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Indonesia’s impressive political and economic development in recent years has fuelled expectations that Australia’s much larger neighbour could join the ranks of the world’s ten largest economies as early as 2030. While there are good reasons to caution against such long-term predictions, there’s a high likelihood that Indonesia will become stronger relative to Australia. Consequently, Prime Minister Tony Abbott has made the relationship with Indonesia a top foreign policy priority. In this context, Indonesia’s ambitious plans to modernise its armed forces (Tentara Nasional Indonesia, TNI) over the next 10 to 15 years, including a 274-ship ‘green-water navy’, 10 fighter squadrons and 12 new diesel–electric submarines, are of key interest for Australia. While Indonesia has had similar ambitions in the past, this time the match between resources and ambitions could be closer.

It’s timely to assess TNI’s current modernisation. Three major issues are particularly pertinent for Australia: the degree to which the capability balance between the ADF and the TNI could shift; the degree to which the TNI will strengthen its capacity to defend the Indonesian archipelago and contribute to regional security; and the implications of a relative shift in Indonesia’s military power for the Australia–Indonesia defence relationship. The study examines some key issues related to TNI modernisation:

What are the key drivers behind Indonesia’s efforts to build a modern defence force? What are the key trends and challenges for TNI reform? What are the strategic implications for Australia? And what could Australia do to support Indonesia’s military capability development and to further the bilateral defence relationship?

Chapter 1 introduces the importance of Indonesia to Australian strategic policy. Close geographical proximity, a sometimes conflicted relationship, and cultural differences, mean stable relations with our larger neighbour to the north are paramount for Australia’s security. Historically, Australia’s defence planning has accounted for two possible worst-case scenarios—Indonesia as a direct military threat or as weakly-defended lily pads that an aggressor might exploit to attack Australia. A ‘double asymmetry’ has worked for both sides: Indonesia didn’t face an existential threat from a much smaller but technologically superior ADF, while Australia didn’t face an Indonesian threat to its homeland from a much larger but less capable TNI. Now, the prospect of a friendly, militarily stronger Indonesia provides opportunities for moving the bilateral defence relationship beyond this paradigm.
Chapter 2 looks at current drivers behind Indonesia’s military modernisation which starts from a very low base. TNI urgently needs to replace many ageing, Cold War-era military platforms. Readiness levels are low and critical enablers for modern military operations such as logistics, sustainment as well as command and control are largely non-existent. The result is an imbalanced, mostly non-deployable force. When it comes to threat and risk perception, TNI remains very much focused on internal security challenges. However, Indonesia also takes the external environment more seriously. Military modernisation trends in Southeast Asia are a source of concern in Jakarta as are China’s ambitions in the South China Sea. The result is a push to increase TNI’s ability to control and defend Indonesia’s vast exclusive economic zone (EEZ) by investing in maritime and air denial capabilities.

Chapter 3 provides an in-depth analysis of key trends and challenges for TNI modernisation. The introduction of new military equipment should not distort from the fact that TNI’s defence procurement and capability development process remains ad hoc, incoherent and riddled by high levels of corruption. Indonesia’s institutional capacity to formulate and execute a coherent defence policy remains underdeveloped. Furthermore, while the defence budget has grown substantially in recent years, it’s still relatively modest. That’s also because rhetoric notwithstanding defence policy continues to rank low on Jakarta’s political agenda.

These shortfalls affect the modernisation efforts of the single services. The Indonesian Navy (Tentara Nasional Indonesia Angkatan Laut, TNI-AL) develops fragments of a ‘green-water’ navy through the acquisition of smaller, but modern frigates and corvettes equipped with anti-ship missiles, as well as a greater number of patrol boats and guided-missile attack craft. It’s also developing modern maritime doctrine to guide its operations. But it’s not a ‘balanced fleet’, lacking investment in critical areas such as long-range maritime surveillance, anti-submarine warfare (ASW) and mining/countermining. As well, its submarine program continues to face major problems. TNI-AL is far from being able to control most of its territorial waters effectively, and even then it will lack significant maritime power projection capability.

The Indonesian Air Force (Tentara Nasional Indonesia Angkatan Udara, TNI-AU) is also investing in more sophisticated equipment, particularly with regard to air combat and tactical airlift. However, its new fighters are largely incompatible and it lacks key assets for modern air combat operations such as airborne early warning and control (AEW&C) systems. Over the next two decades it will incrementally improve its capacity to patrol Indonesia’s air space and provide lift for operations within the archipelago. Yet, it’s highly unlikely that the TNI-AU will pose any significant operational challenge for a state-of-the-art air force such as the RAAF any time soon.

The Indonesian Army (Tentara Nasional Indonesia Angkatan Darat, TNI-AD) remains the most influential of the three services. Any analysis of the TNI needs to recognise that Indonesia is very much a defensive, continental power. The TNI-AD has taken some steps towards a more modern, agile and deployable force. However, most of its units remain non-deployable because of ineffective training schemes, lack of financial resources and a territorial command structure more suited to provincial politics than operational effectiveness. Major acquisitions such as new main battle tanks are largely symbolic. Until the TNI-AD addresses the problem of a force that’s too large and expensive, TNI modernisation as a whole will remain difficult.

Finally, TNI’s C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) systems remain rudimentary. It also faces a difficult choice between professionalism and (army) force size. To become more professional and deployable, the TNI needs to shrink, but it’s unclear if the TNI leadership is prepared to make such a trade-off. Additionally, Indonesia’s aim to strengthen the domestic defence industrial base to reduce its reliance on foreign arms suppliers paradoxically is likely to impede on TNI modernisation.

Chapter 4 discusses the implications for Australia. Indonesia remains a long way from reaching its ambitious defence plans. There’s little indication of a break with past practices: incoherent strategic planning and procurement; a largely insular defence doctrine; bold declarations about procurement plans without adequate funding; and money spent on expensive military equipment without the ability to keep it in service. Therefore, shortfalls in key areas of military capability such as professionalism, training, joint operations, air combat, submarine warfare, ASW, naval surface warfare, C4ISR, and logistics will either persist or only partially be addressed. TNI’s power projection capability beyond its EEZ will remain limited.
That means that for the foreseeable future, the ADF will retain its high-end ‘capability edge’ over Indonesia. For example, alarmist predictions about an erosion of Australia’s ‘air superiority’ are unfounded. Nevertheless, TNI will improve in relative terms, aided by Indonesia’s general political and economic trajectory. It will strengthen its denial capabilities and force projection within Indonesia’s EEZ. Access to modern technologies such as anti-ship missiles, better maritime domain awareness, an increase in coastal combatants, and improved capacity to deploy troops within the archipelago means that the TNI will be better placed to engage any hostile force operating in its maritime approaches. It will also increase its capability for missions below the high-end military spectrum such as unconventional, guerrilla warfare. Should there be tensions in Australia’s strategic relationship with Indonesia, for example in a crisis over Papua, the ADF would certainly face a TNI in a much better position to pose enormous operational headaches.

Consequently, as Indonesia’s relative military power grows, Australia has a strategic interest in ensuring cooperative (or at least neutral) defence relations with our bigger neighbour. A friendly, militarily more powerful Indonesia would be a major geostrategic asset for Australia. Indonesia’s current investments in coastal defence and littoral warfare will make it very difficult for any hostile force to establish a stronghold in the archipelago in order to project force against the Australian continent. Moreover, Australia–Indonesia defence relations are based on a greater convergence of strategic interests.

Moving forward, defence cooperation needs to go beyond ‘low-hanging fruits’ such as staff exchanges, military exercises or humanitarian assistance and disaster relief (HADR). Australia (and Defence) needs to think about new, creative ways to support TNI’s capability development and to strengthen the bilateral defence relationship. The days where TNI was an eager recipient of Australian defence aid (including fully funded activities) are numbered. One new element for defence cooperation with Indonesia could be to utilise the Defence Materiel Organisation (DMO) to improve TNI’s defence procurement and sustainment process. DMO could also initiate cooperation between Australian defence industry and TNI to expose Indonesia to ‘best practice’ in defence contracting and sustainment. In addition, Defence could offer to assist TNI in doctrine and capability planning.

Further strengthening single service cooperation between the ADF and TNI is critical to building trust and to hedge against future crisis. Defence should consider increasing the Army’s special forces’ interaction with its Indonesian counterpart by upgrading Special Operations Command’s (SOCMD) representation at the Australian Embassy in Jakarta. As well, Army should intensify the nascent regular army-to-army cooperation; the emerging amphibious capability provides one such opportunity. Moreover, as the TNI navy and air force grow in relative importance, the RAN and RAFAF should increase their networks beyond existing levels. In general, the ADF needs a larger pool of officers trained in Bahasa Indonesia and cultural awareness.

Finally, joint maritime surveillance is an underdeveloped area of cooperation. The Cocos Islands could be used as a location for joint operations and for sharing information on boat movements. Further, Australia could increase Indonesia’s capacity to monitor its maritime and air space by sharing data from the Jindalee Operational Radar Network (JORN). Sensitivities about JORN’s security could be mitigated by providing Indonesia with only filtered datasets. In turn, Indonesia could share data from its newly established maritime surveillance systems. Indonesia’s military will continue to face a considerable gap between ambitions and reality. Yet, Australia needs to anticipate and shape the emergence of a more capable TNI that is willing and ready to influence security in our key area of strategic interests.
Introduction

Australia’s strategic debate has started to discuss the potential implications of a much more powerful Indonesia. Jakarta’s rather impressive political and economic development in recent years has fuelled predictions that our much larger neighbour to the north could join the ranks of the world’s ten largest economies as early as the year 2030. By 2050, it might even become the fourth largest economy, behind China, the US and India. While there are good reasons to caution against such long-term predictions, there’s a high likelihood that Indonesia will become stronger relative to Australia. The 2013 Defence White Paper expects nothing less: ‘Indonesia’s importance to Australia will grow as its significant regional influence becomes global. Indonesia’s success as a democracy and its economic growth will see it emerge as one of the world’s major economies.’

The Prime Minister stated that the link with Indonesia is Australia’s ‘single most important relationship’.

Consequently, the new Australian government of Tony Abbott has made the relationship with Indonesia a top foreign policy priority. The Prime Minister stated that the link with Indonesia is Australia’s ‘single most important relationship’. One critical area is the future defence relationship with Jakarta. Indonesia plans to modernise its armed forces (Tentara Nasional Indonesia, TNI) over the next 10 to 15 years, including through investments in anti-ship missiles, new warships, submarines and combat aircraft. Indonesia’s 2010 Strategic Defence Plan formulated a goal of developing a ‘Minimum Essential Force’ (MEF) by 2024. Key elements of the MEF include the development of a ‘green-water’ navy, major upgrades of air combat capability, a more mobile and agile land force, and the development of a viable domestic defence industrial base. The MEF is very ambitious: major items include a 274-ship navy, 10 fighter squadrons and 12 new diesel–electric submarines. While Indonesia has had similar ambitions in the past, this time the match between resources and ambitions could be closer. Hugh White, for example, expects that it will turn into a ‘major maritime power with the capacity to protect its own maritime approaches from hostile intrusions, and in doing so protect Australia’s as well’.
A democratic, militarily more outward-looking Indonesia is in Australia’s strategic interest as it would provide us with much greater strategic depth in the midst of power shifts in Asia. Consequently, the Chief of the ADF, General David Hurley, has pointed to the opportunity to forge a true ‘strategic partnership’ between the two countries in which the possibility of armed conflict is virtually non-existent. This would be welcome news, indeed. Given our close geographical proximity and sometimes conflicted relationship with Indonesia, Australia’s defence planning since the 1950s accounted for two possible worst-case scenarios. The first concerned Indonesia as a direct military threat. A ‘double asymmetry’ made such a situation unlikely: Indonesia didn’t face an existential threat from a much smaller but technologically superior ADF, while Australia didn’t face an Indonesian threat to its homeland from a much larger but less capable TNI. The second scenario, grounded in the experience of Japanese air raids during World War II, considered the possibility of the Indonesian archipelago again turning into ‘weakly-defended lily pads that an aggressor from the Asian mainland might exploit to attack Australia.’

Indonesia’s current political and economic trajectory therefore requires a reassessment of its emergence as a military power and the possible implications for Australia. Three major issues are particularly pertinent:

- the degree to which the capability balance between the ADF and the TNI could shift
- the degree to which the TNI will strengthen its capacity to defend the Indonesian archipelago and contribute to regional security
- the implications of a relative shift in Indonesia’s military power for the Australia–Indonesia defence relationship.

This paper analyses key aspects of the TNI’s modernisation, including modernisation drivers; Indonesia’s defence strategy and defence budget; capability developments in its navy, air force and army; and its efforts to revive Indonesia’s defence industrial base. The aim is to make some cautious predictions about the TNI’s capability development over the next 10 to 15 years. The paper then discusses potential implications for Australia and makes some concrete recommendations for further strengthening bilateral defence ties with Indonesia.
CHAPTER 2

Drivers of Indonesia’s defence modernisation

Indonesia has an urgent need to replace many ageing, Cold War-era military platforms in all services. The TNI also needs to tackle low levels of readiness and professionalism. Long preoccupied with domestic security and faced with consistent underfunding, the TNI remains largely ill-equipped and ill-prepared for modern military operations. Critical enablers such as logistics, command and control, and C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) systems, are largely non-existent. The industrial base to sustain and maintain the force is very weak. In other words, TNI modernisation starts from a very low base.

Efforts to invest in a more modern TNI are also driven by a shifting risk and threat perception.

Efforts to invest in a more modern TNI are also driven by a shifting risk and threat perception. The TNI remains very much focused on internal security challenges and the need to safeguard Indonesia’s littoral approaches. While the traditional role of the army (Tentara Nasional Indonesia Angkatan Darat, TNI–AD) in combating Islamist terrorism or ethnic violence has been marginalised by non-military law enforcement agencies, threats of insurgency in Papua and the possibility of conflict with Papua New Guinea (PNG) remain a high-priority military task for TNI, as does its involvement in local politics. Furthermore, the TNI faces non-traditional maritime security challenges in Indonesia’s exclusive economic zone (EEZ), such as illegal fishing, piracy, people smuggling and drug trafficking. Finally, because of frequent natural disasters, the TNI seeks to strengthen its capabilities for humanitarian assistance and disaster relief operations.

Nevertheless, Indonesia’s started to take its external security environment more seriously. Of major concern is the security of its expansive EEZ. Indonesia’s vast archipelago includes about 13,000 islands stretching over nearly 2 million square kilometres (Figure 1). It has a coastline of 54,716 kilometres to protect and three land borders (Timor-Leste 228 kilometres, Malaysia 1,782 kilometres, and Papua New Guinea 820 kilometres). Moreover, it sits right at Southeast Asia’s maritime chokepoints, such as the Strait of Malacca.
Its geography makes a land invasion of Indonesia extremely unlikely, but also compounds the TNI’s challenge to control its vast territorial waters. At the moment, TNI has difficulty in safeguarding even 12 of the country’s 92 outermost islands. It also has major difficulties in controlling Indonesia’s airspace.

The goal of better protecting Indonesia’s maritime sovereignty is also the result of a perception among political elites in Jakarta that the TNI needs to keep up with force modernisation trends in Southeast Asia. Malaysia’s viewed as a military ‘peer competitor’, and the two countries are still in a dispute over the jurisdiction of Ambalat in the Sulawesi Sea. Singapore’s air power is another source of discontent, given Indonesia’s significant weakness in this area. Consequently, some of the TNI’s force modernisation projects are driven by questionable prestige thinking in Jakarta. For example, the TNI used Malaysia’s acquisition of two Scorpène-class submarines to justify plans to acquire new diesel–electric submarines.

Finally, Indonesia’s wary about China’s territorial claims in the South China Sea. Beijing’s ‘nine-dashed line’ runs very close to Jakarta’s Natuna Islands, and Chinese and Indonesian patrol boats were involved in an incident near the islands in June 2010 (Figure 2). Indonesia also expects increased activities by the PLA Navy and Chinese fishermen in Jakarta’s EEZ. As a result, the TNI sees a need to develop military capabilities to strengthen maritime domain awareness and, if necessary, to deter Chinese naval activities.
Indonesia’s growing awareness of its maritime vulnerabilities in the South China Sea should be welcomed by the Australian Government. Jakarta looks north, not south, when it comes to external risks and threats.
CHAPTER 3

Trends and challenges

There are significant challenges related to making defence strategy and uncertainties regarding the financial underpinnings of TNI modernisation. Moreover, a detailed analysis of the individual TNI services (navy, air force, army) shows that while there are improvements in some capability areas, serious imbalances will persist for the foreseeable future.

What’s the strategy?

A major challenge for Indonesia is its weakness in formulating and executing coherent defence policy. For one thing, there’s no clear linkage between its broader foreign policy objectives and the role played by TNI to support those goals. This isn’t surprising since domestic stability and national cohesion have historically been more influential for TNI than pursuing foreign policy objectives. Yet, as Indonesia’s regional (and potentially global) power grows, analysts and policymakers in Jakarta debate on what role the military can and should play in achieving the country’s foreign policy agenda. They also question to what degree Jakarta’s ‘non-alignment’ foreign policy doctrine of bebas aktif (independent and active) can continue to serve as foreign policy guidance in the 21st century; and, if not, what should be the alternative.

Additionally, TNI still follows a rather outdated defence doctrine. Indonesia’s most recent defence white paper in 2008 still reflected the army-centric ‘Total People’s Defense’ concept based on nonlinear territorial guerrilla warfare, dating back to the struggle against Dutch colonialism in the 1940s. Moreover, the document lacked clear strategic guidance for the TNI in the form of priorities for military tasks and defence acquisitions. It’ll be interesting to see whether the next white paper, planned for release later this year, can overcome some of those problems.

Moreover, institutional capacity to guide bureaucratic coordination in defence affairs remains limited. As well, government and parliamentary committees overseeing defence procurement decisions have only limited access to independent advice from expert civilian staff, think tanks, journalists or universities. Such interactions and expertise are only developing incrementally. Together, these deficiencies lead to an incoherent, ad hoc procurement process, riddled by a very high level of corruption. As a result, the TNI’s modernisers will have to overcome significant institutional hurdles in formulating and executing defence policy.

Nevertheless, a more coherent, outward-looking defence policy wouldn’t necessarily translate into a more assertive Indonesian posture. Jakarta doesn’t have an expansionist foreign policy agenda, and the TNI reflects a strong continental strategic culture—its maritime thinking is very much defensively oriented and focuses on littoral defence within its vast archipelago. In fact, Indonesia still lacks a genuine maritime strategy, and TNI officers concede behind closed doors that there’s no real desire to develop major maritime power projection capabilities. Thus, it’s prudent to assume that the TNI won’t develop significant force projection capabilities for the foreseeable future but will focus on its territorial waters and airspace and on its capacity to deal with internal security challenges. Speculation about Indonesia’s emergence as a major, potentially assertive, military power is unfounded.
More money, but …

Modern armed forces are expensive, and the TNI has been notoriously underfunded. To close the ‘defence-economic gap’, President Susilo Bambang Yudhoyono (SBY) pledged in 2010 to increase defence spending to 1.5% of GDP by 2014. If that happens, Indonesia will have a defence budget in the US$14–15 billion range, assuming its economy continues to grow by 6%–7% annually. It would then overtake Singapore as the largest defence spender in Southeast Asia.

However, there’s reason for caution about such predictions. Table 1 and Figure 3 show defence spending over the past decade.

Table 1: Indonesian defence spending, 2003 to 2012

<table>
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<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rupiah (trillion)</td>
<td>18.2</td>
<td>21.4</td>
<td>23.9</td>
<td>23.6</td>
<td>32.6</td>
<td>32.8</td>
<td>33.6</td>
<td>42.9</td>
<td>51.1</td>
<td>72.5</td>
</tr>
<tr>
<td>US$ (billion)</td>
<td>2.12</td>
<td>2.39</td>
<td>2.47</td>
<td>2.59</td>
<td>3.57</td>
<td>3.40</td>
<td>3.25</td>
<td>4.70</td>
<td>5.82</td>
<td>7.74</td>
</tr>
<tr>
<td>Real growth (% US$)</td>
<td>33.0</td>
<td>13.0</td>
<td>3.0</td>
<td>5.0</td>
<td>38.0</td>
<td>-5.0</td>
<td>-4.0</td>
<td>45.0</td>
<td>24.0</td>
<td>33.0</td>
</tr>
<tr>
<td>Percentage of GDP (US$)</td>
<td>0.99</td>
<td>0.93</td>
<td>0.88</td>
<td>0.75</td>
<td>0.82</td>
<td>0.67</td>
<td>0.60</td>
<td>0.67</td>
<td>0.69</td>
<td>0.86</td>
</tr>
<tr>
<td>GDP (US$ billion)</td>
<td>214</td>
<td>258</td>
<td>281</td>
<td>346</td>
<td>433</td>
<td>511</td>
<td>544</td>
<td>704</td>
<td>846</td>
<td>894.9</td>
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But this upward trend isn’t a reason for alarm that Indonesia will inevitably outspend Australia over the next two decades. First, defence spending as a proportion of GDP has remained consistently below 1% (Figure 4).

And it turns out that President SBY has reneged on his promise to increase defence spending to 1.5% of GDP by 2014. For 2013, estimates are that Indonesia will spend just under US$8 billion.\(^\text{12}\) However, this is only a slight increase of about 3.8% from the previous year and still well below 1% of GDP. What’s more, Indonesia’s 2013 average inflation rate by August this year had already reached 6.27%.\(^\text{13}\) In other words, the defence budget stagnated or even declined slightly. During August, SBY also announced that the defence budget for 2014 would be increased by 9%. But that will account for only about US$7.91 billion and only 0.9% of GDP\(^\text{14}\)—a far cry from the rhetoric about major increases. It’s quite clear that the Indonesian Government will continue to prioritise the delivery of non-military services such as health, education and infrastructure over defence spending.

Second, Indonesia’s economic growth projections are far from guaranteed. Long-term projections over 30–40 years should generally be viewed cautiously. Moreover, Indonesia’s economy faces major obstacles, such as economic nationalism, which is taking a toll on its recent economic growth rates.\(^\text{15}\) As a result, in 2013 the World Bank trimmed its economic outlook for Indonesia and pointed to serious macro- and microeconomic risks in the Indonesian economy.\(^\text{16}\) Short term, it’s hard to see the next Indonesian president pushing for major defence budget increases in the face of a cooling economy and pressing socioeconomic challenges. It’s important to keep in mind that defence policy ranks low on the political agenda and the parliament has consistently watered down TNI budget requests. Medium to long term, however, more money will probably be available for TNI modernisation. Even if Indonesia doesn’t turn into a global economic power, chances are that it will be economically stronger than Australia and its Southeast Asian neighbours. Yet, it will take a very long time before Indonesian defence spending realistically approaches Australian figures, and even if it will be for a much larger military.
Third, in a regional perspective, Indonesia’s defence spending remains low, particularly when the size of the TNI is taken into account. In 2012, Indonesia spent about US$7.74 billion on a force of 395,000 active personnel. This was 21.3% of all defence spending in Southeast Asia, second only to Singapore (26.6%), and 2.5% of total defence spending in Asia. Meanwhile, Australia accounted for 8.0% of all defence spending in Asia (excluding the US), making us the fifth largest spender after China (32.5%), Japan (18.9%), India (12.2%) and South Korea (9.2%).

Put another way, Australia spent US$25.4 billion (A$24.2 billion) on an ADF of 57,000 personnel, which is consistent with a force structure that has a focus on high-end platforms.

Fourth, even if Indonesia’s defence budget increases, more money doesn’t automatically translate into more capability for the TNI, particularly in modern weapon systems (about two-thirds of recent spending increases went into personnel costs). The need to improve TNI professionalism will only drive up expenses for wages, housing, health, education and the like. Moreover, buying expensive military equipment is only part of the investment. The costs of maintaining and sustaining complex weapon systems are even higher during the lifecycle of a platform. The more sophisticated the TNI equipment, the greater the pressure on Indonesia’s defence budget. Or, put differently, Indonesia’s at significant risk of investing in shiny new kit without the ability to keep it in service.

Finally, as long as Indonesia’s defence budget stays rather modest, the funding base for new procurement will remain limited. This year’s procurement budget is estimated to be around US$1.67 billion, while in 2014 it could rise to US$1.8 billion. That’s not much, particularly when considering the rising costs of major weapon systems, which generally increase by 4% above inflation each year. The TNI also funds some projects through export credits and bank loans, but those sums aren’t nearly enough to fund all the major investments planned under the MEF.

Behind closed doors, TNI officials argue that defence spending would need to equal at least 2% of GDP in order to implement the goals of the MEF. That’s not going to happen without dramatic changes in Indonesia’s domestic and external environment that increase the priority for defence spending. In all likelihood, there won’t be enough money for 12 new submarines, 274 ships or 10 fighter squadrons, even out to 2024. What’s much more realistic is piecemeal TNI modernisation in certain capability areas.

Towards a green-water navy?

The Indonesian Navy (Tentara Nasional Indonesia Angkatan Laut, TNI-AL) has declared that its goal is to develop a 274-ship ‘green-water’ navy by 2024, consisting of 110 surface combatants, 66 patrol vessels and 98 support ships. It also seeks to operate 12 new diesel–electric submarines. However, it’s hard to see how this ambitious plan can be achieved. On paper, the current TNI-AL is a 213-ship navy, comprising 11 major surface combatants, 72 patrol and coastal combatants, 11 ships for mine warfare and mine countermeasures, 5 major amphibious ships, 26 landing ships, 54 landing craft, 2 submarines and 32 logistics and support vessels. Yet fewer than half of those ships are deemed seaworthy. Most of them were commissioned during the Cold War and need urgent replacement.

It’s important to first look at the human dimension of Indonesia’s maritime capability.

It’s important to first look at the human dimension of Indonesia’s maritime capability. With about 65,000 active personnel (including marines and aviation), it’s much smaller than the army (300,400). And Indonesia doesn’t have a mature maritime consciousness, despite being an archipelagic state. As Geoffrey Till points out, developing and maintaining the personnel for excellence at sea takes decades and might become even harder, particularly for countries without a strong naval tradition. The TNI-AL will face a major challenge in developing an adequate
personnel skill set, specifically for key capabilities that have been severely degraded over the years, such as anti-submarine warfare (ASW) and mine countermeasures (MCM).

Second, the declared goal of developing a ‘green-water’ navy warrants some discussion, as it’s arguably the domain of greatest interest to Australia. The term itself is rather vague and often poorly defined, but it’s useful to think of a navy that focuses primarily on defending and controlling its oceanic littoral as well as coastal waters, ports and harbours. It might have some ocean-going ships, but it lacks the logistical support needed for an expeditionary regional navy (such as the Japanese or Chinese navies) or a global blue-water navy (such as the US Navy). Instead, a green-water navy concentrates on developing maritime anti-access capabilities—such as anti-ship missiles, fast attack craft, submarines, shore-launched missiles, land-based tactical fighter aircraft, sea mining and amphibious warfare assets—in order to fortify its maritime approaches. The goal is to signal to a potential adversary that it would be highly risky to deploy high-value units, such as large capital ships (carriers, helicopter landing docks etc.) into those areas, making on-shore power projection from the sea a difficult undertaking.

Apart from this conceptual approach to the term ‘green-water navy’, it makes sense to apply an additional framework for classifying the Indonesian Navy. Broadly, navies can be classified in the following way:

1. major global force projection navy (complete)—such as the US Navy
2. major global force projection navy (partial)—the Soviet Navy of 1990
3. medium global force projection navy—the French and the British navies
4. medium regional force projection navy—the Japanese, Chinese and Indian navies
5. adjacent force projection navy—the Portuguese, Israeli and South African navies
6. offshore territorial defence navy—the Norwegian navy
7. inshore territorial defence navy—the Singaporean navy
8. constabulary navy—the Mexican and Sri Lankan navies
9. token navy.

Given Indonesia’s archipelagic geography and maritime challenges that are mainly of a constabulary nature, Jakarta’s ambition for a green-water navy reflects a naval posture in line with categories 7–8, or potentially 6. This is very accurately reflected in the Indonesian Navy’s capability development.

However, it’s unlikely that the TNI-AL will evolve into a fully developed green-water navy over the next two decades. Take submarines, for example. Currently, the TNI-AL has only two 1,200-tonne Cakra-class (Type 209) submarines, in service since 1981. They were recently refurbished by the South Korean Daewoo Shipbuilding & Marine Engineering company. Still, they’ll soon reach their lifespans. In 2006, the TNI-AL considered the option of reinforcing the two boats with up to six 2,300-tonne Russian Kilo-class submarines, but the costs were too high. Instead, Daewoo Shipbuilding won a contract to provide three new, but cheaper, 1,400-tonne Type 209 Chang Bogo-class submarines for about US$1.8 billion. The plan is to build two boats in South Korea, while the third one is to be assembled in Indonesia by PT PAL.

The first two boats are to be delivered in 2015 and 2016; the third has been scheduled for 2018. The objective is to develop the expertise to license and build more of these submarines in the future. A larger number of smaller but modern submarines would make perfect sense, given the shallow waters in the Indonesian archipelago. However, implementing these plans will be very difficult. Despite life extension, the troubled Cakra-class will go out of service. If anything, the Chang Bogo-class will replace rather than reinforce the current fleet. Because of limited financial resources and the challenges involved in building submarines, the TNI-AL could end up with only three operational boats by 2025.
And this scenario assumes that Indonesia will overcome the problem of a small and ageing naval engineering base. In August this year, authorities admitted that the submarine program was ‘running slow’ because of difficulties in securing technology transfer from the German HDW shipyard, on a design of which the Chang Bogo-class is based. As a result, Russia has offered to sell Indonesia 10 diesel–electric submarines (most likely Kilo or Amur class). But, again, this US$5 billion project is deemed unaffordable. Thus, huge questions remain about the TNI-AL’s ability to develop a significant submarine capability by 2025.

When it comes to the major surface fleet, the picture doesn’t look much better. The TNI-AL’s current surface combatants consist of six former Dutch frigates, built in the 1960s, which underwent a series of life extensions and upgrades. By 2020, the ships will be 60 years old and inherently unreliable. In 2005, the navy announced plans to acquire a retired Russian Sovremenny-class destroyer (an air defence and anti-surface platform), but once more the costs were too high. Instead, in 2010 Indonesia signed a deal with PT PAL and the Dutch shipyard Damen Schelde to build a new, modular 2,300-tonne Sigma-class ‘guided-missile destroyer’ by 2017–18. In February this year, it announced its intention to build a second ship.

However, the Sigma-class ship’s general specification makes it more a light frigate than a destroyer. It’s also unclear what kind of weapon systems will be on board and whether Indonesia can manage to license-build more such ships in the years ahead. The unit costs have been estimated as US$220 million, but that could rise as the TNI-AL seeks to integrate more sophisticated equipment. That said, a shift to smaller but less expensive frigates would make sense for the TNI-AL’s plan to invest in a green-water navy. Major surface combatants are becoming ever more expensive, leading to shrinking fleets around the world, but a larger number of smaller ships equipped with modern anti-ship missiles would be well placed to play a central role in a maritime anti-access strategy.

In this context, it’s noteworthy that the TNI-AL has started to invest in more sophisticated anti-ship cruise missiles. One of its frigates was upgraded to carry medium-range (300 kilometre) Russian Yahont supersonic anti-ship cruise missiles, which it reportedly tested successfully in 2011. The remaining five ships were apparently upgraded to carry shorter range (120 kilometre) Chinese C-802 anti-ship missiles, which Indonesia is now producing under a technology transfer agreement. Anti-ship missiles (French Exocet Block 2) also feature aboard its four new 1,700-tonne Dutch Sigma-class 9113 corvettes, commissioned between 2007 and 2009. The remaining 19 ASW corvettes are ageing 1970s and 1980s vessels. Apart from building a second Sigma-class frigate, Indonesia hasn’t yet announced any plan for additional major surface combatants. It’s therefore quite likely that Indonesia’s modern major surface fleet in 2025 will be based on 2–5 light frigates and 5–6 corvettes.

Instead, the TNI-AL’s focus is on a greater number of smaller ships optimised for coastal defence, such as locally produced small patrol boats and fast attack guided-missile boats. The navy looks to be introducing up to 60 patrol vessels and has ordered 24 locally produced guided-missile fast attack KCR-40 craft. Its PB-57 large patrol craft are fitted with C-802 missiles, and Jakarta is in negotiations with Beijing on license-building China’s 120-kilometre range C-705 surface-to-surface missile for its KCR-40s. Over time, this could strengthen Indonesia’s ability to handle anti-ship missile technologies—a key component in a littoral warfare posture.
However, the TNI-AL still lacks critical capabilities to become a more capable maritime power. It planned to acquire three 95-metre offshore patrol vessels from Brunei but failed to gain parliamentary approval. Moreover, its maritime patrol squadron operates 20 twin-turboprop Nomad Searchmaster aircraft built in the 1970s and three medium-range CN-235 maritime patrol aircraft. Its maritime helicopter fleet is also degraded, and plans to buy 11 older US Sea Sprite helicopters were never realised. The TNI-AL has virtually no mining, MCM or ASW capabilities. As well, its major replenishment ships are dated and it remains to be seen if TNI-AL can realise plans to indigenously build up to four new ships.

The TNI-AL is seeking to upgrade its amphibious capabilities. The acquisition of four 7,300-tonne Makassar-class landing platform docks added to the 20,000-strong Marine Corps’ lift capabilities. Each ship can carry up to 35 vehicles, such as troop carriers and amphibious infantry fighting vehicles, or more than 200 troops and two landing craft, and can also support the operations of light and medium-sized helicopters. However, currently the Marines operate only three Eurocopter Super Puma helicopters suited for such purposes. They also acquired more than 50 BMP-3F amphibious infantry fighting vehicles from Russia. This certainly increases Indonesia’s littoral warfare capabilities. However, given the vast coastal area to be covered, those capabilities remain limited. Moreover, efforts to further increase amphibious capabilities will clash with other TNI-AL investment priorities.

Figure 5 provides an overview of the TNI-AL’s actual (old/modern) and planned capabilities.

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**Figure 5: Indonesian Navy (TNI-AL) capabilities**

<table>
<thead>
<tr>
<th>Category</th>
<th>Planned</th>
<th>Actual (modern)</th>
<th>Actual (old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submarines</td>
<td>12</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Frigates (light)</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Corvettes</td>
<td>24</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Missile-guided attack craft</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Patrol craft</td>
<td>60</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Patrol boats</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Mine warfare</td>
<td>0</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Mine sweeper</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Principal amphibious vessels (LPO)</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Landing ships (LST)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Replenishment ships</td>
<td>11</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ASW helicopter</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maritime patrol (MPA)</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*‘Planned’ refers to actual acquisitions of new platforms which will enter into service as well as Indonesian statement of intent to acquire new platforms over the next decade (for example, Indonesia’s announcement to only build two modern light frigates with the ‘option’ to build more in the future is counted as ‘2 planned’); ‘actual (modern)’ refers to platforms which entered into service after 1990; ‘actual (old)’ refers to platforms which entered into service prior to 1990, the reliability of many of those platforms is questionable.*
In sum, the TNI-AL is developing the fragments of a more modern green-water navy. It won’t develop major maritime power capabilities and its modernisation efforts will, in all likelihood, continue to be hampered by inadequate resources. The result will most likely be a shrinking fleet, concentrated on a handful of smaller frigates and corvettes equipped with anti-ship missiles, as well as a greater number of patrol boats and guided-missile attack craft. The focus on smaller ships is a step in the right direction and suited to Indonesia’s operational needs. However, the TNI-AL is far from being a ‘balanced fleet’, as it lacks investment in critical capability areas such as maritime surveillance, ASW and mining/countermapping. As well, its submarine program will continue to face major problems for years to come. We’re still far from a TNI-AL able to control most of its territorial waters effectively, and even then it will lack significant maritime power projection capability.

Indonesia’s air power: taking off?

Australia’s strategic goal of retaining ‘air superiority’ in Southeast Asia depends on whether regional countries catch up in their own air combat capability. Given our close geographical proximity, developments in the Indonesian Air Force (Tentara Nasional Indonesia Angkatan Udara, TNI-AU) are of particular interest. Just like the navy, the TNI-AU has formulated very ambitious plans. It wants to operate 10 fighter squadrons by 2024. To that end, Defence Minister Purnomo Yusgiantoro announced in 2010 that Indonesia would acquire 180 Russian Sukhoi fighter jets over the next 15 years. The 30,100-strong TNI-AU also wants to replace its ageing tactical transport capabilities and invest in tactical unmanned aerial vehicles.

However, less than half of its current fleet is estimated to be operational, and that’s probably a generous estimate. It operates a few Cold War-era Hawk Mk jet trainer aircraft, but 16 T-50 advanced jet trainers from South Korea might become operational at the end of this year. Critically, efforts to strengthen its multirole fighter capability to replace its obsolete F-5E/F fighter squadron and 10 ageing F-16A/B fighters lack cohesion:

- In 2011, Indonesia requested 24 surplus F-16 C/D fighters from the US.
- Six Sukhoi Su-30MK2s were ordered from Russia in 2011. By 2015, these are to complement the TNI-AU’s existing Sukhoi fleet of 10 aircraft (two Su-27SKs, two Su-30Mks and three each of the Su-27SKM and Su-30MK2).
- In 2012, Indonesia agreed with South Korea to jointly develop the fourth-generation ‘KFX/IFX’ fighter. Development costs were scheduled to be US$5 billion—an unrealistically low figure for such a project. Under the contract, Indonesia would pay 20% of the costs. However, in March 2013 Seoul suspended the project until at least June 2014. This appears only logical, given that South Korea is about to invest billions of dollars to possibly acquire a fifth-generation fighter aircraft. Still, Indonesian officials insisted that the state-owned aerospace company, PT DI, would continue with the ‘second stage’ of the aircraft development, a move more suited to promoting company interests than to developing military capability.

Thus, the TNI-AU has two fighter squadrons of largely incompatible aircraft; even its Sukhoi fleet features two different models with two different variants each. This array not only requires separate chains for training, logistics and maintenance, driving up costs. It also greatly complicates the networking of the different types of aircraft. Finally, Indonesia doesn’t possess airborne early warning and control (AEW&C) systems to guide air combat operations or airborne refuelling to extend the range and loiter capability of its tactical aircraft. It has one ageing KC-130B Hercules tanker aircraft, with no apparent goals to acquire newer planes. Greater numbers of combat aircraft could therefore be little more than symbolic.

Moreover, the suspension of the KFX/IFX program means that the air force doesn’t have a realistic prospect of this aircraft entering into service before 2025, if ever. What’s more likely to happen over the next decade is that the TNI-AU will aim to add more fighters of different types, if money is available. Yet, acquiring four squadrons of 72 Sukhois, for example, will cost at least US$7 billion before operating costs, which again is way beyond the
country’s financial capacity. Ten squadrons by 2025 is an entirely unrealistic proposition. US-sourced aircraft are even further out of reach—72 Super Hornets, for example, would cost over US$9 billion before operating costs.

The TNI-AU is also in dire need of investment in other, some would argue more important, capabilities. One such area is tactical airlift to move troops around Indonesia’s many islands and to respond to natural disasters or other contingencies. The core of its tactical airlift is centred on 16 ageing, poorly maintained C-130s, which will be very hard to sustain until 2024. Australia’s offer in July this year to sell five refurbished ex-RAAF C-130H transport aircraft to Indonesia, on top of the four planes donated in 2011 (but not yet delivered), provides a welcomed interim solution. Long term, however, it’s unclear whether the TNI-AU will acquire a fleet of modern airlifters of similar size, such as the C-130J-30 aircraft or the even larger Airbus A400. Again, money will most likely be a limiting factor, and the TNI-AU currently invests in cheaper, locally produced, but less capable CN-295 medium transport aircraft. There are no current plans to acquire a strategic airlift capacity. Figure 6 provides a basic overview of the TNI-AU’s actual (old/modern) and planned capabilities.

**Figure 6: Indonesian Air Force (TNI-AU) capabilities**

<table>
<thead>
<tr>
<th></th>
<th>Approximate number of systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combat aircraft</td>
<td>150</td>
</tr>
<tr>
<td>Jet trainer</td>
<td>10</td>
</tr>
<tr>
<td>Airborne Early Warning and Control (AEW&amp;C)</td>
<td>0</td>
</tr>
<tr>
<td>Tanker</td>
<td>0</td>
</tr>
<tr>
<td>Strategic airlift</td>
<td>0</td>
</tr>
<tr>
<td>Tactical airlift (medium)</td>
<td>0</td>
</tr>
<tr>
<td>Tactical airlift (light)</td>
<td>2</td>
</tr>
<tr>
<td>Maritime patrol (MP)</td>
<td>3</td>
</tr>
</tbody>
</table>

*‘Planned’ refers to actual acquisitions of new platforms which will enter into service as well as Indonesian statement of intent to acquire new platforms over the next decade; ‘actual (modern)’ refers to platforms which entered into service after 1990; ‘actual (old)’ refers to platforms which entered into service prior to 1990, the reliability of many of those platforms is questionable.*

The TNI-AU is trying to invest in more sophisticated equipment, particularly for air combat capability. As a result, it will modestly increase its capacity to patrol Indonesia’s air space and to provide tactical airlift for operations within the archipelago. That said, it still lacks key assets for modern air operations and insufficient resources as well as incoherent planning make it highly unlikely that the TNI-AU will achieve its ambitions by 2024 or pose a significant challenge for a state-of-the-art air force such as the RAAF.
A more mobile army?

Despite a greater emphasis on naval and air forces, the army (Tentara Nasional Indonesia Angkatan Darat, TNI-AD) retains a strong grip on the way the TNI thinks, organises and spends resources. Indonesia’s continental strategic mindset favours the army as the main service. It’s by far the biggest service. As well, Indonesian policymakers and the electorate consider internal security issues much more pressing. The TNI-AD therefore remains much more visible in daily Indonesian life than the other two services. Across the country it retains 13 territorial commands (KODAMs) that provide not only a structure to react to low-level conflicts, but also an opportunity to influence provincial and local politics. In contrast, the navy and air force don’t enjoy such a strong constituency. Furthermore, the army has made a case to be the leading service when it comes to border security, humanitarian and disaster relief, and peacekeeping operations.

… the TNI-AD recognises the need for reform and has announced its goal of developing into a more agile, rapidly deployable force to ‘narrow the defence gap in the islands outside the island of Java.’

Nevertheless, the TNI-AD recognises the need for reform and has announced its goal of developing into a more agile, rapidly deployable force to ‘narrow the defence gap in the islands outside the island of Java’.\textsuperscript{35} This would require significant improvements in logistics, airborne capability, air mobility and mechanised mobility. Yet, implementation is slow at best. Indeed, key procurement decisions seem driven more by status than by operational utility.

The most prominent army procurement has been the purchase of 103 surplus Leopard 2A6 main battle tanks, 50 Marder 1A3 infantry fighting vehicles and 10 support vehicles from Germany in 2012. The tanks were labelled a ‘cornerstone’ of the MEF and vital to strengthening ‘border security’. However, apart from significant operating costs, they seem unsuitable for Indonesia’s terrain, particularly the mountainous border with Malaysia in Kalimantan. It’s also hard to see them offering much operational utility in any Papuan conflict. Finally, the tanks will apparently be delivered without fire control systems, which would further reduce their operational utility.

To be fair, the TNI-AD has taken some steps to improve air mobility and air attack capability, but the current readiness of army aviation is estimated to be only 60%. The army recently acquired 18 Russian Mi-17 medium-lift transport helicopters, which will improve its capacity in local contingencies, such as in Papua. For air attack, the army took delivery of six reliable but ageing Russian Mi-35P Hind systems. Overall, it’s still a rather modest capability, given Indonesia’s vast territory.
But the biggest news was that the US announced in August 2013 that it would sell Indonesia eight AH-64D Apache attack helicopters. Reportedly, the US$500 million deal includes pilot training and radars. Judging by the price, however, it doesn’t include a primary weapon system, such as modern air-to-surface missiles. The Apache is a world-class system, but some question marks remain over how the army intends to operate this capability. First, it’s a very expensive platform to operate and maintain. Second, its operational utility is unclear. In a purely land-attack configuration, the ‘gunship’ could become another expensive, largely symbolic piece of kit, given Indonesia’s operating environment. Optimised for littoral operations, the Apache could strengthen Indonesia’s maritime denial capability, but only if the army and navy agree on joint operations. The helicopters’ final armaments and configuration (communications and data systems), as well as basing, will thus be critical in determining their future operational value. The worst-case scenario is that the Apache will be a very expensive ‘airborne main battle tank’, unsuited to the country’s operational needs and mostly used for symbolic purposes.

The army’s Special Forces Command (KOPASSUS) retains three groups (2 Commando/Paramilitary units; 1 Counter-Terrorism unit; 1 Intelligence unit). KOPASSUS plays a critical role in domestic counter-terrorism (CT) and military operations related to safeguarding Indonesia’s territorial integrity. Australia’s Special Air Service Regiment (SASR) has a long tradition of conducting a major annual counter-terrorism exercise with KOPASSUS, suspended between 1999 and 2003 in the wake of the East Timor operation. Indeed, this relationship has long been the ADF’s primary link to the Indonesian land forces; only recently did Army initiate cooperation among the conventional forces of both countries. Ties with KOPASSUS have been subject to domestic criticism in Australia because of its sometimes contentious domestic operations. However, on balance Australia has an overriding interest in Indonesia’s territorial integrity and maintaining close relations between the special forces for CT and intelligence collection purposes.

...for peacekeeping operations the government has announced the ambitious goal of creating a standing peacekeeping force of about 10,000 personnel.

Finally, for peacekeeping operations the government has announced the ambitious goal of creating a standing peacekeeping force of about 10,000 personnel. It’s estimated that Indonesia currently has a pool of about 4,000 troops for such missions. As of June 2013, Indonesia had contributed 1,636 troops to UN peacekeeping operations, particularly to UNIFIL in Lebanon. On a global scale, the country ranked 16th, while in Asia only India (6,821), Bangladesh (6,047) and China (1,710) provided more troops. In 2011, Indonesia established the new TNI Peacekeeping Centre in Sentul, Java. Moreover, elements of KOPASSUS and the strategic reserve (Kostrad) are apparently being reorganised to be deployable for international peacekeeping. As a result, a greater pool of Indonesian peacekeeping forces could emerge. It must be said, however, that peacekeeping operations are mainly used by armed forces of developing countries as a force generation instrument. Figure 7 provides a basic overview over the TNI-AD’s actual (old/modern) and planned capabilities.
The TNI-AD has thus taken only incremental steps towards a more modern, agile and deployable force. Most of its units remain non-deployable because of ineffective training schemes, lack of financial resources and a territorial command structure more suited to provincial politics than operational effectiveness. Until the TNI-AD systematically addresses the problem of a force that’s too large and expensive—which would include restructuring a reserve force of 400,000 personnel—TNI modernisation as a whole will remain difficult.

### Limited C4ISR and professionalism

A modern TNI would depend on robust C4ISR systems to connect and employ sophisticated sensors and weapons. The TNI’s abilities in this area are still very limited. As mentioned above, it doesn’t operate AEW&C systems to guide air combat operations. Moreover, for over a decade, Indonesia has tried to develop an indigenous tactical unmanned aerial vehicle—called Puna—for surveillance purposes, but its limited industrial capability has stymied progress. Similar problems have slowed the introduction of an indigenous 122 mm rocket launcher system. The navy also has significant shortfalls when it comes to ship-borne sensor systems.
However, Indonesia has improved its maritime reconnaissance and surveillance capabilities:

- In 2011, it put in place the US-funded Integrated Maritime Surveillance System (IMSS), which consists of 18 coastal surveillance stations, 11 ship-based radars, two regional command centres and two fleet command centres. The US also provided US$4.6 million to ensure sustainment until 2014.
- In 2012, Indonesia established two additional radar stations, featuring British technology, to further upgrade its shore-based coastal surveillance network.
- In March 2012, China offered Indonesia a maritime surveillance system to monitor maritime chokepoints, such as the Lombok and Sunda straits. Should Indonesia accept the offer, China would be able to monitor US and Australian shipping traffic in this area, including warships.

Overall, however, the TNI’s C4ISR capabilities remain rudimentary. Its challenges are exacerbated by the fact that over the years it’s acquired a wide array of largely incompatible military systems from more than 20 different countries.

The TNI also faces some difficult choices between professionalism and force size. Efforts are underway to increase the professionalism of TNI officers which is a prerequisite for a modern defence force. As the TNI seeks to introduce and maintain more sophisticated weapons, as well as optimise its force for more outward-oriented military operations, it needs to significantly increase the money spent per individual soldier in order to build a more conventional and competent TNI. As a result, the overall size of the TNI—particularly the land force and its large reserve—would shrink yet become more professional and deployable. The question is to what degree the TNI leadership is prepared to make this trade-off, particularly as a smaller local footprint could diminish its influence in local politics.

**Strengthening defence industrial capacity and procurement?**

The Indonesian Government has initiated a push to strengthen the domestic defence industrial base. In 2012, the Indonesian Parliament approved a national defence industry bill that provides a framework under which financial assistance should be provided to domestic defence companies. It also seeks to prioritise indigenous military systems in future procurement cycles and creates offset guidelines. The long-term goal is to reduce Indonesia’s reliance on foreign arms suppliers by producing major weapons systems in-country and to establish the defence industry as a ‘strategic industry’.

The long-term goal is to reduce Indonesia’s reliance on foreign arms suppliers by producing major weapons systems in-country and to establish the defence industry as a ‘strategic industry’.
Yet, paradoxically, plans to pork barrel local defence industries could seriously hamper TNI modernisation. Certainly, local defence industries have made some progress in building smaller, less sophisticated military platforms, such as patrol boats, the CN-235 maritime patrol aircraft and the Bell 212EP helicopter. However, attempts to build more complex systems, such as modern submarines or even light frigates, will pose major challenges, given the poor state of Indonesia’s defence industrial capacity.

It will also be next to impossible to achieve economies of scale. The growing complexity of major military systems leads to ever more consolidation of defence industries around the world, so that only a few countries remain major suppliers of such platforms. Indonesia simply won’t be able to compete in this market. Experts point out that it would be counterproductive for Indonesia to insist on indigenous procurement if the goal is to modernise the TNI and not to address national economic problems or serve as a national prestige object.  

In the context of Indonesia’s democratic modernisation and economic growth, Western nations are increasingly willing to provide Indonesia with more sophisticated platforms.

Moreover, the traditional argument for indigenous defence production has been the country’s vulnerability to Western sanctions, which hit the TNI hard in the past. Yet, in the context of Indonesia’s democratic modernisation and economic growth, Western nations are increasingly willing to provide Indonesia with more sophisticated platforms. Questions of possible human rights abuses have subsided. Finally, Indonesia shows no signs of ending the practice of acquiring defence equipment from a high number of different foreign suppliers. Indeed, the high level of corruption continues to create incentives for various interest groups in and outside the TNI to continue buying overseas.
CHAPTER 4

Implications for Australia

The TNI is still a long way from reaching its ambitious defence plans. There’s little indication of a radical break with past practices in Indonesian defence policy: a lack of cohesion in strategic planning and procurement; continued commitment to a largely insular defence doctrine; bold declarations about procurement plans, regardless of whether funding is available; a counterproductive focus on promoting Indonesia’s indigenous defence industry; and money spent on expensive military equipment without the ability to keep it in service. In other words, more often than not, TNI conflates new shiny equipment with real military capability. As well, Australia’s strategic debate needs to keep in mind that regardless of political rhetoric in Jakarta, defence policy remains low on the list of political priorities.

...for the foreseeable future TNI will remain an imbalanced, mostly non-deployable force.

Consequently, for the foreseeable future TNI will remain an imbalanced, mostly non-deployable force. Shortfalls in key areas of military capability such as professionalism, training, joint operations, air combat, submarine warfare, ASW, naval surface warfare, C4ISR, and logistics will either persist or only partially be addressed. TNI’s power projection capability beyond its EEZ will continue to face severe limitations. Expectations about Indonesia’s emergence as a major regional military power are likely to be disappointed. For the foreseeable future, the ADF will retain its ‘capability edge’ over Indonesia when it comes to high-end warfighting. Alarmist predictions about TNI capability developments and the erosion of the ADF’s technological superiority are not only unfounded but also unhelpful for efforts to further strengthen the bilateral defence relationship.

Doing so is important since TNI’s capabilities will certainly improve in relative terms, aided by Indonesia’s general political and economic trajectory. In particular, it will make progress in strengthening maritime denial capability, e.g. improvements in littoral warfare and force projection within its EEZ. Access to modern technologies such as anti-ship missiles, better maritime domain awareness, an increase in coastal combatants, and improved capacity to deploy troops within the archipelago means that the future TNI will certainly be better placed to engage any hostile force operating in its waters. It will also increase its capability for missions below the high-end military spectrum such as unconventional, guerrilla warfare. Should Australia’s strategic relationship with Indonesia become more tense again, for example in a crisis over Papua, the ADF would certainly face a TNI in a much better position to pose enormous operational headaches.
This is not to argue that the ADF needs to benchmark against TNI capability developments. Rather, it’s to underscore the critical importance for Australia to get the defence relationship right. As Indonesia’s relative military power grows, Australia has an abiding interest in ensuring cooperative security and defence relations with our bigger neighbour. A friendly, militarily more powerful Indonesia would be a major geostrategic asset for Australia amidst the power shifts in Asia. The good news is that Indonesia’s current investments in coastal defence and littoral warfare will make it very difficult for any hostile force to establish a stronghold in the archipelago in order to project force against the Australian continent. Jakarta’s current political trajectory creates greater alignment of strategic interests between the two countries. For Indonesia, closer defence engagement with Australia not only offers access to state-of-the-art military practise and potential to increase maritime security. Strategically, it also means Jakarta wouldn’t need to worry about its southern flank but could concentrate on shifting power dynamics in the South China Sea; indeed, if Indonesia ever was to face a major external security threat Australia most likely would offer political and military support.

As a result, Australia and Indonesia appear on track to developing a more ‘normal’ defence relationship that moves beyond stereotypes of regarding each other as ‘best mate’ or ‘future foe; instead it’s increasingly based on shared strategic interests. Defence ties have markedly improved and mutual trust lost in the wake of the East Timor operation has largely been restored. For example, in September 2012, Australia and Indonesia signed the Defence Cooperation Arrangement, which introduced a formal framework for practical defence cooperation under the 2006 Lombok Treaty. Importantly, the Lombok Treaty recognised Indonesia’s territorial integrity, including the Papuan province. In addition, the first formal Annual Defence Ministers’ Meeting was held in 2012, and military exercises as well as staff exchanges have increased markedly since 2002. Notably, in 2012 the Indonesian Air Force for the first time participated in Exercise Pitch Black and dispatched four of its newest combat aircraft (Su-27s/Su-30s). Moreover, a newly established Indonesia–Australia Defence Alumni Association (IKAHAN) contributes to confidence building between the defence communities of both countries. The importance of substantial ties between ADF and TNI officers, both at the strategic and tactical level, cannot be overstated. In fact, during East Timor the military-to-military relationship was critical to manage the crisis. Finally, Indonesia’s Ministry for Defence has announced that it will consult Australia closely on its next defence white paper, reciprocating Defence’s consultations and extensive briefings in the context of the 2013 DWP.

...there’s a challenge to add more substance to practical defence cooperation.

However, that doesn’t necessarily mean that further improving the bilateral defence relationship will be easy. First, there’s a challenge to add more substance to practical defence cooperation. So far, this cooperation has focused on uncontroversial areas, such as staff exchanges, military exercises or humanitarian assistance and disaster relief (HADR). What more is there beyond these ‘low-hanging fruits’? The second challenge is related to the shifting power balance between the two countries. While Indonesia will naturally always be Australia’s most important regional defence relationship, the reverse isn’t necessarily true. Instead, for Jakarta, the defence link is just one among many and the need to improve it isn’t necessarily regarded with a great sense of urgency. This imbalance could grow if Indonesia continues to become more attractive for more powerful players seeking to engage with Jakarta, such as China, the US or India. This situation has at least two strategic consequences for Australia. Positively, Indonesia simply doesn’t pay much attention to us in the assumption that Australia is its friend and partner at its southern flank. The downside is that Australia (and Defence) needs to provide more incentives for TNI to cooperate. The days where TNI was an eager recipient of Australian defence aid (including fully funded activities) are over. Instead, Indonesia’s likely to see defence cooperation more as a two-way street, including the possibility of joint military developments and selling Indonesian defence products to the ADF. This, however, would require much deeper levels of cooperation as well as create thinking on both sides.
The Australian Government should seek to shape Indonesia’s defence capability in a way that suits our interests. This includes assisting TNI’s capability development in areas that strengthen its capacity to safeguard its EEZ and which contribute to greater TNI professionalism. While the scope for cooperation on major platforms remains limited (and arguably not necessarily in Australia’s direct interest), Defence could consider additional ways to support TNI capability developments. Moreover, it’s important to further improve the networks between ADF and TNI which are key to hedge against potential tensions in the future. Finally, there are possibilities to improve ‘two-way’ bilateral defence cooperation. In addition to existing initiatives, the Australian Government and Defence could consider the following steps:

- **Cooperation between the Defence Materiel Organisation (DMO) and Indonesian counterparts.** Effective and efficient defence procurement and sustainment, including areas such as commercial risk assessment, defence contracting, legal issues, life-cycle costing, financial management and probity, and logistics management is a key challenge for TNI. As a recent ASPI study pointed out, DMO has recently increased its engagement in Southeast Asia and, for example, conducted a Capability Development workshop in Thailand. Working with Indonesia should be made a priority. DMO could not only conduct similar workshops in Indonesia, it could also initiate cooperation between Australian defence industry and TNI in the area of defence support to expose the Indonesian military to ‘best practice’ procurement and sustainment. For example, Indonesia has expressed interest in learning from the cooperation model between the ADF and Qantas Defence Services. This could also create new business opportunities for Australian companies.

- **Assistance in doctrine and capability planning.** The TNI is moving towards acquiring more sophisticated military systems but has very limited experience in how to operate those platforms or how to translate systems into military capability, including as part of a joint force. Further, it’s now in the process of developing doctrine for modern naval, air and land operations—an area where the ADF has much expertise to offer.

- **Strengthening of single service cooperation, ADF language skills, and cultural awareness training.** The Army’s special forces traditionally have had the strongest network with its TNI counterpart, KOPASSUS. Regular army-to-army cooperation has been hampered by mutual mistrust in the aftermath of East Timor. However, Army has begun to invest more in practical cooperation with TNI-AD. Particularly, the development of its amphibious capability and the TNI-AD’s interest in becoming a more mobile force provide significant opportunities for deeper cooperation. Moreover, as the TNI navy and air force grow in relative importance, the RAN and RAAF should also increase their networks beyond existing levels. For example, the RAN could establish of a full-time RAN instructor at the Indonesian Naval Staff College (Seskoal). Meanwhile, cooperation between the RAAF and TNI-AU could be increased in critical aspects such as information sharing and airworthiness. In general, the ADF needs a larger pool of officers trained in Bahasa Indonesia and cultural awareness.
• **Upgrade Australia’s special operations representation at the Australian Embassy in Jakarta.** The ADF’s Special Operations Command’s (SOCOMD) ability to maintain close ties with KOPASSUS will only grow in importance. As well, SOCOMD could play a greater role in improving the capacity of regular TNI forces, as US special forces do in the Philippines. However, its current in-country presence is only on a rotational basis. To facilitate the build-up of even deeper ties, Defence should consider creating a permanent SOCOMD posting at the Australian Embassy in Jakarta.

• **Cooperation on amphibious capability.** Unlike Australia, Indonesia has a Marine Corps and conducts regular exercises with the US Marines. As the ADF moves to develop an amphibious component, closer cooperation could be beneficial for both sides. That cooperation could be extended to include the US Marine Air–Ground Task Force rotating through Darwin. Australia should also seek close coordination with the US with regard to the two countries’ bilateral defence activities with Indonesia, to avoid unnecessary duplications and to harmonise strategic approaches.

• **Trilateral maritime defence cooperation with India.** Because of shared interests in the eastern Indian Ocean, closer defence engagement between Australia, Indonesia and India, particularly in the maritime domain, makes sense. Recently, India has warmed to the idea of more concrete forms of cooperation, and Indonesia’s current government has embraced the term ‘Indo-Pacific’ and the need to develop new forms of security cooperation in this region.44

• **Conduct of joint maritime patrols with Indonesia’s Western Fleet.** So far, the RAN has conducted coordinated maritime patrols with Indonesia’s Eastern Fleet off Surabaya. It would make sense to extend similar patrols to the Western Fleet.

• **Sharing of maritime surveillance.** Both countries have a requirement for maritime situational awareness, and it would be in the interests of both sides to share information on boat movements.45 The recent establishment of the TNI-AL’s National Maritime Information Centre provides a good opportunity to increase this type of cooperation. In this context, Australia could further increase Indonesia’s capacity to monitor its maritime and air space by sharing data from the Jindalee Operational Radar Network (JORN). JORN’s over-the-horizon radar covers virtually the whole Indonesian archipelago. Sensitivities about JORN’s security could be mitigated by providing Indonesia with only filtered datasets. In turn, Indonesia could share data from its newly established maritime surveillance systems. Such steps could significantly strengthen trust between the two countries. A further step might be a later move to make Australia’s Cocos Islands a location for shared maritime surveillance and patrol operations.


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<tr>
<th>Acronym</th>
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<tr>
<td>ADF</td>
<td>Australian Defence Force</td>
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<tr>
<td>AEW&amp;C</td>
<td>airborne early warning and control</td>
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<td>ASW</td>
<td>anti-submarine warfare</td>
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<tr>
<td>C4ISR</td>
<td>command, control, communications, computers, intelligence, surveillance and reconnaissance</td>
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<tr>
<td>DIO</td>
<td>Defence Intelligence Organisation</td>
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<tr>
<td>DMO</td>
<td>Defence Materiel Organisation</td>
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<tr>
<td>EEZ</td>
<td>exclusive economic zone</td>
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<tr>
<td>GDP</td>
<td>gross domestic product</td>
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<tr>
<td>JORN</td>
<td>Jindalee Operational Radar Network</td>
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<tr>
<td>MCM</td>
<td>mine countermeasures</td>
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<tr>
<td>MEF</td>
<td>Minimum Essential Force</td>
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<td>RAAF</td>
<td>Royal Australian Air Force</td>
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<td>RAN</td>
<td>Royal Australian Navy</td>
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<tr>
<td>TNI</td>
<td>Tentara Nasional Indonesia (Indonesian Armed Forces)</td>
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<td>TNI-AD</td>
<td>Tentara Nasional Indonesia Angkatan Darat (Indonesian Army)</td>
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<td>TNI-AL</td>
<td>Tentara Nasional Indonesia Angkatan Laut (Indonesian Navy)</td>
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<tr>
<td>TNI-AU</td>
<td>Tentara Nasional Indonesia Angkatan Udara (Indonesian Air Force)</td>
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<tr>
<td>UAV</td>
<td>unmanned aerial vehicle</td>
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Moving beyond ambitions?
Indonesia’s military modernisation

Over the next 10 to 15 years, Indonesia wants to become a major regional military power. The armed forces’ (Tentara Nasional Indonesia, TNI) ambitions include a 274-ship ‘green-water navy’, 10 fighter squadrons and 12 diesel–electric submarines. While similar ambitions failed in the past, this time the match between ambitions and resources could be closer given Indonesia’s positive political and economic trajectory. Indeed, TNI’s coastal defence and littoral warfare capabilities will incrementally improve. Access to modern technologies such as anti-ship missiles, better maritime domain awareness, an increase in coastal combatants, and improved capacity to deploy troops within the archipelago means that it will be better placed to engage any hostile force operating in its maritime approaches. Yet, TNI modernisation continues to suffer from traditional shortfalls in Indonesian defence policy such as incoherent strategic planning and defence procurement, an outmoded defence doctrine, insufficient funding, and an inability to maintain military equipment. Into the foreseeable future, the ADF will retain its high-end ‘capability edge’ over Indonesia and TNI’s power projection capabilities will remain limited.

Australia has a major interest in shaping Indonesia’s emergence as a military power. A friendly, militarily more powerful Indonesia would be a major geostrategic asset for us. To do so, new ways to support TNI capability development are needed. The days where Indonesia was an eager recipient of Australian defence aid are numbered. Moreover, a greater convergence of interests could be moderated by a divergence in strategic approaches to defence policy. One new instrument could be to utilise the Defence Materiel Organisation to improve TNI’s defence procurement and sustainment process. In addition, Defence should offer to assist TNI in doctrine and capability planning. As well, single service cooperation between the ADF and TNI could be intensified. Finally, joint maritime surveillance offers room for greater cooperation. In sum, Indonesia's military will continue to face a considerable gap between ambitions and reality. Yet, Australia needs to anticipate the emergence of a more capable Indonesian military willing and able to play a greater role in regional security.