to \$15.7 million, while the value of offset should be 100% of the main procurement contract value (although the minimum level of offset will still remain at 50%). Foreign direct investment will also be considered as offset

⁷² "Regional matters", *Jane's Defence Weekly*, 11 May 2011

⁷³ Malaysia operates a policy of positive discrimination in that it reserves the right to issue tenders exclusively to companies owned by ethnic Malays, which are referred to as Bumiputra-status companies.

⁷⁴ "Malaysia's new offset policy to boost self-sufficiency and oversight", *Jane's Defence Industry*, 6 October 2011

⁷⁵ A more detailed examination of Malaysia's defence industry is available in "Navigating the emerging markets: Malaysia", *Jane's Industry Quarterly*, 23 May 2011

⁷⁶ "BAE Systems outlines Malaysian Eurofighter industrial participation plans", *Jane's Defence Weekly*, 27 July 2011. In the past counter-trade has formed a part of defence offset agreements, although Malaysia has sought to meet those obligations through the sale of palm oil, cocoa and rubber products as opposed to indigenously manufactured defence components.

credit, while counter-trade will be given lower priority, although not abolished completely.⁷⁷ However at the heart of the updated policy is the premise that “technology transfer and competency development will form an integral part of direct offset [and will] include knowledge-based activities such as design of systems and subsystems of the procured supplies, services and works”.⁷⁸ The incorporation of domestically manufactured products into the overall platform will be a key feature.

Malaysia’s current programme to procure a new multi-role fighter aircraft is expected to include significant offset agreements which are likely to form a main part of the competitive process. Indeed many companies have already been prompted to sign broader partnership deals with Malaysian companies in order to position themselves ahead of the MRCA competition. For example, in June 2011 Boeing announced that it had signed partnership agreements with three Malaysian companies in order to explore opportunities for the manufacture of specialised components and equipment such as advanced composites.⁷⁹

The recent deal to procure a multi-role helicopter from Eurocopter includes a number of offset projects including the creation of several Joint Ventures between the company and a number of Malaysian companies to provide maintenance, repair and overhaul services and flight simulator services; the development of an aeronautical training centre and the transfer of unspecified technologies and knowledge to both Malaysian industry and the Armed Forces.⁸⁰

However, the ability of the Malaysian defence industrial base to absorb the new technologies and partnering arrangements that have been agreed under the offset policy, has been questioned by some analysts. They have suggested that, in the short term at least, efforts to improve the defence industrial base will yield limited results and that for the time being Malaysia will remain reliant upon its foreign partners.⁸¹

Malaysia has also been a strong advocate of closer defence industrial co-operation between the ASEAN nations as a means of both improving regional defence capabilities, but more particularly the defence industrial base. However, while the concept of utilising procurement budgets more effectively has appeal, the practicalities of joint procurement have not been met with enthusiasm among the other members, who have preferred to pursue bilateral defence industrial agreements, for example with China, South Korea, the US and other Western nations. Singapore and Indonesia have also reportedly expressed concern over the disparity between individual nations’ defence industrial capabilities, with many countries in the region having a very limited military industrial complex. It has been suggested that ongoing disputes between the ASEAN nations has also done little to encourage defence co-operation.⁸²

⁷⁷ Counter-trade has in the past been a key feature of indirect offset involving commodities such as palm-oil, cocoa and rubber products.

⁷⁸ “Malaysia’s new offset policy to boost self-sufficiency and oversight”, *Jane’s Defence Industry*, 6 October 2011

⁷⁹ “Boeing signs Malaysian MOUs”, *Jane’s Defence Weekly*, 10 June 2011

⁸⁰ “Eurocopter signs Malaysia collaboration contract”, *Jane’s Defence Industry*, 24 June 2011

⁸¹ “Briefing: A market set to make its mark”, *Jane’s Defence Weekly*, 27 May 2011

⁸² See “Malaysia renews calls for greater ASEAN collaboration”, *Jane’s Defence Industry*, 19 May 2011

2.4 Indonesia

Indonesia's territorial expanse covers 2,600 miles and includes 18,000 islands. As such it has the second largest coastline in the world and is situated on a number of key strategic maritime routes, through which a large proportion of the world's trade, in particular oil, passes. Littoral defence and maritime security are therefore significant security concerns.

Indonesia has maintained relatively peaceful relations with the majority of its neighbours since the 1960s and over the last decade has also made significant efforts to improve its relations with East Timor, which gained independence from Indonesia in 2002.



Source: University of Texas Map Collection

However, like many of its neighbours Indonesia has a number of unresolved disputes over its maritime and land borders. Maritime boundaries with East Timor and Malaysia remain unresolved; while Indonesia and Singapore continue to work to finalise the maritime boundary agreement reached in 1973. As outlined above, relations between Malaysia and Indonesia have at times been fractious, most recently resulting in a minor military confrontation in mid-2009 over the disputed maritime demarcation zones off the coast of Sabah in northern Borneo. Both countries also remain in dispute over the oil-rich area of the Ambalat Sea, and the land border in Borneo. A dispute over the islands of Sipadan and Ligitan in the Celebes Sea was resolved by an ICJ judgement in 2002. Indeed, in June 2011 Indonesia suggested that it was planning to station a battalion of 700-1,000 soldiers on the border with Malaysia in East Kalimantan in order to “enhance its security presence in Indonesian territory”.⁸³ All disputes are longstanding and neither side is considered likely to relinquish its claims. However, neither is the situation expected to result in a major military confrontation in the immediate future.

Indonesia and Vietnam signed an agreement concerning the delimitation of the Continental Shelf Boundary in 2003, which was ratified in 2007. In September 2011 both countries also agreed to begin joint patrols on their maritime border and increase co-operation and communication regarding security issues in the area, particularly in relation to illegal fishing which the Indonesian government has estimated loses its national economy \$3.5 billion a year.

While Indonesia has no sovereignty claims over the Paracel or Spratly Islands it does retain concerns over a claim set out by China in 1993 over the Natuna Islands, which form part of Indonesia's Riau Island province in the Natuna Sea between east and west Malaysia and the Indonesian part of Borneo.⁸⁴

⁸³ “Indonesia rejects border conflict claims with Malaysia”, *Jane's Intelligence Weekly*, 11 October 2011

⁸⁴ “Indonesia and Vietnam launch joint maritime patrols in disputed waters”, *Jane's Intelligence Weekly*, 15 September 2011

International Engagement

ASEAN

As a founding member of ASEAN, and the host to its secretariat, Indonesia has traditionally been seen as a cornerstone of the organisation and a strong advocate of co-operation among ASEAN countries, particularly on trade and regional issues such as smuggling and piracy. However, Indonesia's response to Malaysian efforts to establish a regional defence collaboration mechanism through ASEAN has been lukewarm. As one of only three countries (Malaysia, Singapore and Indonesia) that has an established defence industry, albeit of varying capabilities, Indonesia has expressed concern over the ability of other nations to contribute and has reiterated its priority of advancing its own defence industrial base in order to reduce its reliance on foreign suppliers (see below). However, it has signalled its support for enhancing capabilities that would allow Southeast Asian nations to deal more effectively with natural disasters and maritime security.

United States

While the US and Indonesia have generally maintained cordial diplomatic relations and have engaged in a number of co-operative measures relating to the maintenance of peace and security in the region, the relationship has occasionally been challenged by differences of opinion on human rights and foreign policy.

In 1992 the US cut off military training assistance funding and placed a ban on all activities between the US military and Indonesia's Special Forces Command after Washington accused Indonesian security forces of killing East Timorese demonstrators in 1991. Further violence in East Timor in 1999, following its referendum for independence, resulted in a military arms embargo against Indonesia. That embargo was revoked in 2005 (although only after the capabilities of the Armed Forces had been severely diminished, see below), at the same time that military relations were normalised and military assistance funding had been reinstated. Although no major defence sales have been agreed since the embargo was lifted, potential sales of military equipment and services are expected to be encouraged following the US administration's decision to increase the funds available to Indonesia through the Foreign Military Financing (FMF) scheme. By 2011 this funding had reached \$22 million, making the country the ninth largest recipient of FMF funding in the world, and the biggest recipient outside the Middle East, Pakistan and Colombia.⁸⁵ In June 2010 both countries also signed the *Framework Agreement on Cooperative Activities in the Field of Defence*, which was intended to expand existing co-operative activities, including industrial collaboration, the procurement of military equipment, security dialogue, and to address non-traditional challenges to regional security.⁸⁶ The US is reported to have agreed to expand military training exercises between US and Indonesian forces to include joint submarine exercises and naval minesweeping exercises. Those exercises are expected to take place in 2012.

In October 2011 both countries once again reiterated their intention to enhance defence collaboration, including potential sales of US defence equipment to Indonesia, military-to-military cooperation, disaster relief and the development of Indonesia's planned peacekeeping training centre in Sentul, which is due to be completed in 2013.

Australia

Co-operation between Indonesia and Australia on security matters is underpinned by the *Lombok Treaty 2006*, which came into force in 2008. That treaty provides a framework for addressing both traditional and non-traditional threats including counter terrorism,

⁸⁵ Foreign Military Financing is the provision of US military financial assistance to a country in order for it to purchase US military equipment, services and training.

⁸⁶ That agreement became one of the pillars of the subsequent US-Indonesia Comprehensive Partnership that was launched in November 2010.

transnational crime, illegal fishing, human trafficking, maritime and aviation security, the proliferation of weapons of mass destruction (WMD) and disaster management. The treaty also provides for the conclusion of separate agreements in specific areas such as defence co-operation and law enforcement.

In March 2011 the Indonesian President and the Australian Prime Minister announced that the relationship between the two countries would be upgraded to a comprehensive strategic partnership.

However, in mid-November 2011 the Indonesia Foreign Minister and Chief of the Armed Forces both expressed their concern over Australia's recent announcement that US marines would be forward deployed in Northern Australia from 2012.

China

China has also been seeking to strengthen its ties with its Southeast Asian neighbours in the last year or so. In 2009 Indonesia and China signed an agreement that paved the way for China to provide unspecified assistance to Indonesia's defence industry.

Building on this arrangement, in early 2011 China and Indonesia signed a Memorandum of Understanding on the development and production of a Chinese-designed missile system (see below). Other collaborative projects thought to be under discussion include the joint development of surface-to-air missiles, and co-production of basic trainer and light attack aircraft, transport aircraft and helicopters.⁸⁷ Beyond industrial collaboration, Chinese and Indonesian Special Forces also conducted their first ever joint exercise in June 2011.

Other Bilateral Agreements

Like many of its neighbours, Indonesia has also signed a number of defence collaboration/partnership agreements in the last few years, to increase the country's international standing and to consolidate its strategic partnerships, but also to diversify its military suppliers and support its efforts to develop its indigenous defence manufacturing base. Agreements on increased defence co-operation, with specific emphasis on industrial collaboration, were signed with Russia and Serbia in September 2011, Turkey and Saudi Arabia in April 2011, France in July 2011, South Korea, India (as part of its Look East policy), Vietnam, and Brunei.

International Deployments

Indonesia is currently the 15th largest contributor to UN peacekeeping operations, with a total of 1,976 personnel deployed. Those personnel are deployed in the following locations:

- Haiti (MINUSTAH) – 9 police personnel and 168 troops.
- Democratic Republic of Congo (MONUSCO) – 17 experts and 175 troops.
- Darfur (UNAMID) – 140 formed police units, 3 experts and 1 soldier.
- Lebanon (UNIFIL) – 1,456 troops⁸⁸
- Liberia (UNMIL) – 1 expert
- South Sudan (UNMISS) – 6 police personnel.

⁸⁷ "Indonesia and China reach agreement on joint development of anti-ship cruise missile", *Jane's Defence Weekly*, 24 March 2011

⁸⁸ Indonesia has maintained a contingent in UNIFIL since 2006.

Defence Expenditure

Indonesia is one of the largest economic powers in ASEAN and has a stated vision of being a global top ten economic power by 2025. Indeed, in 2010 the IMF stated that Indonesia is set to become one of the world's fastest growing economies over the next decade.

As a result of strong economic growth, defence expenditure has increased significantly in the last two years, making Indonesia's defence budget the second largest among its regional neighbours. The defence budget in 2010 saw a 27.8% increase over the previous year, while the 2011 budget has been identified at \$6.5 billion, an additional \$500 million compared to 2010. Due to strong economic growth, the defence budget has remained relatively static, however, when considered as a proportion of GDP.

Yet the defence budget has not been immune from domestic spending pressures. Earlier in 2011 the MOD submitted a proposal to boost the 2011 defence budget by a further \$1 billion in order to cover the shortfall of funds allocated for defence procurement. The country's Parliament reportedly refused the request in July due to ongoing economic pressures on social welfare spending.⁸⁹

Despite this, for the future increases in military expenditure are expected to become the norm. In July 2011 President Susilo Bambang Yudhoyono publicly vowed to raise military expenditure to 1.5% GDP by 2014⁹⁰ and a Presidential Statement in September suggested that Indonesia would allocate at least \$17.5 billion towards defence procurement over the next 10-15 years.⁹¹

The government confirmed in October 2011 that the defence budget for 2012 would be approximately \$7.2 billion, a 36% increase on the previous year.⁹² That final budget allocation was, however, less than many analysts had expected after the MOD proposed earlier in the year a budget increase of \$2 billion, which would take military expenditure closer to \$8.5 billion in 2012.⁹³ GDP is widely expected to grow by about 6% in 2012 which has prompted the UK Trade and Investment agency to designate Indonesia as one of its 17 high-growth markets.⁹⁴

With the rapid expansion of its economy predicted over the next few years, the Indonesian government has indicated its intention to repay the export credit loans that it has used for major defence equipment purchases in the past, particularly from Russia.⁹⁵ Since 2007 Indonesia has, for example, acquired infantry fighting vehicles, helicopters and fast jet aircraft through a series of credit deals with Russia and in March 2011 Indonesia secured a further \$6m loan from the country in order to fund the purchase of additional items. Indonesia

Military Spending of Indonesia 2001-2010

	US \$m (Constant, 2009 prices)	% change on previous year	% of GDP
2001	2,025	N/A	0.6
2002	3,293	62.6%	1.1
2003	4,291	30.3%	1.3
2004	4,412	2.8%	1.3
2005	4,313	-2.2%	1.1
2006	4,380	1.6%	1.1
2007	5,271	20.3%	1.2
2008	4,903	-7.0%	1.0
2009	4,702	-4.1%	0.9
2010	6,009	27.8%	N/A

Source: SIPRI

N/A - Not Available

⁸⁹ "Indonesia MOD's spending request denied", *Jane's Defence Weekly*, 7 July 2011

⁹⁰ *ibid*

⁹¹ "Indonesia vows to subject all defence acquisitions to intense scrutiny", *Jane's Defence Industry*, 9 September 2011

⁹² "Indonesia confirms 36% boost to defence budget", *Jane's Defence Weekly*, 7 October 2011

⁹³ "Indonesia plans defence budget rise to boost operational effectiveness", *Jane's Defence Weekly*, 2 June 2011

⁹⁴ *IHS Jane's*, 7 October 2011

⁹⁵ "Indonesia gets \$6m loan from Russia", *Jane's Defence Industry*, 16 March 2011

has also acquired loans from France, Switzerland and South Korea in the past in order to enable the purchase of military equipment at a time of economic constraint. Counter-trade has also been widely used by Indonesia. In recent years Indonesia has been seeking to secure financing from Indonesia's own banking system in order to purchase military equipment. In late 2010 Bank Rakyat Indonesia extended credit to the government in order for them to proceed with the acquisition of three CN-235 maritime patrol aircraft for the Navy, at a cost of \$80m.⁹⁶

Jane's has argued, however, that should domestic economic constraints persist in Indonesia (as was witnessed earlier in 2011), then the country will almost certainly continue with this policy of funding defence purchases through export credit and foreign loans, regardless of the sizeable increase in defence spending. The US extension of its Foreign Military Finance mechanism to Indonesia, which would allow the country to purchase US-made equipment with US financial assistance, could prove particularly significant (see below).

Others have also questioned the political will of the government to maintain such high levels of defence spending over the next decade. Indeed, at just below 1% of GDP, the government still remains far off its target of military expenditure equating to 1.5% by 2014.

Manpower and Assets⁹⁷

Like many of its neighbours Indonesia's military is dominated by its ground forces. Of the military's Regular personnel, 77% are Army personnel; while the majority of its reserves are Army reservists. Indonesia widely uses its extensive reserve and paramilitary forces in order to supplement its military capabilities, particularly in the maritime sphere. In terms of the total manpower at its disposal, the Indonesian Armed Forces is the second largest among its Southeast Asian neighbours.

Current Military Manpower

	Army	Navy	Air Force	Total
Active	233,000	45,000	24,000	302,000
Paramilitary				280,000
Reserves				400,000

Source: IISS, *Military Balance 2011*

In common with Malaysia, assets across all three Services are a mixture of largely ageing Western and Soviet/Russian technologies, interspersed with small numbers of domestically manufactured assets, such as the CN-235 transport aircraft and armoured personnel carriers. It has been estimated that the average age of equipment in service with the Armed Forces is between 25 and 40 years old, while operational effectiveness has been significantly diminished due to a lack of funds and the imposition of the US arms embargo against Indonesia in 1999, which curtailed their ability to maintain or procure spares for their US-sourced assets, including the Air Force's fleet of F-5 and F-16 fast jet aircraft and C130 transport aircraft. The Indonesian MOD's Director General for Defence Planning has estimated that "barely 30 to 35% of equipment owned by the three armed services [is] operational to a satisfactory level".⁹⁸

The Army is divided into 11 Military Area Commands, a Special Forces Command and a Strategic Reserve Command. While its manpower may be extensive, its assets are not. Although the Army has no main battle tanks it has approximately 350 light tanks (a mixture of French MX-13, Soviet-era PT-76 and the British Scorpion tank), 142 reconnaissance vehicles, 11 Russian manufactured armoured infantry fighting vehicles and in excess of

⁹⁶ "Indonesia turns to Bank Rakyat to fund stalled CN-235 purchase", *Jane's Defence Weekly*, 17 September 2010

⁹⁷ Figures are provided by the IISS, *Military Balance 2011*

⁹⁸ "Indonesia plans defence budget rise to boost operational effectiveness", *Jane's Defence Weekly*, 2 June 2011

1,000 artillery pieces. Its helicopter fleet comprises a number of Russian Mi-35 attack helicopters and Western sourced multi-role, transport and training helicopters. A small air defence capability is provided by a mixture of Rapier (British) and RBS-70 (Swedish) surface-to-air missiles.

In comparison, the Navy is significantly smaller in terms of manpower, but it possesses assets that make it capable of both littoral defence⁹⁹ and limited regional power projection. The Navy is divided into two fleets: the Eastern fleet is based at Surabaya and the Western fleet is based at Jakarta. There are also two forward operating bases at Kupang in West Timor and Tahuna in Northern Sulawesi. It operates two tactical submarines and 11 warships, all frigates and all equipped with anti-ship and surface to air missiles. Six of those frigates also have a helicopter capability. There are 66 patrol and coastal combatants, including 19 corvettes (four of which are the new Diponegoro-class) equipped with either anti-ship or surface-to-air missiles, 11 mine warfare/countermeasures vessels and a number of principal amphibious vessels, including four landing platform docks capable of carrying troops, tanks, helicopters and landing craft, the latest of which was delivered in March 2011. The fleet also has 32 logistics and support vessels capable of at sea replenishment. The naval aviation arm is largely devoted to maritime patrol, surveillance and anti-submarine warfare.

While the Air Force does possess approximately 100 fast jet aircraft (a mixture of F-5E/F, F-16, Su-27 fighter and five SU-30Mk1 aircraft which entered service in 2009/2010, and Skyhawk attack aircraft), only 45% of them are thought to be operational, therefore limiting their contribution to power projection and the defence of Indonesian airspace. The Air Force also possesses 12 intelligence, surveillance and reconnaissance aircraft, a fleet of transport aircraft (mostly older C130 variants, CN-235 and Cessna aircraft), transport and search and rescue helicopters. Again nearly half of its assets are thought to be non-operational due to cannibalisation and a lack of spares.¹⁰⁰ The Air Force also has a special operations wing.

Indonesia is a good example of a country in the region that uses its paramilitary forces to supplement its maritime capabilities for littoral defence purposes. Paramilitary forces are heavily focused on maritime activities with personnel divided among the Naval Auxiliary Service, Customs, the Marine Police, the Coast and Seaward Defence Command, the Police and the Kamra People's Security which is a part-time police auxiliary force.

Military Modernisation

As outlined above Indonesia's military is large in terms of manpower, but lacking in effective capabilities. Therefore the Government's plans for military modernisation over the next decade are ambitious and are fuelled by the current growth in Indonesia's economy. As outlined above, over the next 10-15 years approximately \$17.5 billion is expected to be allocated to defence procurement.

As an island archipelago of over 18,000 islands, with a number of maritime border disputes and facing issues such as maritime trafficking and piracy, investment in the navy has been highlighted as the military's greatest priority.¹⁰¹ Indeed, in 2010 the Deputy Chief of the Navy outlined his ambition for the acquisition of a 40-boat submarine fleet and plans to replace many of the Navy's ageing surface fleet with the procurement of 20 new frigates and 30-40 corvettes and fast patrol craft.¹⁰² The majority of commentators concur that these aims are

⁹⁹ Littoral defence is the defence of coastline and territorial waters usually out to the limits of the Exclusive Economic Zone (EEZ).

¹⁰⁰ Cannibalisation involves removing parts from a piece of equipment for use as spares.

¹⁰¹ In January 2011 legislation was also passed by the Indonesia Parliament to establish a dedicated Coast Guard by the end of 2011, in order to maximise the capabilities of the Indonesian navy.

¹⁰² "Regional overview", *Jane's Defence Weekly*, 11 May 2011

over ambitious. However others, such as Dewi Anwar of the Indonesian Institute of Sciences, have argued that the Indonesian Navy would require at least 300 new surface ships if it is to effectively monitor and control its vast coastline and territorial waters, and therefore its current plans are modest in comparison.¹⁰³

The Indonesian government has made various in-roads over the last few years to achieve these goals. The Navy already operates two Type-209 submarines (recently upgraded by South Korea) and has announced that it will purchase two more platforms over the next two years to enhance its littoral defence capabilities, possibly from Turkey, South Korea (the Type-209 built under licence from Germany), or from France (the Scorpene, which was also recently procured by Malaysia).¹⁰⁴ A decision is expected before the end of 2011. The domestic shipbuilding company PT Pal, and its Dutch partner Damen Schelde Naval shipbuilding, are expected to begin construction on the new frigate fleet later in 2011, although it is unclear whether those construction plans envisage a full class of 20 vessels. A new fleet of fast attack craft (two have been ordered to date, although there are plans to procure an additional 20) and fast patrol craft are also currently under domestic construction, while negotiations with Italy over a further construction contract for fast patrol craft are understood to be ongoing. The Navy is also negotiating the purchase of two survey ships from foreign suppliers and recently signed an agreement with China on the joint development and production of a Chinese-designed anti-ship missile that is likely to be deployed aboard its new fleet of fast patrol craft, and possibly its frigates and corvettes if the system performs well in tests.¹⁰⁵

It has been widely acknowledged that the effectiveness and safety record of the Air Force is substantially below par and therefore ambitious plans for the Indonesian Air Force have also been outlined in relation to its fast jet and transport fleets. In April a senior Indonesian Air Force officer suggested that the Air Force aimed to field 10 modern fighter squadrons by 2025, totalling approximately 180 aircraft.

In the last few years Indonesia has acquired five Su-27 and five Su-30MK aircraft from Russia, Super Tucano light attack aircraft from Brazil (which are scheduled for delivery in 2012) and in February 2011 the US agreed to sell Indonesia 24 second hand F-16C/D aircraft to supplement that newly acquired fleet from 2014-15. In October the Indonesian House of Representatives attached a number of caveats to that deal however: the aircraft must undergo upgrades, components for that upgrade must be sourced in Indonesia wherever possible and the transaction must progress through the US Foreign Military Sales programme. The deal is currently pending approval in the US Congress and if it proceeds will represent the first major defence contract between the two countries since the lifting of the US arms embargo in 2005. However, considerable wariness over the deal remains with concerns being voiced in Indonesia that the US might re-invoke the arms embargo if it determines that Indonesia's human rights record is deteriorating.¹⁰⁶

In order to realise the ambition of a 10 squadron fleet, the potential purchase of additional Sukhoi aircraft and 24 Typhoon aircraft has also been touted. In April 2011 the government also announced the purchase of 16 KAI T-50 advanced training aircraft from South Korea to replace the Air Force's ageing fleet of Hawk Mk53s and support the newly acquired and expanding fast jet fleet. Those aircraft are expected to be delivered by the end of 2012. The Ministry of Defence also announced in April 2011 that Indonesia had signed a definitive

¹⁰³ "Regional overview", *Jane's Defence Weekly*, 11 May 2011

¹⁰⁴ Russia is reported to have withdrawn its Kilo-class submarine from the competition as it is too large for Indonesian requirements.

¹⁰⁵ As part of that deal Indonesia will benefit from the transfer of Chinese technologies to enable the domestic industrial base to undertake assembly, testing, maintenance, upgrades and training, while also benefitting from the export of the missile system to third-party customers.

¹⁰⁶ "Indonesia approves bid to buy at least two F-16 squadrons", *Jane's Defence Weekly*, 27 October 2011

partnership agreement with South Korea to collaborate on the development of a next-generation multi-role fighter aircraft for entry into service by 2020. Indonesia is expected to pay up to 20% of the development costs of that programme, which analysts have estimated could exceed more than \$1 billion over the timescale of the project.¹⁰⁷

However, several analysts have criticised the direction in which Indonesia's fighter modernisation plans appear to be developing. The procurement of the Typhoon or any next-generation fighter aircraft would add yet another aircraft type to Indonesia's inventory, complicating issues of through life support and maintenance and increasing costs. Malaysia has also been criticised recently for operating a disparate fleet of fast jet platforms (see above).

Yet, it has also been suggested that Indonesia will aim for the minimum in terms of fighter procurement as the need to upgrade its transport fleet is far greater. In January 2011 the military announced that it would spend \$64 million on modernising five of its C130-B aircraft, while in November 2011 Australia confirmed that it would transfer up to four surplus C-130H aircraft to the Indonesian Air Force in 2012, subject to Indonesia agreeing to fund the costs of refurbishment and maintenance.¹⁰⁸ Discussions are also understood to be continuing on the possibility of acquiring a further five second hand C130's from the US and/or Norway. Agreement on establishing a licensed production agreement with Airbus military for the indigenous production of the C-295 tactical military transport was concluded in October 2011; while the development of a prototype anti-submarine warfare variant of the CN-235 maritime patrol aircraft is also understood to be a possibility.¹⁰⁹ The Air Force has allocated more than \$16 million in the 2011 budget for the domestic purchase of four unmanned aerial vehicles, which have been under development by PT Dirgantara over the last few years and are expected to enter production in 2012. Those platforms would be stationed at bases in West Java and West Kalimantan and close to existing and potential oil and gas reserves. It is also thought that the UAVs will be used for monitoring shipping routes, fishing activities and to assist humanitarian efforts.¹¹⁰ In order to enhance the Air Force's ability to defend territorial airspace and act as an early warning against natural disasters such as tsunamis, the Air Force also has a requirement for a further 14 air defence radars to supplement a range of air defence systems that it has acquired over the last few years, including anti-aircraft guns and man-portable surface-to-air missiles.

Given the priority afforded to the modernisation of the Navy and the Air Force, the procurement of new army equipment is expected to take a backseat over the next few years. However, there has been some new investment in army aviation recently with the delivery from Russia of several attack and transport helicopters. In 2010 the domestic company PT Dirgantara also reached an agreement with the US to manufacture 20 Bell utility helicopters under licence. The Army has also indicated that it has a requirement to procure up to 200 helicopters over the next 20 years to replace its ageing inventory, although whether the Army will have the funds to do so has been questioned.¹¹¹ The defence collaboration agreement signed with Turkey in April 2011 also outlined the potential joint development of an armoured combat vehicle over the next few years; while agreement was reached with South Korea at the end of 2010 for the supply of 22 infantry fighting vehicles to the Indonesian army. The Army is also currently seeking government funding to support its bid to procure at least 44 Leopard 2A6 main battle tanks from Germany. The Army Chief of Staff, General Wibowo, argued that "if the tanks can be purchased, Indonesia will be able to maintain its military

¹⁰⁷ "Indonesia sees Korean fighter collaboration as industry reform driver", *Jane's Defence Weekly*, 13 July 2011

¹⁰⁸ "Australia to provide surplus C-130s to Indonesia", *Jane's Defence Weekly*, 21 November 2011

¹⁰⁹ "Indonesia close to signing submarine accord", *Jane's Defence Industry*, 1 July 2011

¹¹⁰ "Indonesia allocates funds for UAV procurement", *Jane's Defence Industry*, 5 April 2011

¹¹¹ "Indonesia looks to procure helicopters", *Jane's Defence Industry*, 15 July 2011

strength equal to that of its neighbouring countries".¹¹² At present Indonesia does not own or operate any main battle tanks.

Modernising the military to regional standards, in particular its maritime and air assets, will be expensive and many have argued that the government is yet to deliver on its promises of significant investment in defence. The decision in July 2011 to refuse the MOD's request for further funding has been taken as evidence of that trend; while the commitment to raise defence spending to 1.5% of GDP by 2014 is far from being realised. In March 2011 the Defence Commission of the Indonesian House of Representatives criticised the government for "a lack of political will".¹¹³ As a result this lack of finance has prompted the government to continue funding major equipment purchases with export credit, loans which will have to be repaid out of any future defence budget, which in itself will be dependent upon the continual growth of the Indonesian economy. Whether the domestic defence industry will be able to keep pace with political expectations is also open to question (see below).

Defence Industrial Base

Comparable to Malaysia, Indonesia has only limited domestic defence industrial capability, which is dominated by state-owned enterprises across shipbuilding (PT Pal), aerospace (PT Dirgantara) and land systems (PT Pindad).

Indonesia is also adopting a similar approach to Malaysia in terms of revitalisation of this sector, with industrial self-reliance regarded as a key element of the country's vision to become a top ten economic power by 2025, and a fundamental building block of Indonesia's military modernisation plans.

Over the past few years Indonesia has introduced several reforms related to procurement and industrial development in an attempt to harmonise military requirements against industrial capabilities and defence offset rules. The Defence Facilities Agency was set up in January 2011, for example, to act as a dedicated procurement centre, while the MOD's Defence Industrial Policy Committee established in late 2010 has responsibility for overseeing reform. Increasing transparency in the procurement process in order to combat corruption has also been a priority for the government since it entered office in 2004. Driving down corruption in defence acquisition is seen as particularly important in light of the significant investment which is expected to be channelled into the modernisation of the Armed Forces over the next decade.

The Indonesian government has also sought to diversify its list of suppliers and placed significant emphasis on pursuing licensed production agreements with foreign suppliers as a means of boosting its industrial capabilities. Agreements have been in place for nearly three decades, for example, between the aerospace group PT Dirgantara (PTDI) and EADS for the licensed production of the CN-235 multi-mission tactical transport aircraft and the NC-212-200 maritime patrol aircraft, and with Eurocopter for the manufacture of the Puma and Super Puma helicopters. Defence industrial co-operation agreements, involving joint production and the transfer of technology, have also been recently signed with Russia, France, China, Pakistan, Serbia, South Korea, Spain and Turkey.

However, expansion of the defence industry has been limited by the Government's dependence on foreign export credit and on ad hoc counter-trade agreements for the purchase of major equipment. In order to break that cycle of dependence and boost the capacity and effectiveness of the indigenous defence industry, the Defence Industry Revitalisation Programme was introduced in 2009. As part of that programme the

¹¹² In 2007 Singapore acquired 96 Leopard 2A4 tanks from Germany. "Indonesian Army seeks Leopard 2A6 funding from government", *Jane's Defence Industry*, 14 November 2011

¹¹³ "Indonesian defence commission criticises defence policy progress", *Jane's Defence Industry*, 25 March 2011

government set out a number of commitments for implementation over the next five to ten years, including a commitment to prioritise the procurement of domestic products, to increase defence spending by more than 10% each year and to introduce an official offset policy and a structured approach to procurement, thereby allowing the acquisition of advanced military technologies through collaborative programmes and technology transfer, and licensed production projects within Indonesia. As part of the revitalisation programme, in July 2011 the Ministry of Defence also announced that it proposed to remove import duties on all raw materials that are to be used in indigenous military production programmes, in order to lower the price of domestically manufactured items and increase the competitiveness of Indonesian companies overseas.

The Air Force's fighter reform programme and the submarine acquisition programme have been regarded as potential springboards for the MOD's revitalisation plans. Both South Korea and Turkey, which are bidding for the submarine programme, have offered a significant industrial participation package; while collaboration between Indonesia and South Korea on a next-generation fighter will secure Indonesian access to aviation technology, knowledge of production techniques and an option to procure the aircraft at a later date. Indonesia would also benefit from any future exports.¹¹⁴ As outlined above the Indonesian House of Representatives has also made any procurement of the US F-16C/D dependent upon the involvement of the Indonesian defence industry in the upgrade of such platforms. The Technology Director of PT Dirgantara Indonesia, Dita Ardoni Jafri, has argued that "PTDI should be given the trust to undertake these programmes. Sooner or later we need to get this technology – with just patches of technology here and there we are not progressing".¹¹⁵

Yet little progress on implementing the Revitalisation Programme is considered to have been made in the last two years, in particular in relation to the introduction of formalised guidelines on procurement and offset. Despite being under discussion for the last two years, Indonesia's first offset policy is not due to be published until early 2012. Once it is published, it is widely expected to make provision for a minimum of 30-40% of contracted work to be carried out domestically, therefore making technology transfer and licensed production a central element of any defence procurement contract. In the past offset guidelines have been largely based on counter-trade. For example, in 1996 Indonesia agreed to supply South Korea with eight CN-235 aircraft in exchange for military trucks and armoured vehicles of a similar value. It is also thought that the current deal for the Indonesian purchase of 16 T-50 fast jet trainers from South Korea could be partly funded by the transfer of four CN-235 aircraft.¹¹⁶

Analysts have also questioned whether the domestic defence industry will be capable of absorbing any meaningful technologies acquired under new offset or licensed production policies. In the past for example, the aerospace PT Dirgantara has focused on transport aircraft and helicopters, and not technologically sophisticated platforms such as fast jets.¹¹⁷ The Indonesian Engineers Association has also argued that Indonesia's ability to develop its strategic industries will be limited by a lack of skilled engineers. The Association has suggested that 100,000 additional engineers are required if the government is to meet its targets for economic growth and industrial development by 2025.¹¹⁸

¹¹⁴ "Indonesia sees Korean fighter collaboration as industry reform driver", *Jane's Defence Weekly*, 13 July 2011

¹¹⁵ "PTDI restates intent to help upgrade F-16 fighters", *Jane's Defence Industry*, 4 November 2011

¹¹⁶ "Korea and Indonesia solidify plans for defence industrial co-operation", *Jane's Defence Industry*, 19 May 2011

¹¹⁷ "Indonesia calls on Washington to speed up F-16 deal", *Jane's Defence Weekly*, 12 May 2011

¹¹⁸ "Dearth of engineers to slow Indonesia's defence and industrial development", *Jane's Defence Industry*, 29 July 2011

2.5 Philippines

The Philippines is significantly smaller than the majority of its neighbours in terms of territory and population, but comprises over 7,100 islands and has the 3rd largest coastline in the world.

Like its neighbours, the Philippines has a number of ongoing territorial disputes in the South China Sea and the surrounding region. It lays claim to the Scarborough Reef, off its west coast in the South China Sea, which is also claimed by China and Taiwan; while it also claims sovereignty of the Spratly Islands. Despite relatively positive diplomatic and trading relations between China and the Philippines, tensions between the two countries escalated over 2011 following a number of incidents between Chinese and Philippine naval vessels. In February a Chinese frigate was reported to have fired shots at three Filipino fishing boats off the shores of Palawan, which is adjacent to the Spratly Islands and is considered by the Philippines to be part of those Islands.¹¹⁹ In March a Philippine exploration vessel also reported that it had been confronted by Chinese patrol ships within the Philippine's exclusive economic zone;¹²⁰ while in April 2011 the Philippines government confirmed that it had filed a diplomatic note with the United Nations over the sovereignty of the Spratly Islands. In June the government also made clear its intention to defend its maritime interests in the region. It declared that the South China Sea would now be referred to as the West Philippine Sea,¹²¹ and following a meeting with the US Secretary of State, declared that "while we are a small country, we are prepared to do whatever is necessary to stand up to any aggressive action in our backyard". However, the Philippines Foreign Minister also went on to emphasise the need for a diplomatic approach first and foremost and the need for international law to be adhered to. He stated that:

The Philippines has made clear its position on the issue: to maintain peace while allowing for the economic development of the area. There is no need to segregate the non-disputed areas. What is ours is ours, and what is disputed can be shared [...] there should be a rules-based regime that should be put in force so that international law will have to prevail [...] we are hoping that the issue can be resolved diplomatically and in accordance with international law.¹²²



Source: US State Department

¹¹⁹ "Manila ready to invoke mutual defense pact", *Manila Standard Today*, 13 June 2011

¹²⁰ "Interview with Rear Admiral Alexander Pama, Commander of the Philippine Navy, *Jane's Defence Weekly*, 5 May 2011

¹²¹ "Philippines asks US for more second-hand naval assets", *Jane's Navy International*, 1 July 2011

¹²² US State Department, *Remarks with Philippines Foreign Secretary Albert del Rosario after their Meeting*, 23 June 2011

At the end of September 2011 the Philippines also secured the support of Japan over its stance in the South China Sea. In a Joint Statement leaders agreed to boost their relationship to that of a Strategic Partnership and reiterated their support for “freedom of navigation, unimpeded commerce and compliance with established international law... and the peaceful settlement of disputes in the South China Sea”.¹²³

In addition the Philippines retain a dormant claim to Malaysia’s Sabah state in northern Borneo, while maritime delimitation negotiations continue with Palau.

However, it is counter-insurgency operations in the south that have dominated strategic thinking thus far, and continue to do so. The military is therefore configured with internal security priorities in mind. From a regional perspective, the Philippines has historically relied on the US as its longstanding ally in the region. Given the nature of that relationship, China’s ties with the Philippines in the security sphere have never been close.

US-Philippines Mutual Defense Treaty

Since the end of the Second World War the United States has been a staunch ally in the region and to a large extent the Philippines has relied on the US for its regional security over the last 60 years.

The cornerstone of that relationship is the *US-Philippines Mutual Defense Treaty* (MDT) which was signed in August 1951.¹²⁴ The treaty contained eight articles which committed both nations to supporting each other in the development of their ability to resist attack and to support each other in the event of an attack on either State by an external party. Articles II to V state:

ARTICLE II

In order more effectively to achieve the objective of this Treaty, the Parties separately and jointly by self-help and mutual aid will maintain and develop their individual and collective capacity to resist armed attack.

ARTICLE III

The Parties, through their Foreign Ministers or their deputies, will consult together from time to time regarding the implementation of this Treaty and whenever in the opinion of either of them the territorial integrity, political independence or security of either of the Parties is threatened by external armed attack in the Pacific.

ARTICLE IV

Each Party recognizes that an armed attack in the Pacific Area on either of the Parties would be dangerous to its own peace and safety and declares that it would act to meet the common dangers in accordance with its constitutional process. Any such armed attack and all measures taken as a result thereof shall be immediately reported to the Security Council of the United Nations. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.

ARTICLE V

For the purpose of Article IV, an armed attack on either of the Parties is deemed to include an armed attack on the metropolitan territory of either of the Parties, or on the

¹²³ “Japan, Philippines agree ‘strategic’ ties”, *Jane’s Defence Weekly*, 5 October 2011

¹²⁴ The full text of the treaty is available at: www.vfacom.ph/resource/mdt1951.pdf

island territories under its jurisdiction in the Pacific or on its armed forces, public vessels or aircraft in the Pacific.

Separate to the MDT, although still a fundamental part of the US security commitment to the Philippines, the 1947 Military Bases Agreement between both countries also allowed for the US to operate permanent military facilities at Clark Air Force Base, Subic Bay Naval Complex and several smaller subsidiary installations over the entire period of the Cold War. During this period the Philippines was therefore viewed as a bulwark against other communist states in Southeast Asia and a staging post of military operations throughout the region. US forces withdrew from the country in November 1992 after the US and the Philippines failed to reach agreement on a new version of the Military Bases Agreement.¹²⁵

In 1998 both countries concluded a Visiting Forces Agreement, which has paved the way for greater co-operation under the Mutual Defense Treaty, including US ship visits to Philippine ports, and the resumption of large scale annual combined military exercises between the two countries.¹²⁶ Those exercises focus not only on military training but also civil-military affairs, humanitarian and disaster relief. The US also provides significant support for the country's counter-terrorism efforts and in its maritime security efforts. The US International Military Education and Training programme in the Philippines is the largest in the Pacific region and the third largest in the world. The latest naval exercises were conducted in June 2011 (Exercise CARAT¹²⁷ 2011) in the Sulu Sea, adjacent to the Spratly Islands, and involved the deployment of two US guided missile destroyers, one diving and salvage ship and maritime patrol aircraft. The exercises prompted criticism from China.¹²⁸

Both countries reaffirmed their security commitment under the *US-Philippines Mutual Defense Treaty* in August 2011, the 60th anniversary of the treaty's signature. A US State Department statement noted:

Today we celebrate the 60th anniversary of the US-Philippines Mutual Defense Treaty, which still serves as the cornerstone of our relationship and a source of stability in the region [...]

Our alliance with the Philippines continues to grow in the 21st century as our two countries chart a new vision for our critical partnership, in the defense realm and beyond. Whether we are working together to combat extremism, help victims of natural disasters, or stand up for human rights, the people of our countries share a mutual desire to build a better world for future generations.¹²⁹

However, there has been some debate over the extent to which the treaty obliges the US to intervene in any future territorial disputes that the Philippines may have with its neighbours, particularly in the South China Sea. In response to the recent suggestion by the Philippines Government that it was ready to invoke the treaty over disputed areas such as the Spratly Islands,¹³⁰ a number of commentators, including some prominent US and Philippine Senators, have urged caution and called for the commitments under the treaty to be clarified.

¹²⁵ The US decided to withdraw from Clark Air Force Base after it was heavily damaged by the 1991 eruption of Mount Pinatubo. The new treaty was intended therefore to focus on the US use of Subic Bay Naval Base for a further ten years. In September 1991 the Philippines Senate rejected the draft treaty however and gave the US one year to withdraw its forces.

¹²⁶ That agreement was approved by the Philippines Senate in May 1999 and entered into force on 1 June 1999.

¹²⁷ Cooperation Afloat Readiness and Training

¹²⁸ "US-Philippines start 11-day naval exercise close to Spratly Islands", *Jane's Defence Weekly*, 29 June 2011

¹²⁹ US Department of State, Press Statement, 31 August 2011

¹³⁰ "Manila ready to invoke mutual defense pact", *Manila Standard Today*, 13 June 2011

Philippine Senator Francis Escudero has questioned whether recent Chinese incursions into the Philippines' EEZ would be covered by the treaty,¹³¹ while US Senator Jim Webb, Chair of the Senate East Asian and Pacific Affairs Subcommittee, stated in July 2011:

Repeated actions by Chinese government vessels against the Philippines raise serious questions about the circumstances under which our treaty commitments apply [...]

Given these recent incidents, I would like to request a legal clarification of the US commitments to come to the aid of the Philippines under the Mutual Defense Treaty between the Republic of the Philippine and the United States of America [...] Our transparency on this matter is of great importance to our ally, the Philippines, and to the entire Southeast Asian region.¹³²

Alongside Thailand, the Philippines is also an original signatory of the Manila Pact which it signed in 1954 and was also designated as a major non-NATO ally by the US in October 2003 (see section 2.2).

At the beginning of November 2011 it was reported that US military aid to the Philippines had been withheld in response to growing concerns about human rights violations in the country.¹³³

Defence Expenditure

The government of President Aquino was elected in 2010 and immediately pledged to reverse the decade of overall decline in defence spending. That pledge was subsequently followed by a 12.5% increase in the 2010 defence budget to \$1.4 billion, the first significant rise in military spending since 2007.

The Government stated that the defence budget for 2011 would be almost doubled to \$2.4 billion while earmarking an additional \$970 million for procurement over the next five years.¹³⁴ In September 2011, however, a further \$118 million was released by the Department of Budget and Management to boost the Armed Forces capabilities in the South China Sea. The additional funding has reportedly been charged against revenues directly linked to the Philippines' Malampaya gas field, which is located approximately 80km off the coast of Palawan. More than half of the extra funds have been earmarked for the acquisition of a coastal surveillance system and the purchase of additional Hamilton-class cutters. The remaining funds are expected to be used to purchase three multipurpose helicopters for the Air Force and fund the construction of a hangar in Isabela, the province adjacent to Palawan.¹³⁵

Military Spending of the Philippines 2001-2010

	US \$m		
	(Constant, 2009 prices)	% change on previous year	% of GDP
2001	1,130	-7.0%	1.0
2002	1,187	5.0%	1.0
2003	1,310	10.4%	1.0
2004	1,220	-6.9%	0.9
2005	1,231	0.9%	0.9
2006	1,254	1.9%	0.9
2007	1,472	17.4%	0.9
2008	1,342	-8.8%	0.8
2009	1,321	-1.6%	0.8
2010	1,486	12.5%	N/A

Source: SIPRI
N/A - Not Available

¹³¹ http://www.senate.gov.ph/press_release/2011/0611_escudero1.asp

¹³² Letter to the US State Department, 20 July 2011: <http://webb.senate.gov/newsroom/pressreleases/07-20-2011-04.cfm>

¹³³ "US holds back military funding to Philippines over human rights concerns", *Jane's Defence Weekly*, 7 November 2011

¹³⁴ "Philippines raises spending in reaction to insurgency and Chinese build-up", *Jane's Defence Weekly*, 2 September 2010

¹³⁵ "Philippines puts focus on interests in South China Sea", *Jane's Defence Weekly*, 14 September 2011

In October 2011 the government announced that it had released \$231 million of the funds earmarked for procurement over the next five years to urgently address requirements related to its counterinsurgency efforts. Funds are expected to be allocated to the Army for the procurement of 14 armoured personnel carriers, special purpose vehicles, radios and force protection systems; to the Navy for a strategic sealift vessel and to the Air Force for the purchase of “special mission” aircraft and two search and rescue helicopters.¹³⁶

Despite this recent rise in the budget, military expenditure in the Philippines is still the smallest among its regional neighbours both in terms of overall spending and as a percentage of GDP.

Capabilities

The active military of the Philippines is on a par with Malaysia in terms of manpower, although as an overall total including paramilitaries and reserves, its military forces are much smaller than those of its neighbours.

Given the military’s main focus is on counterinsurgency operations in the south of the country, the balance between the three Services, in terms of manpower and assets, is skewed in favour of ground forces. Of 125,000

personnel, 69% are Army, 19% are Navy personnel and 12% are Air Force personnel. There are also 40,500 paramilitary forces, supplemented by a Reserve force of approximately 171,000 in total.

Current Military Manpower

	Army	Navy	Air Force	Total
Active	86,000	24,000	15,000	125,000
Paramilitary				40,500
Reserve Forces	100,000	15,000	16,000	131,000
Paramilitary Reserves				40,000

Source: IISS, Military Balance 2011

Assets are also minimal compared to its neighbours, both in terms of numbers and capability. Ground forces have received the majority of funding over the last few years and are configured for light ground/counterinsurgency operations. Specifically, the Army is equipped with seven Scorpion light tanks, 36 armoured infantry fighting vehicles, 293 armoured personnel carriers and approximately 250 artillery pieces. It also possesses a UAV intelligence, surveillance and reconnaissance capability. Army personnel are frequently deployed to the south of the country in a bid to stamp out the ongoing insurgency.

In contrast the Navy and the Air Force have suffered from a decade of neglect, despite the Philippines having one of the world’s largest maritime borders. The Philippine Air Force ceased to be regionally effective after the last of its forward ground attack F-5 aircraft were withdrawn from service in 2005 due to high maintenance costs. It does, however, possess one squadron of S-211 aircraft¹³⁷ being deployed in the fighter role, four maritime patrol aircraft, seven OV-10 observation attack aircraft being utilised primarily in the surveillance and reconnaissance role and a number of transport aircraft and helicopters. The majority of those assets are ageing, having been in service with the Philippine Air Force for a number of decades. Indeed the airworthiness of the fleet has been called into question recently after a series of crashes over the last three years and grounding orders in light of safety concerns.¹³⁸

¹³⁶ “Philippines increases funding for COIN and South China Sea operations”, *Jane’s Defence Industry*, 25 October 2011

¹³⁷ The S-211 is primarily a fast jet training aircraft.

¹³⁸ A Hercules crashed in August 2008, followed by a navy utility helicopter in August 2010 which killed both pilots and a Huey utility helicopter in September 2010.

The Navy only has one flagship, a 46 year old ex-US coast guard Cutter which it acquired through the US Foreign Military Sales programme in March 2011, and entered service in September. That vessel is not equipped with guided missiles. The Navy also possesses 65 patrol and coastal combatant vessels, seven amphibious landing ships and seven logistics and support ships. The majority of those assets are ageing, however, and increasingly unavailable for operational duties. Of those vessels only 26 patrol craft, three transport and four auxiliary ships are thought to be operational.¹³⁹ The Navy and Air Force is therefore restricted primarily to the support of land forces and some limited defence of territorial airspace and waters. For example, on 24 October the Philippine Air Force launched air strikes using two OV-10 attack planes against Muslim separatist rebels in the south of the country.¹⁴⁰

Paramilitary forces are divided between the Philippine National Police, the Coast Guard and the Citizen Armed Force Geographical Units which are manned by Reservists.

The Philippines occupies eight of the Spratly Islands and at the end of 2010 confirmed that it would undertake major renovation works of its existing military facilities on the islands due to years of poor maintenance and neglect.¹⁴¹

As an active member of the UN, the Philippines has a long history of participation in UN peacekeeping operations. As of June 2011, the country had 881 personnel deployed, making it the 29th largest contributor to UN peacekeeping operations out of a total of 114 countries. Those personnel are deployed in:

- Haiti (MINUSTAH) – 45 police personnel and 157 troops.
- Darfur (UNAMID) – 70 police personnel.
- Syria (UNDOF) – 342 troops.
- Liberia (UNMIL) – 29 police personnel, 2 experts and 115 troops.
- South Sudan (UNMISS) – 13 police personnel and 3 experts.
- East Timor (UNMIT) – 89 police personnel and 3 experts.
- India and Pakistan (UNMOGIP) – 3 experts.
- Ivory Coast (UNOCI) – 3 experts and 4 troops.

The Philippines also deployed a small contingent to Iraq in 2003, although those troops were withdrawn after less than a year following the kidnapping of a Filipino overseas worker.

Military Modernisation

The Philippines has been seeking to modernise its Armed Forces since 1995 when its Capability Upgrade Programme was signed into law. That programme was divided into three phases: 2005-10, 2011-16 and 2017-22. However, until 2010 the programme had been hampered by a lack of investment.

¹³⁹ "Philippines to increase defence procurement budget", *Jane's Defence Weekly*, 21 June 2011

¹⁴⁰ "Philippines launches air strikes on Muslim rebels", *Agence France Presse*, 24 October 2011

¹⁴¹ Philippines plans military base renovation in disputed Spratly Islands, *Jane's Intelligence Weekly*, 15 September 2010

As outlined above the new government has earmarked an additional \$970m for procurement projects over the next five years, as part of the Government's latest phase of its Capability Upgrade Programme, which has been motivated largely by the rise of China, the modernisation plans of neighbouring countries and the acknowledgement that the Philippines must take responsibility for securing its interests in the South China Sea.

As a result of starting from such a low technological base, however, the absence of any domestic defence manufacturing capabilities, and a navy and air force almost stripped of any significant assets, the allocation of additional funding, while a welcome first step, is not expected to revolutionise the Philippine Armed Forces or allow the country to achieve parity with any of its regional neighbours in the near term. Many analysts have also suggested that until serious efforts are made to downsize the Army, move away from a focus on counterinsurgency capabilities and free up badly needed resources for the Navy and Air Force, then modernisation will make slow progress.

Indeed most modernisation programmes to date have focused on improving the country's counterinsurgency capabilities. In June 2010, for example, the Philippine Air Force finalised a contract for the supply of eight combat utility helicopters, the first half of which are scheduled to be delivered in November 2011, in addition to five utility helicopters it procured from the US in December 2010. The procurement of a further seven attack helicopters was suspended in late 2010, however, following the announcement that the programme would be reviewed as part of wider government efforts to promote transparency in defence contracting.¹⁴² It is expected that that programme will be re-tendered once the review is complete. The Army has also outlined its plans to replace its Scorpion light tanks and upgrade its armoured personnel carriers over the next few years. As outlined above funding for 2011 has been specifically earmarked for the procurement of additional counterinsurgency capabilities, including special mission vehicles and force protection systems.

Yet, the first signs of potential investment in the regional projection, coastal and air defence and disaster relief capabilities of the Navy and Air Force have been noted. In March 2011 the Philippine government announced its plan to invest \$183 million in capabilities intended to protect territory around the disputed Spratly Islands. Identified as a national priority, funds are expected to be allocated to the purchase of a number of helicopter-capable patrol ships, patrol aircraft and an air defence radar system. As outlined above, the Philippines recently acquired a former US Coast Guard Hamilton-class Cutter and is understood to be seeking to purchase a further two vessels of this class. Funds for that additional purchase are expected to come from the extra investment in the military capabilities programme announced in September 2011 (see above). The Hamilton-class cutter is expected to be deployed off the shores of Palawan, in order to secure the Philippines oil exploration activities.¹⁴³ The deal is part of a broader commitment by the US to assist the Philippines in its military upgrade programme, which it announced in June 2011.¹⁴⁴ As part of that pledge, the Philippines government is understood to be currently lobbying for the potential sale or lease of a number of F-16 fast jet aircraft through the US Excess Defense Articles (EDA) programme.¹⁴⁵ However, the Philippine Armed Forces policy of procuring ageing hardware, even from the

¹⁴² A Senate inquiry is currently underway concerning alleged corruption within the Philippine Armed Forces.

¹⁴³ "Philippines to increase defence procurement budget", *Jane's Defence Weekly*, 21 June 2011

¹⁴⁴ US State Department, *Remarks with Philippines Foreign Secretary Albert del Rosario after their Meeting*, 23 June 2011

¹⁴⁵ The EDA programme makes available to foreign countries US military equipment that has been declared surplus to requirements.

US, may prove to be a false economy given the high maintenance costs of such assets.¹⁴⁶ Some previous weaponry provided by the US for example, including eight F-5 fighter aircraft in 2003, has since been retired due to the lack of spare parts.¹⁴⁷ The Navy has also expressed an interest in procuring a number of landing platform docks in the next few years, and a submarine before the end of the decade in order to bolster its ability to patrol Philippine territorial waters. An official request is expected to be submitted toward the end of 2011 with a purchase proposal to follow in 2012. The potential value of the submarine project has been estimated at \$1 billion. Given the more pressing need to revitalise the Navy's surface fleet over the next few years, however, it remains unclear as to whether the submarine proposal will receive priority funding. This is in contrast to its regional neighbours who are either expanding their submarine fleets or are in the process of acquiring new capabilities.¹⁴⁸

In July 2011 the Air Force also set out its requirement for the acquisition of up to six lead-in fighter trainer aircraft in order to provide some interim interception capability and enhanced maritime patrol cover until the Air Force's requirement for surface attack aircraft and multirole fighters can be fulfilled. On current plans the intention is to procure either the Korean Aerospace Industries T/A 50 or the Italian Alenia Aermacchi M-346. Funding for the programme has, however, yet to be approved. In the longer term the Air Force has outlined its intention to procure one squadron of 12 multirole fighter aircraft by 2020. It has been suggested that two to three platforms could be procured within the next few years, with the remaining platforms purchased a few years later. The Russian MiG-29 and the Boeing F/A-18 are thought to be under consideration.¹⁴⁹ The acquisition of a former Tunisian Air Force Hercules C-130H transport aircraft is also expected to be complete by the end of 2011.

2.6 Vietnam

Like its neighbours, Vietnam's immediate strategic priorities are focused on its territorial integrity, disputed territories in the South China Sea and increasingly its access to oil and gas reserves in the region. It has ongoing border issues with Cambodia and Laos, while an unresolved dispute between Vietnam and Cambodia remains over the sovereignty of several offshore islands.

However, it is Vietnam's relations with China over the last few decades that have been the most fractious, in particular in relation to competing claims in the South China Sea. In common with the Philippines and Malaysia, Vietnam also claims title to the Spratly Islands and also to the Paracel Islands, the latter of which China seized in the 1970s.

Over the years these conflicting claims have produced small-scale armed altercations in the region. In 1988, for example, 70 Vietnamese sailors died during a confrontation with China over the sovereignty of the Spratly islands. More recently, in late 2007-2008, tensions between the two countries escalated after reports emerged that China was pressuring foreign oil companies to abandon their oil and gas exploration contracts with Vietnam in the region.¹⁵⁰

¹⁴⁶ The US sale of the Hamilton-class was originally prompted by the high maintenance costs of the vessel. In 2009, the US Coast Guard spent 3.5 times the budgeted maintenance fund in order to keep the vessels operational and lost one quarter of available patrol days to maintenance issues ("Philippine navy purchases US cutter to replace flagship", *Jane's Defence Weekly*, 11 March 2011)

¹⁴⁷ "US hesitates on Philippine arms", *Asia Times*, 2 July 2011

¹⁴⁸ "Underwater aspirations break the surface in SE Asia", *Jane's Navy International*, 7 October 2011

¹⁴⁹ "Philippines lead-in fighter trainer programme shifts up a gear", *Jane's Defence Weekly*, 4 July 2011

¹⁵⁰ US Department of State, *Background Note: Vietnam*, last updated 3 June 2011

Hope had been expressed that diplomatic relations were improving following agreement in 2008 on the demarcation of the Sino-Vietnamese land border and agreement over the maritime boundaries in the Gulf of Tonkin. Less than a year later, however, relations deteriorated after China detained a number of Vietnamese fishermen as it tried to enforce its unilateral fishing ban in disputed waters. More recently in May and June 2011 Vietnam also accused Chinese ships of trying to damage or cut seismic cables on an oil and gas survey ship that Hanoi claimed was in Vietnamese territorial waters. The incident resulted in hundreds of Vietnamese students protesting outside the Chinese embassy in Hanoi. In July a Chinese warship was also reported to have confronted an Indian amphibious assault vessel in Vietnamese waters shortly after it completed a port call in Vietnam. The Chinese vessel reportedly demanded that the Indian vessel “justify its presence in Chinese waters in the South China Sea”. The reports were subsequently denied by the Indian Navy.¹⁵¹

In October 2011 there were steps toward easing tensions in the region after China and Vietnam signed an agreement pledging to resolve their maritime disagreements in the South China Sea. Under the agreement both countries will meet twice a year and establish a ‘hotline’ to deal with emergency situations. Both parties have also agreed to develop a long term approach to resolving their maritime disputes, and in the interim committed to examining the potential for joint development of the sea. A commitment to increasing the exchange of military delegations and expanding training programmes was also agreed.

Whether this approach will be successful in the longer term is open to debate. An article in *Jane’s Intelligence Weekly* commented:

The complexity of the matter, underscored by the number of claimants involved, suggests that a genuine solution to the problem remains a long way off. China shows no inclination to soften its policy stance, viewing its maritime actions as the simple defence of its legitimate national interests.¹⁵²

China’s insistence on resolving territorial disputes in the region through bilateral talks is also in stark contrast to Vietnam’s preference for multilateral negotiation through ASEAN and in accordance with international law.

Indeed, with Chinese diplomats repeatedly referring to the disputed South China Sea region as a ‘core’ interest, and what has been perceived as increasing Chinese aggression in the area, Vietnam has moved quickly to engage with other external actors, notably India, the United States and the West more generally. It has also embarked on a significant modernisation programme for its Armed Forces, fuelled by a rapidly growing economy.



Source: US State Department

¹⁵¹ “China confronts Indian warship off Vietnam coast”, *Jane’s Intelligence Weekly*, 1 September 2011

¹⁵² “China and Vietnam take steps to ease tension in South China Sea”, *Jane’s Intelligence Weekly*, 12 October 2011

Engagement on the International Stage

Vietnam has historically maintained close relations with Russia, while at the same time remaining relatively isolated from the international stage. Since the 1990s, however, Vietnam has attempted to broaden its diplomatic relationships, most notably with its regional neighbours in ASEAN,¹⁵³ and with India, the United States and other Western countries, including the UK, in what it has termed its 'External Defence' strategy. Vietnam has also begun to integrate itself into the regional and global economy, becoming a member of the World Bank, the World Trade Organisation, the International Monetary Fund and the Asian Development Bank, among others. While intended to elevate its international standing, many analysts have also observed that Vietnam's efforts to engage with the West and other major actors in Asia more generally has in part been motivated by Vietnam's need to access advanced Western defence markets, obtain spare parts and technological 'know how' for the maintenance of its ageing Soviet/Russian military equipment and to develop Vietnam's currently limited indigenous defence industrial base. However, it has also been motivated by expanding Chinese influence in the region and its need to gain strategic allies. Despite its efforts to improve its standing on the international stage, Vietnam does not utilise its military assets in order to do so. It does not contribute to UN peacekeeping operations or deploy any of its forces overseas.

In 1994 Vietnam and India signed their first Protocol on Defence Cooperation, which focused on military exchanges, visits and training. In 2007 that protocol was followed up by a Memorandum of Understanding intended to boost defence trade between the countries and centred on sales to Vietnam of Indian manufactured parts and components intended for incorporation into Soviet/Russian-made military equipment in service with the Vietnamese Armed Forces. Since then India has indicated its increased willingness to "assist Vietnam in the modernisation of its armed forces, particularly the navy and air force".¹⁵⁴ In particular India has offered to assist Vietnam with domestic support for the six Kilo-class submarines it is procuring from Russia in the next few years (see below) in terms of both infrastructure and training. In October 2011 Vietnam also agreed to extend its defence co-operation activities with India in addition to developing joint collaboration initiatives relating to oil exploration in the South China Sea.¹⁵⁵

The United States normalised diplomatic relations with Vietnam in 1995. Co-operation since then has steadily increased, albeit mostly focused on economic and trade relations. However, in October 2008 the US and Vietnamese governments agreed to conduct annual political-military talks in order to consult on regional security and strategic issues. In August 2010 both countries held the first round of talks, through a process known as the Defence Policy Dialogue, while the first ever joint US-Vietnamese military exercises were held. The US is also the largest single donor to unexploded ordnance/mine clearance initiatives in Vietnam, which remains heavily contaminated by such ordnance left over from the Vietnam War.¹⁵⁶

In June and September 2011 both countries held further talks,¹⁵⁷ aimed at increasing co-operation in the military sphere and particularly in relation to issues such as non-proliferation, regional maritime security, search and rescue, and humanitarian and disaster relief.

¹⁵³ Vietnam has been a consistent supporter of Malaysia's efforts to establish more co-ordinated defence industrial collaboration across ASEAN nations (see section 2.3)

¹⁵⁴ <http://frontierindia.net/india-to-continue-assisting-modernization-of-vietnam-armed-forces-indian-finance-minister>

¹⁵⁵ "Vietnam extends bilateral ties with Germany and India", *Jane's Defence Weekly*, 14 October 2011

¹⁵⁶ Since 1993 the US has contributed over \$50m in clearance, education and victim assistance programmes (US Department of State: Background Note: Vietnam, last updated 3 June 2011).

¹⁵⁷ In June the US-Vietnam Political, Security and Defence Dialogue met for the fourth time, while the second round of talks under the newly established Defence Policy Dialogue took place in September.

Following on from the joint military exercises conducted in mid-2010, the expectation among observers is that increased dialogue and practical co-operation in the defence sphere could potentially result in a longer term strategic partnership developing. After the September talks US officials reportedly confirmed that preliminary discussions over potential military trade and the lifting of related US restrictions that have been in force since the Vietnam War, had taken place.¹⁵⁸ As article in *Jane's Defence Weekly* has suggested:

Most significantly it [is] a signal to Beijing that countries beside the US' traditional allies have a stake in retaining US influence in the South China Sea.¹⁵⁹

For the US, increased dialogue and co-operation with Vietnam allows Washington to consolidate and expand its influence in Southeast Asia while at the same time providing access to a country with a rapidly expanding economy and a government that has extensive military modernisation priorities.

In 2010 Vietnam also entered into a number of defence co-operation agreements with several countries, notably European nations, and stated in early 2011 that it planned to continue this approach over the next five years.¹⁶⁰ In the latter half of 2010 alone, Vietnam signed agreements with 15 countries, including the UK.

In September 2010 the UK and Vietnamese governments issued a [Joint Declaration on the Establishment of the Vietnam-UK Strategic Partnership](#). The declaration sets out the intention to increase bilateral co-operation in a number of areas including political/diplomatic co-operation, trade and investment, socio-economic development, education, cultural links and security and defence. With respect to the latter, both countries are committed to increasing exchanges of Ministerial delegations and senior military officials in order to enhance co-operation on issues of common interest, while enhanced co-operation on organised crime will be pursued. The first UK-Vietnam Strategic Dialogue was held on 26 October 2011¹⁶¹ and in November the UK and Vietnam signed a Defence Co-operation Memorandum of Understanding.¹⁶² Although few details of its content have been provided, it is expected that the MOU will focus on military exchanges, training and collaboration in areas such as cyber crime, search and rescue, maritime security, and the clearance of cluster munitions and unexploded ordnance. It is also expected to pave the way toward more extensive defence industrial co-operation.¹⁶³

Defence co-operation agreements have also been signed in the last couple of years with Germany, Slovakia, the Netherlands, Romania, Mozambique, France, Spain, the Czech Republic, Poland, Israel, Bulgaria, Luxembourg, Australia, Brazil, Sri Lanka, South Korea and regional neighbours Japan, Indonesia and the Philippines. Additional defence co-operation agreements have also been signed with Russia during this period.

At the end of 2010 the Deputy Defence Minister, Lieutenant General Nguyen Chi Vinh, confirmed Hanoi's intention to continue pursuing its External Defence objectives, in particular in relation to its military modernisation agenda and efforts to improve Vietnam's indigenous industrial capabilities in this area (see below). In a statement General Vinh suggested that:

the pace of Vietnam's bid to enhance its prestige and strategic standing will not diminish. We need to continue to expand and improve the efficiency of strategic

¹⁵⁸ "Briefing: Vietnam and US review potential military sales and lifting of embargo" *Jane's Defence Industry*, 9 September 2011

¹⁵⁹ "Regional matters", *Jane's Defence Weekly*, 11 May 2011

¹⁶⁰ "Vietnam, Germany enter strategic partnership", *Jane's Defence Industry*, 13 June 2011

¹⁶¹ The text of the communiqué is available from the [Foreign and Commonwealth office website](#).

¹⁶² [MOD press release](#), 24 November 2011

¹⁶³ "UK and Vietnam agree to defence collaboration plan", *Jane's Defence Industry*, 27 January 2011

dialogue and partnership with all countries... establishing and continuing defence relations is considered an important basis for Vietnam in the coming years in order to benefit our country as well as the region.¹⁶⁴

As outlined above, Vietnam also signed an agreement with China in October 2011 as a first step toward resolving their maritime disputes in the South China Sea. In September Vietnam and Indonesia also agreed to launch joint patrols on their maritime border and to improve lines of communication as a means of increasing security in the South China Sea. Illegal fishing in the border region has been cited as a particular concern.¹⁶⁵

Defence Expenditure

Since the 1990s Vietnam has gradually moved away from a centrally planned economy, to one that is more market-oriented. In order to meet the obligations of WTO membership Vietnam has been obliged to revise nearly all of its trade and investment laws and guiding regulations and open up large sectors of its economy to foreign investors.

Despite this move toward more open practices, the Vietnamese government has continued to be criticised for what is perceived as a lack of transparency in its defence budgets. In 2010 the budget was approximately \$2.4 billion, making it the second smallest of its regional neighbours. However, Vietnam spends more on defence as a percentage of its GDP than any of its neighbours, with the exception of Singapore, although it is worth noting that its GDP is also significantly lower than its neighbours from the outset.

Analysts have suggested that in reality the defence budget could be almost double as a result of supplemental funding through non-defence revenue streams and the funding of defence acquisitions through unorthodox means, such as linking defence programmes to contracts in its expanding oil and gas sectors.¹⁶⁶

As such analysts have speculated that the budget for 2011 could equate to anything between \$3.5 billion and \$4.7 billion, around 3-4% of GDP.¹⁶⁷

Such a significant increase in defence spending is likely to ensure the continued progress of the military modernisation agenda (see below). However, Vietnam's ability in the longer term to sustain such levels of defence spending has been questioned.

Manpower and Assets

Due to its history and its previous attitude toward engagement on the regional and international level, the Vietnamese military has historically been land-centric, with very little balance with the other services in terms of manpower and capabilities.

Military Spending of Vietnam 2001-2010

	US \$m (Constant, 2009 prices)	% change on previous year	% of GDP
2001	N/A	N/A	N/A
2002	N/A	N/A	N/A
2003	1,369	N/A	2.1
2004	1,402	2.4%	2.0
2005	1,462	4.3%	1.9
2006	1,721	17.7%	2.1
2007	2,219	28.9%	2.5
2008	2,186	-1.5%	2.3
2009	2,401	9.8%	2.5
2010	2,410	0.4%	N/A

Source: SIPRI
N/A - Not Available

¹⁶⁴ "Vietnam outlines 2011 strategy", *Jane's Defence Weekly*, 30 December 2010

¹⁶⁵ "Indonesia and Vietnam launch joint maritime patrols in disputed waters", *Jane's Intelligence Weekly*, 15 September 2011

¹⁶⁶ "UK, Vietnam set for defence collaboration after inaugural talks", *Jane's Defence Industry*, 27 October 2011

¹⁶⁷ "Vietnam's military spending to rise by 70% in 2011", *Jane's Defence Weekly*, 17 January 2011

Of its 482,000 active military personnel, 85.5% are Army, 8.3% are navy, over half of which are naval infantry, and 6.2% are air force personnel. There are also 40,000 paramilitary forces formed into the Border Defence Corps and approximately 5 million Reserve forces formed into the People's Self Defence Force and People's Militia. On that basis, Vietnam has the largest military forces out of all of its Southeast Asian neighbours. However, many of those forces are also conscripts, which on the whole are generally

Current Military Manpower

	Army	Navy	Air Force	Total
Active	412,000	40,000	30,000	482,000
Paramilitary				40,000
Reserves				5,000,000

Source: IISS, *Military Balance 2011*

less well trained, less well equipped and therefore less efficient. Conscripts serve two years with the Army and three years with the Air Force and Navy. Thus the Vietnamese military at present is configured overwhelmingly for territorial defence, with limited focus on littoral defence and defence of its territorial waters and airspace.

Historically Vietnam has also maintained a strong relationship with Soviet Union/Russia, which is reflected in its military inventory. The majority of its assets are Soviet-era capabilities and are therefore becoming increasingly obsolete and expensive to maintain. Vietnam itself has virtually no domestic defence industrial capacity. Ground forces are divided into 10 armoured brigades, three divisions of mechanised infantry, 58 divisions of infantry, field artillery and one Special Forces brigade of mostly airborne forces. They are equipped with in excess of 1,300 ex-Soviet era main battle tanks (mainly the T-54/55 but also the T-59 and T-60); 620 light tanks (Soviet-era T-62/63 and PT-76); 300 armoured infantry fighting vehicles; 380 armoured personnel carriers and in excess of 3,000 artillery pieces. All of the Army's air defence/surface-to-air missiles are Soviet-era SA-7, SA-16 and SA-18 variants.

The Navy has no principal warships, but does possess two Yugo-class tactical midget submarines which it purchased from North Korea in 1997. They are potentially Torpedo-capable, but are thought to be used for swimmer/diver delivery. The Navy also operates 56 patrol and coastal combatants, including seven corvettes equipped with anti-ship missiles, 13 mine warfare/countermeasures vessels, six amphibious landing ships and 25 logistics and support ships. Vietnam has some indigenous warship building capability, in the form of the state-owned Vietnam Shipbuilding Industry Group (Vinashin), although the Government declared the company to be on the verge of bankruptcy in July 2010 after it admitted to debts of \$4.2 billion. The group will now be restructured, although it will remain 100% state-owned. In 2007 the group formed a Joint Venture with the Netherlands shipbuilding group Damen as part of its efforts to modernise its naval capabilities (see below).

The Air Force comprises seven regiments of air defence fighter aircraft (Soviet MiG 21s) and three regiments of ground attack aircraft (Soviet/Russian Su-22M-3/4, Su-27 and Su-30); 223 combat capable aircraft in total equipped with air-surface, air-to-air and anti-radiation missiles. It is also equipped with 26 Mi-24 attack and 13 anti-submarine warfare helicopters. The Air Force also operates a number of air defence sites equipped with surface-to-air missiles.

Military Modernisation

In line with the modernisation priorities of most of its regional neighbours, Vietnam has also embarked upon a similar path in recent years. However, its modernisation plans are faced with several significant challenges from the outset, which places it at somewhat of a disadvantage compared to its neighbours. First, Vietnam is starting from a very low base in terms of technical capabilities and therefore modernisation will need to be widespread and consequently will be expensive. Second, downsizing the Army and its reserve forces

efficiently and effectively will be complex, both politically and in terms of its effect on Vietnam's social demographic. Other countries that have experienced a major rationalisation of their manpower, for example, have often seen unemployment rise significantly and pressures on the welfare state increase.¹⁶⁸

Despite these challenges, in January 2011 the Vietnamese government designated military modernisation as one of its five core objectives over the next five years,¹⁶⁹ and particularly in relation to its ability to defend its interests in the South China Sea. The fast growing economy has also allowed it to markedly increase defence spending in order to fund substantial new purchases in the last few years. Its close relationship with Russia has also allowed the military to make some significant purchases of advanced capabilities, the Air Force and Navy being the biggest beneficiaries. In 2006 Vietnam procured two Gepard-class light frigates from Russia, the first of which was commissioned into service in March 2011. The second ship was delivered in July 2011 after undergoing sea trials. That deal was followed in 2009 with the conclusion of an arms deal worth \$3.2 billion for the delivery of six kilo-class submarines and associated weapons systems (between approximately 2014 and 2016),¹⁷⁰ Svetlyak-class fast attack craft for the navy, and eight SU-30Mk2 aircraft. In February 2010 a further \$1 billion deal for the purchase of an additional 12 Su-30Mk2 aircraft was signed. Those aircraft are expected to be delivered in 2012. Together with the Su-27, the new SU-30Mk2 will enable the Air Force to partially replace its increasingly obsolete force of Soviet-era MiG 21 aircraft. In August 2011 the Vietnamese government was also reportedly in talks with Russia over the potential sale of additional coastal defence systems by 2014.¹⁷¹ The second of two coastal defence systems ordered in 2005 was delivered in October 2011.¹⁷²

The decision to acquire a full-size submarine fleet has been regarded as particularly significant and a response to the build up of sub-surface capabilities among Vietnam's neighbours. The procurement of six Kilo-class vessels would allow Vietnam to maintain two on patrol at any one time, with two in port and two in maintenance, providing the Vietnamese Navy with one of the most advanced submarine capabilities in the region.

As part of these deals Russia has also agreed to modernise shipbuilding facilities in Vietnam including the construction of a new submarine base, and transfer technologies that will support indigenous through-life maintenance of these platforms. The cost of these procurements is also thought to have been partly offset by deals linked to Russia's energy interests in Vietnam. It is currently building two nuclear power stations in the country and is developing gas fields off its coast.¹⁷³

In May 2010, Vietnam also ordered six Canadian-built DHC-46 amphibian aircraft, three of which will be the maritime patrol variant. The first of those aircraft was delivered in August 2011. The aircraft are expected to enter service between 2012 and 2014. In the meantime the Vietnamese Marine Police has taken delivery of the first of three light maritime patrol aircraft from Airbus Military. A range of naval platforms, including offshore patrol and high speed craft, a multipurpose hydrographical and oceanographic survey and mine countermeasures vessel, are also being constructed by the Damen Vinashin shipyard, the Joint Venture established in 2007 between the Netherlands shipbuilding group Damen, and

¹⁶⁸ This situation has arisen in Russia, for example, as it looks to implement wholesale reform of its Armed Forces. Further detail is available in Library Research Paper RP09/35, [Russia's Military Posture](#).

¹⁶⁹ "Vietnam prioritises defence modernisation", *Jane's Defence Industry*, 12 January 2011

¹⁷⁰ Initially the deal had been valued at \$1.8 billion.

¹⁷¹ "Vietnam looks to expand coastal defence assets", *Jane's Defence Weekly*, 24 August 2011

¹⁷² Each system includes command and control facilities, radars and launchers with up to 36 supersonic anti-ship missiles with a maximum range of 300km, "Vietnam receives second Bastion coast-defence system", *Jane's Missiles & Rockets*, 26 October 2011

¹⁷³ "Vietnam and Russia strengthen technology ties", *Jane's Defence Industry*, 16 February 2011

the Vietnam shipbuilding Industry Group.¹⁷⁴ In October 2011 the Vietnamese Prime Minister also expressed an interest in acquiring four corvettes from Damen. The first two vessels would be constructed in the Netherlands and the second two in Vietnam. However, the company's current economic problems (see above) are considered likely to impact on both the naval construction programmes currently underway and any future contracts.

India has also been providing training to Vietnamese submariners in anticipation of the delivery of the Kilo-class. As many commentators have observed, it is not just the acquisition of advanced military capabilities that is required but the ability to operate and maintain those modern systems that will also prove crucial.

It has been suggested that the growing focus on maritime and air assets is partly intended to deter China from using force to assert its claims in the South China Sea, and in particular over those areas of disputed territory which Vietnam also lays claim too.¹⁷⁵ However, the prospects for growth of the Vietnamese economy is also reliant upon energy resources in the South China Sea, many of which also lie in disputed waters and analysts have made the point that only modern air and naval forces will enable the Vietnamese government to safeguard those assets.

Plans to build up key ground capabilities in areas such as modern missile forces and ground manoeuvre, with the rapid modernisation of its ageing T-55 soviet-era tanks, have also been discussed.

2.7 Singapore

The government document *Defending Singapore in the 21st Century*, which was published in 2000, highlighted diplomacy and deterrence as the longstanding pillars of Singapore's defence policy. From the latter has emerged the concept of Total Defence whereby every sector of society takes an integrated approach to the defence of Singapore and its national interests.

However, that document also noted a number of future challenges both to the regional balance of power and Singapore's place within it. Most notable was acknowledgment of the potential for unresolved territorial and boundary disputes to lead to conflict, in particular as a result of the increasing competition for resources.¹⁷⁶

An island City State, Singapore is geographically located astride several key international shipping lanes at the southern tip of the Malay Peninsula and its economic and strategic importance far outweighs its small size. Maritime security has therefore become a strategic priority over the last few years.



Source: US State Department

¹⁷⁴ "Vietnam and Netherlands extend shipbuilding partnership", *Jane's Defence Industry*, 31 March 2011

¹⁷⁵ International Institute for Strategic Studies, *Military Balance 2011*

¹⁷⁶ A copy of *Defending Singapore in the 21st Century* is available online at: <http://www.mindef.gov.sg/ds21/>

Unlike the majority of its neighbours, as a result of its history and strategic location, Singapore does not have any outstanding territorial disputes in the South China Sea or with China in particular. Disputes continue to persist, however, with Malaysia over the delivery of fresh water to Singapore, Singapore's extensive land reclamation works, bridge construction and maritime boundaries in the Johor and Singapore Straits. Work also continues on finalising the maritime boundary agreement with Indonesia which was originally signed in 1973.

In keeping with its diplomacy and deterrence approach, Singapore has sought to maintain a strong regional balance through ensuring good relations with its neighbours, including China, India, Japan and Australia; encouraging US engagement in the region and ensuring the development of strong regional institutions such as ASEAN, of which it was a founding member, and existing multilateral arrangements such as the Five Powers Defence Arrangements (see section 2.3)

Relations with the United States

Alongside Thailand and the Philippines, Singapore is one of the US's longest standing allies in the region. Indeed, a number of analysts have argued that Singapore is the US's partner of choice in the region, given its advanced military capabilities and economic importance.

Unlike the Philippines, however, which has relied on the US as the cornerstone of its regional security policy, Singapore has relied upon its own military forces to ensure security and the pursuit of its national interests. However, it remains a supporter of closer US engagement in Southeast Asia.

The US has sold Singapore a large of amount of defence materiel and signed a number of MOUs permitting American use of Singaporean military facilities. In 1990 the US and Singapore signed an MOU which allowed the US access to facilities at Paya Lebar airbase and to establish a US Navy logistics unit in the country. The MOU was subsequently amended in 1999 to permit US naval vessels to berth at Changi Naval Base which was completed in early 2001. US Pacific Command therefore currently retains approximately 122 personnel in Singapore, and maintains one naval support facility at Changi naval base and one Air Force logistics support squadron at Paya Leba..

That MOU was once again updated in 2005 to ensure continued US access to Singapore's military facilities, while in July 2005 the US and Singapore also signed a Strategic Framework Agreement that expanded co-operation in defence and security matters, including joint military exercises, counter proliferation, counter-terrorism and the sharing of defence technologies. In June 2011 the then US Defense Secretary, Robert Gates, confirmed that a number of US littoral combat ships would be forward deployed to Singapore as part of the US's ongoing commitment to the Asia-Pacific region, in addition to further investment in the military-to-military relationship, joint training and exercises including the prepositioning of supplies for humanitarian and disaster relief operations.¹⁷⁷ In August 2011 the US and Singapore conducted their 17th annual Co-operation Afloat Readiness and Training (CARAT) bilateral exercises.

¹⁷⁷ "US looks to deepen ties with Singapore", *Jane's Navy International*, 6 June 2011

Defence Expenditure

In the 2000 document *Defending Singapore in the 21st Century* the government committed to spending up to 6% of GDP on the defence budget every year, in order to maintain a “capable and operationally ready” military.¹⁷⁸ Defence expenditure in Singapore has subsequently accounted for approximately 25-30% of total Government expenditure each year and over the last decade has averaged between 4 and 5.5% of GDP.¹⁷⁹

On that basis, Singapore’s defence budget far exceeds all of its regional neighbours. In 2010 it exceeded Indonesia, the second largest spender, by more than \$1 billion. In February 2011 the government announced a defence budget for the coming year of \$9.84 billion, in current prices, approximately 4.6% GDP.¹⁸⁰

Due to the extensive investment in Singapore’s military capabilities and infrastructure, it has one of the most advanced militaries in the region, alongside an advanced defence industrial complex.

Military Spending of Singapore 2001-2010

	US \$m (Constant, 2009 prices)	% change on previous year	% of GDP
2001	5,995	2.4%	5.0
2002	6,320	5.4%	5.1
2003	6,382	1.0%	5.1
2004	6,503	1.9%	4.6
2005	6,908	6.2%	4.4
2006	6,966	0.8%	4.0
2007	7,236	3.9%	3.7
2008	7,293	0.8%	3.9
2009	7,743	6.2%	4.3
2010	7,651	-1.2%	N/A

Source: SIPRI
N/A - Not Available

Capabilities

The size of the active military is small (75,000 personnel), reflecting its status as a city state with a small population. Of those personnel, the majority are Army personnel, although in common with the other two services the Army is highly dependent upon national service conscripts who are compulsorily obliged to fulfil a two-year term of service.

Current Military Manpower

While the active military alone gives Singapore the smallest force among its regional neighbours it has a large paramilitary force and a significant reserve force at its disposal. Of its Reserve personnel, the majority (96%) are ground forces, thereby providing significant territorial defence capability. If total available manpower is taken into consideration, Singapore jumps from having the smallest military among its neighbours, to the fourth largest.

	Army	Navy	Air Force	Total
Active	50,000	9,000	13,500	72,500
Paramilitary				75,100
Reserve Forces	300,000	5,000	7,500	312,500
Paramilitary Reserves				44,000

Source: IISS, *Military Balance 2011*

However, any inferiority it suffers in terms of actual numbers of personnel is more than outweighed by its technological superiority and advanced operational doctrine. Since independence in the mid-1960s Singapore has sought to maintain an integrated, modernised military force, a feat largely assisted by the strength of its domestic industrial capabilities, its

¹⁷⁸ *Defending Singapore in the 21st Century*, p.51

¹⁷⁹ US State Department Country Profile, May 2011

¹⁸⁰ “Singapore maintains commitment to strong defence spending”. *Jane’s Defence Industry*, 1 July 2011

economic growth and its defence relationship with the US. Consequently it is one of only a few countries in the region that operates a modern fast jet fleet, an unmanned aerial vehicle capability and a modern surface and submarine fleet, enabling it to deploy fully integrated forces, achieve air superiority and power projection, and maintain battlefield awareness.

This is reflected in the inventory of Singapore's military assets, the majority of which are either US or Western sourced, or indigenously manufactured. The Army is equipped with 196 main battle tanks, in excess of 272 M113 and AMX-10 armoured infantry fighting vehicles, in excess of 1,250 armoured personnel carriers, artillery, and air defence missile systems. The Navy operates a fleet of six tactical submarines and a principal surface fleet comprised of six guided missile frigates, providing Singapore with both littoral defence capacity and regional power projection. The surface fleet also comprises four amphibious landing platform ships, four mine countermeasures vessels, 35 patrol and coastal combatant vessels, including six guided missile corvettes, and a further two logistics ships. Like the Navy, the Air Force is also configured for territorial defence and regional power projection. It possesses six squadrons of F-5 fighter and F-15 and F-16 forward ground attack aircraft, in addition to 14 Super Skyhawk attack aircraft, air to air refuelling aircraft, C-130 transport aircraft, maritime patrol aircraft, airborne early warning aircraft, one squadron of Apache attack aircraft, Chinook and Super Puma transport helicopters. The Army operates the light UAV, Skylark, while the Air Force has three squadrons of Searcher and Hermes unmanned aerial vehicles, although those squadrons are staffed by personnel from all three Services. Within the Air Force is also the Air Defence Group equipped with Rapier and MIM-23 surface-to-air missiles.

The active paramilitary forces comprise the Civil Defence Force, the Singapore Police Force (including the Coast Guard) and the Singapore Gurkha Contingent.

International Deployments

Despite the advanced nature of its armed forces, historically Singapore has not utilised its armed forces on the international stage, largely as a result of its reliance on conscripted personnel, and only a small pool of Regular personnel. Its contribution to UN peacekeeping operations has been relatively minimal, participating in a UN peacekeeping operation for the first time in 1989. At present it has just 12 personnel deployed on operations, making it the 96th largest contributor out of 114 countries. All of those personnel are deployed in the region in East Timor (10 police personnel and 2 experts). In the past however the Singaporean Armed Forces have also participated in UN peacekeeping/observer missions in Kuwait, Angola, Namibia, and Cambodia.

Singapore has also deployed small forces in support of US-led operations in the last ten years including a small contingent of transport aircraft and logistical supply vessels to Iraq in support of Operation *Iraqi Freedom* in 2003; while in October 2011, Singapore also had 39 medical and construction engineering personnel and refuelling aircraft deployed in Bamiyan and Uruzgan provinces in Afghanistan as part of the ISAF operation. In 2009-2010 Singapore contributed to anti-piracy efforts in the Gulf of Aden.

Given its geographical constraints, Singapore conducts the majority of its military training overseas and has units deployed in Australia, Brunei, France, Taiwan, Thailand and the United States. However, it has also been suggested that Singapore has pro-actively decided to base many of its modern capabilities overseas in an "apparent effort to minimise regional concern over its military acquisitions".¹⁸¹

¹⁸¹ "Singapore asks for US resources to train F-16 pilots", *Jane's Defence Industry*, 7 October 2010

Defence Industry

The importance of technology as a means of gaining strategic advantage was recognised at the outset by the Singapore Armed Forces. As such, decades of investment have been channelled into establishing a strong domestic defence industrial base, while research and development has been a priority.

The Singapore Armed Forces is supported by three entities: the Defence Science and Technology Agency within the Ministry of Defence, DSO National Laboratories, which is primarily responsible for R&D, and the indigenous defence industry.

The Singapore Technologies companies, of which the government holds a controlling stake, are at the centre of that defence industrial base. Over the last three decades that group of companies has developed the skills and knowledge necessary to allow Singapore to indigenously design and develop advanced weapon systems, and upgrade major naval, air and land platforms such as the M113 armoured personnel carrier and the F-5 fighter aircraft. Systems integration has become a particular specialisation, thereby allowing Singapore to make commercial-off-the-shelf purchases from countries such as the US, reduce cost and R&D, and then customise those assets to meet the unique operating requirements of the Singapore Armed Forces.

Singapore's defence industry has not only become an important part of Singapore's own Armed Forces but it has also become an exporter of military assets. ST Engineering, for example, has recently concluded orders for fast missile craft for the Egyptian navy, and naval guns for the Brazilian navy.

Military Modernisation

As outlined above, Singapore's status as an advanced military has been achieved partly as a result of its high level of investment and its approach to the continuous modernisation of its military assets.

Given the current modernisation programmes of its regional neighbours, which in most cases have been assisted by rapid economic growth, Singapore is considered likely to continue its level of investment and pursue further modernisation initiatives in order to retain the capability gap that it has built up over the last few decades. Indeed, in July 2011 the Defence Minister, Ng Eng Hen, pledged to continue allocating up to 6% of GDP to defence spending in order to maintain its military superiority in the region.¹⁸² Specifically, the Government has reiterated its intention to transform the Singapore Armed Forces into a "networked third-generation military".¹⁸³

Singapore has already concluded a number of high profile procurement programmes in the last few years, including the procurement of 96 German Leopard 2 main battle tanks which many analysts have considered a counter to Malaysia's recent procurement of a fleet of Polish PT-91M tanks.¹⁸⁴ In addition the Armed Forces have taken delivery of six Seahawk maritime helicopters which will operate from its new Formidable-class frigates, a number of armoured infantry fighting vehicles, high mobility artillery rocket systems, Apache attack helicopters, 24 F-15SG strike aircraft (the final aircraft are due for delivery in early 2012), 12 Alenia Aermacchi M-364 advanced jet trainers (to be delivered from 2012) and two ex-Royal Swedish Navy A17-class submarines which have been refitted and modernised for the Singapore Navy. Singapore took delivery of the first of those vessels in September 2011, which will operate alongside Singapore's four existing challenger-class submarines which

¹⁸² "Singapore maintains commitment to strong defence spending", *Jane's Defence Industry*, 1 July 2011

¹⁸³ "Singapore renews commitment to 3G military transformation", *Jane's Defence Weekly*, 17 October 2011

¹⁸⁴ "Singapore enhances MBT armour protection", *Jane's Defence Weekly*, 11 February 2011

were acquired in the mid-1990s. The second vessel of class is expected to enter service in early 2012. The Air Force has also recently embarked on an upgrade programme for its entire fleet of Hercules transport aircraft and toward the end of 2011 is also expected to take delivery of an unspecified number of Heron UAVs, which will replace the current Searcher-class which have been in service since the mid-1990s.

For the future, the Air Force is looking to procure a next generation fighter aircraft to replace its current fleet of F-16C/D over the next decade. Singapore is already a security partner in the F-35 Joint Strike Fighter programme,¹⁸⁵ although many analysts have argued that the aircraft is too expensive. The like-for-like replacement of the F-16 fleet with the F-35 is estimated to cost in the region of \$11 billion.¹⁸⁶ As such, it has been suggested that the recently acquired F-15SG aircraft could form the backbone of the future combat aircraft fleet, while the current fleet of F-16 C/D could be modernised in order to extend their operational service life by at least a further ten years.¹⁸⁷ Singapore's desire to maintain technological superiority may, however, leave the acquisition of the F-35 as the only feasible choice.

The Navy has also outlined a requirement for the acquisition of a next generation submarine fleet, largely in response to the advanced submarine programmes increasingly being operated or acquired by both China and its regional neighbours.

However, in order to retain that technological edge, going forward Singapore will have to maintain its high level of defence spending and concerns have been raised that economic growth will not be sustained at the levels required to allow defence spending to be maintained at more than 4% of GDP.

¹⁸⁵ It joined the JSF programme in 2003, the only Asia country to participate in the project.

¹⁸⁶ "Singapore continues JSF review ahead of decision", *Jane's Defence Weekly*, 22 November 2010

¹⁸⁷ *ibid*