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NUCLEAR POLICY ISSUES FOR AUSTRALIA

<i>John Carlson</i> The Potential for a Regional Uranium Enrichment Centre in Australia	1
<i>Ramesh Thakur</i> Nuclear Weapons: A Progress Report	11
<i>Wayne Reynolds</i> An Astute Choice: Anglo-Australian Cooperation on Nuclear Submarines in Historical Perspective .	21

ARTICLES

<i>Paul Dobb and Richard Brabin-Smith</i> Australian Defence: Challenges for the New Government	45
<i>Andrew Carr and Peter J. Dean</i> The Funding Illusion: The 2% of GDP Furphy in Australia's Defence Debate	65
<i>Sam Bateman and Quentin Hanich</i> Maritime Security Issues in an Arc of Instability and Opportunity	87

Editors' Note

2013 has been a hectic and challenging year for security analysts in Australia and the Asia-Pacific. Each week seems to bring with it a significant new change in regional affairs, each more challenging than the last. Yet as we approach the end of the year, it seems a good time to step back from the daily cycle and return to some fundamental questions about the region and how Australia seeks its security.

This edition of *Security Challenges* takes a particular look at the ever-present issue of nuclear weapons and nuclear power. John Carlson examines whether Australia could strengthen the non-proliferation regime by creating an international uranium enrichment facility, Ramesh Thakur updates us on the recently released State of Play report on non-proliferation and disarmament, while Wayne Reynolds examines the potential for nuclear-powered submarines to one day feature as part of Australia's forces.

Turning to issues of domestic policy making, Paul Dibb and Richard Brabin-Smith—two of the country's most experienced defence officials—outline the challenges and opportunities for the new Abbott Government, while Andrew Carr and Peter Dean examine the public debate over the new target of spending two per cent of Australia's GDP on Defence. Finally, Sam Bateman and Quentin Hanich explore the South Pacific's emerging maritime challenges. This edition also marks the expansion of our editorial board, with Iain Henry, a Fulbright Scholar soon to be based at Princeton for a year, joining our team. Best wishes to all our readers for a safe and happy festive season.

Stephan Frühling Peter Dean Andrew Carr & Iain Henry
Managing Editors
December 2013

The Potential for a Regional Uranium Enrichment Centre in Australia

John Carlson

Australia has the world's largest uranium reserves—one third of the world total¹—and is part of the Asia-Pacific region, the region of largest growth in nuclear power utilisation. Accordingly, Australia seems well placed to become a major supplier of uranium enrichment services in the future. This is not simply a commercial issue, but could help advance non-proliferation objectives. Uranium enrichment is a dual-use technology—a country with a national enrichment program has the potential to use this for producing nuclear weapons. Increasing awareness of this proliferation risk has prompted efforts to develop a new international framework for nuclear energy, emphasising international cooperation as an alternative to national fuel cycle programs. A multilaterally-based enrichment centre in Australia, with regional participation, could obviate further national enrichment programs in the region and would be a significant step towards establishing multilateral approaches to the nuclear fuel cycle as a global norm.

Background: Uranium Enrichment Activities in Australia

The former Australian Atomic Energy Commission (AAEC—the predecessor to the Australian Nuclear Science and Technology Organisation, ANSTO) operated a centrifuge uranium enrichment research and development (R&D) program from the mid-1960s to the mid-1980s. On the basis of this work, Australia was one of the participants in the Hexapartite Safeguards Project which developed International Atomic Energy Agency (IAEA) safeguards arrangements for centrifuge enrichment facilities.² The AAEC's centrifuge work was terminated following the election of the Hawke Labor Government in 1983. The AAEC and later ANSTO also conducted a small laser enrichment R&D program, which was closed in the early 1990s.

¹ Australia has 33 per cent of the world's reasonably assured uranium resources recoverable at less than USD \$130/kg—'Australia's Uranium Resources', Department of Resources, Energy and Tourism, June 2012, <<http://www.ret.gov.au/resources/Documents/Mining/uranium/Uranium-Industry-factsheet.pdf>> [Accessed 7 November 2013].

² The Hexapartite parties were United States, United Kingdom, Germany, Netherlands, Japan and Australia.

In the 1970s a private sector consortium, UEGA (Uranium Enrichment Group of Australia)³ was formed to study the possibility of commercial uranium enrichment in Australia. The AAEC was involved as technical adviser. UEGA looked at a number of technologies, and settled on URENCO centrifuge technology.⁴ However, the commercial terms offered by URENCO at that time were not favourable, and when the incoming Hawke Government announced it would withdraw government support, UEGA terminated the project.

As part of the UEGA project, and also as a separate activity associated with the South Australian Government, the prospect of uranium conversion⁵ in Australia was also studied in the 1970s. The study concluded that uranium conversion would be viable only if associated with an enrichment project.

In 1992 a private sector company, Silex Systems Ltd, commenced R&D into a new laser enrichment process, named SILEX. This work was conducted in laboratories leased from ANSTO at Lucas Heights, but was otherwise independent of ANSTO. In May 2006 Silex Systems and General Electric (GE) announced agreement on the sale of an exclusive licence for the SILEX technology to GE and the further development of the technology in the United States. Under the terms of this agreement the SILEX uranium enrichment process will not be developed further in Australia.

Prospects for Uranium Enrichment in Australia: Relevant Considerations

The main factors influencing whether uranium enrichment is established in Australia in the future are as follows:

Domestic politics—unless both the major political parties (the Coalition and Labor) support a nuclear industry in Australia, no investor will be prepared to commit the substantial funds needed for uranium enrichment, or any other nuclear activity. In view of the costs and the long lead-times for a nuclear facility, support of only one of the major parties would not be sufficient to provide the necessary business confidence. Labor has held an anti-nuclear position since the 1980s, permitting only nuclear research and uranium mining (until 2007 Labor opposed any new uranium mines)—essentially, establishment of a commercial nuclear facility would require a change in Labor policy.

Historically the Coalition has supported nuclear power and other nuclear industry activities in Australia. A Coalition Government studied building a

³ Uranium Enrichment Group of Australia (UEGA) comprised BHP, CSR, Peko-Wallsend and WMC.

⁴ URENCO is a United Kingdom/Germany/Netherlands consortium.

⁵ Conversion is the process of producing the feed material for uranium enrichment, uranium hexafluoride (UF₆).

power reactor at Jervis Bay (on the coast east of Canberra) in the 1960s, and the UEGA enrichment study proceeded during a Coalition Government in the 1970s and early 1980s. The Howard Government established the 2006 Uranium Mining, Processing and Nuclear Energy Review (UMPNER—see below). The Industry Minister in the recently-elected Coalition Government, Ian Macfarlane, is reported as saying “the government has no plans to introduce nuclear power in Australia” and, underscoring the discussion in the previous paragraph, “nuclear power will not be introduced in Australia without bipartisan political support and widespread community support.”⁶

Today nuclear power—and by association, uranium enrichment?—is generally considered to have insufficient public support in Australia. Pressure for change on nuclear power may come from increasing public concern about greenhouse gas emissions and climate change—Australia is one of the world’s highest carbon emitters per capita,⁷ and some 77 per cent of electricity generation is coal-fired.⁸ It is conventional wisdom that the Fukushima accidents have negated possible Australian public support for nuclear power as part of carbon reduction efforts. However, if governments (of either persuasion) are serious about carbon reductions, it will not be realistic to exclude nuclear power from the energy mix. As regards enrichment, nuclear power in our region is growing in spite of Fukushima. While domestic nuclear power could provide base demand for an Australian enrichment project this is not essential, the project could be wholly export-oriented.

Availability of technology—Australia is an enrichment technology holder, through the centrifuge technology developed by the AAEC in the 1960s-1980s. It is not likely however that the AAEC technology could be revived and developed to commercial viability in any reasonable time frame. Australia’s other indigenous enrichment technology, the SILEX laser process, has been sold for further development in the United States. Accordingly, any company wishing to pursue uranium enrichment in Australia would have to import suitable technology—this would require agreement of both the technology holder and the technology holder’s government.

⁶ Peter Hannam, ‘Race Against Time: Scientists Push for Energy Switch’, The Sydney Morning Herald, 4 November 2013, <<http://www.smh.com.au/environment/climate-change/race-against-time-scientists-push-for-energy-switch-20131104-2wxhd.html>> [Accessed 19 November 2013].

⁷ Australia’s carbon dioxide emissions were 16.9 tonnes per capita in 2010, second only to the United States amongst major developed economies—‘CO2 Emissions (Metric Tonnes per Capita)’, World Bank, 2013, <<http://data.worldbank.org/indicator/EN.ATM.CO2E.PC>> [Accessed 7 November 2013].

⁸ Australian Coal Association, 2013, <<http://www.australiancoal.com.au/energy.html>> [Accessed 7 November 2013].

Commercial factors—any enrichment project in Australia would be conducted as a commercial, not government, activity. Accordingly any project would require investors with access to the substantial capital sums required. Investors would have to be satisfied about issues such as political risk (i.e. stability of government policy) and rate of return. The possibility of enrichment in Australia was considered by the 2006 UMPNER Review. The Review noted the significant value-adding potential of enrichment in Australia, but considered that high commercial and technology barriers could make market entry difficult. Ultimately the commercial viability of an enrichment project would be a matter for determination by the companies involved.

International issues—although enrichment for power reactor fuel would be a commercial venture, establishing an enrichment capability could have major strategic implications. The Iranian enrichment program in particular has focused attention on the proliferation potential of national enrichment programs. This issue of ‘nuclear latency’ is very much in the background in the protracted negotiations for the renewal of the US/Republic of Korea (ROK) nuclear cooperation agreement, where the ROK is seeking consent to undertake enrichment and reprocessing.

An enrichment project in Australia (as in other countries) would have to meet Nuclear Suppliers Group (NSG) guidelines for the transfer of enrichment technology. In 2011 the NSG issued guidelines on the transfer of sensitive nuclear technology. These include encouragement of supplier involvement and/or other appropriate multinational participation in enrichment and reprocessing facilities as an alternative to national plants, and supply of technology on a ‘black box’ basis (see below).

More important than meeting particular technology transfer requirements, the long term strategic implications of an Australian enrichment program would have to be considered. Although Australia is one of the non-proliferation regime’s leading supporters, there is no doubt that other governments would consider the possibility that Australia’s position could change over the longer term—not that Australia is in any way suspect, this would be a consideration about any country proposing a national enrichment program. This could lead other countries to seek a matching capability for strategic reasons—clearly an undesirable outcome from the non-proliferation perspective.

New national enrichment programs would be a set-back to international efforts to develop multilateral approaches as an alternative to national projects in proliferation-sensitive nuclear areas. This should be a serious consideration for any country contemplating a new enrichment program.

A Multilateral Approach to Enrichment

The concept of international or multination operation of sensitive nuclear facilities goes all the way back to the 1946 Baruch Plan. The concept was examined in the 1980 International Nuclear Fuel Cycle Evaluation (INFCE) report. Australia's commercial centrifuge enrichment proposal of the 1970s was envisaged as a regional project, with the possible involvement of Japan and others—a concept consistent with the INFCE recommendations. International fuel cycle centres are an important component of the Global Nuclear Infrastructure Initiative proposed by President Putin in 2006, and Russia established the first such centre in 2007, at Angarsk. The idea of international fuel cycle centres, with multination participation, was specifically endorsed by the G8⁹ at the 2006 St Petersburg Summit. Subsequent G8 Summits have reiterated support for multilateral approaches to the nuclear fuel cycle.

Currently, the principal measures to address the proliferation risk posed by uranium enrichment are: to try to minimise the number of national enrichment programs; and to avoid technology transfer.

Minimising the number of national programs—any legitimate need for countries to consider establishing their own enrichment programs can be obviated by long-term fuel supply assurances/guarantees provided by existing enrichers and fuel suppliers. The form of such assurances is being studied in the International Framework for Nuclear Energy Cooperation (IFNEC)¹⁰ as well as by several governments and others. Supply assurances can be made more tangible and strengthened if the recipient is able to participate in the enrichment venture. In addition to supply assurances, participation can also provide equity benefits, e.g. through profit-sharing.

A historic example of a multilateral enrichment venture is Eurodif.¹¹ Eurodif is a commercial entity under French law. There was a protracted legal dispute between France and Iran over Eurodif supply issues—Iran uses this dispute to claim that supply assurances cannot be relied on.¹²

The contemporary example of a multilateral enrichment venture is the International Uranium Enrichment Centre (IUEC) at Angarsk.¹³ In contrast to Eurodif, participation in the IUEC is based on government-to-government agreements, hence the conditions of participation have the force of

⁹ Group of 8—Canada, France, Germany, Italy, Japan, Russia, United Kingdom and United States.

¹⁰ The International Framework for Nuclear Energy Cooperation (IFNEC) is the successor to the Global Nuclear Energy Partnership (GNEP).

¹¹ In addition to France, the parties in Eurodif are Belgium, Italy, Spain and Iran.

¹² In fact the dispute arose initially because Iran refused to take scheduled product deliveries.

¹³ In addition to Russia, participants in the Angarsk International Uranium Enrichment Centre are Kazakhstan, Ukraine and Armenia, and Mongolia is joining.

international law. The supply assurance aspects of IUEC are further strengthened through IAEA involvement—supply cannot be refused to a participant which the IAEA determines is meeting its safeguards obligations. Mention should also be made of URENCO, which has some multilateral attributes.¹⁴ URENCO does not offer participation to enrichment customers.

Supply of technology only on a ‘black box’ basis—under black box arrangements, technology is not transferred, but is limited to the technology holder. Recipients of enrichment equipment have no access to classified aspects of the technology—manufacturing, installation and maintenance are carried out by the technology holder. This is the established practice of URENCO, which is supplying centrifuge installations to France and the United States on a black box basis, and also of Tenex,¹⁵ which has supplied centrifuge installations to China.

It is noted that to date technology supply by URENCO and Tenex has been limited to nuclear-weapon states (France, United States, China), where ‘horizontal’ proliferation (i.e. acquisition of nuclear weapons by those states) is not an issue.¹⁶ In future, however, supply to non-nuclear-weapon states will also need to be considered. Russia’s Global Nuclear Infrastructure Initiative envisages that international fuel cycle centres may be established in a number of countries. Customer countries’ confidence in supply assurances may be stronger where international centres are located outside the major powers.

Non-proliferation Principles for Enrichment Centres

Drawing on the above discussion, the author suggests the following principles for minimising proliferation risks from uranium enrichment projects:

- enrichment centres should be established only in countries with strong non-proliferation credentials—in the case of non-nuclear-weapon states, they should be fully cooperating with IAEA safeguards under an additional protocol as well as a comprehensive safeguards agreement, and there should be no proliferation concerns;
- technology should be supplied only on a black box basis, so the host country has no access to sensitive aspects of the technology.

¹⁴ URENCO is based on the Treaty of Almelo, between the United Kingdom, Germany and the Netherlands.

¹⁵ Tenex is the abbreviation of Tekhsnabexport, the Russian enrichment operator.

¹⁶ Currently proliferation is usually thought of in ‘horizontal’ terms, i.e. acquisition of nuclear weapons by further states. In the future, if substantial progress is made with nuclear disarmament, vertical proliferation will also be an important concern—so a black box approach for technology transfers to nuclear-weapon states, which may have been adopted more for commercial reasons, is also important on non-proliferation grounds.

Manufacturing, installation and maintenance would be undertaken by the technology holder;

- the technology holder should be involved in the operation of the facility, to ensure it is not misused and to ensure the host country does not acquire sensitive technology or know-how;
- customer countries can participate in the centre: as part of the supply assurance arrangements; as part of the commercial arrangements (e.g. share-holding/profit sharing); and for building confidence that the facility is not misused by the host country. Arrangements will need to be developed so participants have access to material accountancy aspects of the facility sufficient to satisfy themselves that the facility is being operated as declared, but without any possibility of accessing technology and know-how;
- in addition to its safeguards functions, the IAEA might have a broader oversight role, e.g. ensuring that any decision to suspend supply to a particular country on safeguards grounds is made impartially.

A Multilateral Enrichment Centre in Australia?

One could imagine a future enrichment centre in Australia, based on URENCO or Tenex centrifuge technology supplied on a black box basis. In addition to the technology holder, there would be participation by regional countries with nuclear power programs—Japan, ROK and China, and looking ahead, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. The IAEA might also be involved in an oversight role (in addition to safeguards).

There would be no technology transfer to Australia or the other participants—thus avoiding potential proliferation risk—and regional countries would have assured supply of low enriched uranium (LEU) product, thus removing any reason they might have to develop their own enrichment capability.¹⁷

In addition to supply assurances, the participants would have the opportunity to invest in the centre and obtain commensurate profit-sharing. The centre would be covered by treaty-level agreements amongst the participants, guaranteeing the peaceful status of the facility and setting out the supply assurances. Perhaps the centre could be part of broader arrangements for

¹⁷ Noting of course that Japan and China already have enrichment programs.

an Asia-Pacific nuclear energy community ('Asiatom'?)—a discussion that goes beyond this comment.¹⁸

At this stage the potential capacity of such a centre is speculative. Centrifuge enrichment plants are modular—the centre could start at a relatively modest size (say 500,000 SWU¹⁹) and expand as markets are established. In round numbers, a facility of the present size of Angarsk (2.6 million SWU) would produce around 500 tonnes of low enriched uranium a year, sufficient to fuel twenty-five 1,000 MWe²⁰ reactors. The feed would be around 4,500 tonnes of uranium, half Australia's current capacity and perhaps a fifth of Australia's uranium production in 2025. To put the figure of twenty-five reactors into context—by 2025 China could have seventy reactors, the ROK thirty-two, and South East Asia between six and seventeen.²¹ Japan has fifty reactors which currently²² remain shut down post-Fukushima. It is not clear how many reactors Japan may have in operation in 2025. Leaving aside what Australia's own requirements might be by then, it is clear that the Asian market could accommodate an enrichment capacity in Australia considerably larger than the current Angarsk facility.

There would be many specific issues for Australia to consider, including: the form of the product to be exported (enriched uranium hexafluoride only, or complete fuel assemblies where practicable?); whether supply to a particular country could be suspended for serious safety and security issues as well as safeguards concerns; and whether customer countries might seek to persuade Australia to accept spent fuel. On the latter point, spent fuel take-back was part of the former Global Nuclear Energy Partnership (GNEP) concept, but this was on the basis that suppliers offering take-back would be in a position to recycle spent fuel in advanced reactors—clearly not Australia's situation.

Conclusion

Establishment of an enrichment centre in Australia would require government support—both at the Commonwealth level and also by a State or Territory willing to host the facility—as well as companies prepared to

¹⁸ See for example J. Carlson, 'An Asia-Pacific Nuclear Energy Community', APLN/CNND Policy Brief No. 4, June 2013, <http://cnnd.anu.edu.au/files/2013/policy-briefs/Policy_Brief_No_4_-_An_Asia-Pacific_Nuclear_Energy_Community.pdf> [Accessed 8 November 2013].

¹⁹ Separative Work Units.

²⁰ Megawatts (electrical).

²¹ Currently China has eighteen reactors in operation and thirty under construction. ROK has twenty-three in operation and five under construction—IAEA Power Reactor Information System, 31 October 2013; 'World Nuclear Power Reactors & Uranium Requirements', World Nuclear Association, 1 October 2013, <<http://www.world-nuclear.org/info/Facts-and-Figures/World-Nuclear-Power-Reactors-and-Uranium-Requirements/>> [Accessed 8 November 2013].

²² November 2013.

make the necessary investment. It would also require an expansion of Australia's nuclear regulatory arrangements (including amendment of legislation). The case for government support is that the centre would have a major non-proliferation benefit, forestalling the development of further national enrichment capabilities by others in the region and helping to establish the multilateral norm. It is to be hoped that the Commonwealth and State/Territory governments, together with industry, would be prepared to seriously consider such a project on its merits.

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Nuclear Weapons: A Progress Report

Ramesh Thakur

Nuclear weapons may or may not have kept the peace among various groups of rival states; they could be catastrophic for the world if ever used by both sides in a war between nuclear-armed rivals; and the prospects for their use have grown since the end of the Cold War. For nuclear peace to hold, deterrence and fail-safe mechanisms must work every single time. For nuclear Armageddon to break out, deterrence or fail safe mechanisms need to break down only once. This is not a comforting equation. It also explains why, unlike most situations where risk can be mitigated after disaster strikes, with nuclear weapons all risks must be mitigated before any disaster.¹

Almost a half century after the Nuclear Non-proliferation Treaty (NPT) was signed (1968) to stop further nuclear weapons proliferation and to facilitate nuclear weapons abolition, the world is yet to walk back from the nuclear cliff to the relative safety of a denuclearised security order. Nine countries seek security in nuclear weapons: China, France, India, Israel, North Korea, Pakistan, Russia, the United Kingdom, and the United States. Around forty countries—including Australia, Japan and South Korea in the Pacific—seek security through the nuclear weapons of their allies under extended nuclear deterrence.

The majority of the world's countries, however, remain interested in security from nuclear weapons by pursuing the threefold agenda of nuclear disarmament, nuclear non-proliferation, and nuclear security. The goal of an eventually denuclearised world is both necessary and feasible. As argued by the Canberra Commission, as long as any country has nuclear weapons, others will want them; as long as nuclear weapons exist, they will be used again some day, whether by design, miscalculation, rogue launch, human error, or system malfunction; any nuclear war fought by any set of nuclear-armed states could have catastrophic consequences for the planet.²

This comment first outlines the background and context of the deflation of the hopes and optimism that was almost palpable in 2009–10 for significant progress on the nuclear issues. It then analyses the main findings of the

¹ See Martin E. Hellman, 'How Risky Is Nuclear Optimism?', *Bulletin of the Atomic Scientists*, vol. 67, no. 2 (2011), pp. 47-56.

² *Report of the Canberra Commission on the Elimination of Nuclear Weapons* (Canberra: Department of Foreign Affairs and Trade, 1996), pp. 18-22.

inaugural *State of Play* report,³ which tabulates what progress has been made on all the relevant NPT Review Conference (RevCon), Nuclear Security Summit (NSS) and International Commission on Nuclear Non-Proliferation and Disarmament (ICNND) commitments and recommendations in the four dimensions of nuclear disarmament, nuclear non-proliferation, nuclear security, and peaceful uses of nuclear energy. The comment concludes with a brief remark on the need to pursue nuclear disarmament, non-proliferation and security with matching conviction and urgency at the risk otherwise of rollbacks and setbacks on all three.

The Evaporation of Optimism

In 2009–10 hopes were higher than for many years that the world was at last seriously headed towards nuclear disarmament as well as stopping any further proliferation of the most indiscriminately inhumane weapons ever invented. President Barack Obama's Prague Speech of 2009 had set the tone, with its elegant vision of a nuclear-weapon-free world.⁴ The report of the ICNND, building on others before it, had set an achievable global agenda, describing in detail all the building blocks that had to be constructed along the way.⁵

In 2009 the United States and Russia were back negotiating nuclear arms control more seriously than they had been for a decade. A major NSS was planned for 2010, with a sharply practical agenda designed to inhibit both proliferation and nuclear terrorism. And there was every sign, in the lead-up to the 2010 NPT RevCon, that unlike its failed predecessor five years earlier, there would be consensus for significant forward movement across the whole spectrum of inter-related disarmament, non-proliferation and peaceful-use issues.

By the end of 2012, however, with almost 18,000 nuclear warheads with a combined yield of almost 1,700 megatons still in existence, and around 2,000 of them deployed on high alert, much of the sense of optimism of three years earlier had evaporated. Certainly some progress had been made, and on a few issues, on the face of it, quite substantial progress. The New START treaty, signed by the United States and Russia in 2010, will significantly reduce the number of deployed strategic weapons. The 2010 US Nuclear Posture Review did make some moves in the direction of

³ Ramesh Thakur and Gareth Evans (eds), *Nuclear Weapons: The State of Play* (Canberra: Centre for Nuclear Non-Proliferation and Disarmament, 2013), available at: <<http://cnnd.anu.edu.au/files/2013/state-of-play-report/Nuclear-Weapons-The-State-of-Play.pdf>> [Accessed 28 November 2013].

⁴ 'Remarks by President Barack Obama, Hradcany Square, Prague, 5 April 2009', Washington DC: White House, Office of the Press Secretary, 2009, <<http://www.whitehouse.gov/video/The-President-in-Prague#transcript>> [Accessed 26 November 2013].

⁵ ICNND (Gareth Evans and Yoriko Kawaguchi co-chairs), *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers* (Canberra and Tokyo: ICNND, 2009).

reducing reliance on nuclear weapons.⁶ The 2010 NPT RevCon succeeded in reaching agreement on 64 action points (a refreshing change from zero in 2005), adopted strong new language on the catastrophic humanitarian consequences of the use of nuclear weapons, and supported initial moves towards a weapons-of-mass-destruction-free zone in the Middle East. And at the NSS in both 2010 and 2012, states made strong commitments to ensure that weapon-useable materials, and weapons themselves, do not fall into the hands of rogue states or terrorists.

But New START left both US and Russian stockpiles intact, their high-alert status undisturbed, weapons-modernisation programs in place, disagreements about missile defence and conventional-arms imbalances unresolved—and talks on further draw-downs going nowhere. Nuclear weapons numbers have decreased overall, as a result of actions by the United States and Russia in particular, but there has been an actual acceleration of nuclear-weapons programs in India, Pakistan, and China. (Asia is thus the only continent where nuclear arsenals are actually growing.) The cautious initial doctrinal move by Washington towards accepting that the “sole purpose” of nuclear weapons is to respond to nuclear threats, not those of any other kind, has been mothballed, inhibited by resistance from its more nervous allies in Northeast Asia and Central and Eastern Europe.

The push for talks on a nuclear-weapon-free zone (NWFZ) in the Middle East had also stalled by the end of 2012. North Korea seemed no closer to being put back in its NPT box, and Iran perhaps closer than ever to jumping out of it. The US Senate was no closer to ratifying the Comprehensive Nuclear-Test-Ban Treaty (CTBT), while China, India, and Pakistan, among others, took shelter behind that inaction, with a fragile voluntary moratorium the only obstacle to resumed testing. North Korea’s “rocket” launch in December 2012 tested its ballistic launch capability, followed by another nuclear test in February 2013. Negotiations in Geneva on a treaty to ban production of fissile material for nuclear weapons remained at a total impasse, raising fresh questions about the utility of the Conference on Disarmament.⁷ And even on nuclear security, there is not much reason for optimism that the original target will be met, of achieving security of all nuclear materials by 2014.

⁶ US Department of Defense, Office of the Secretary of Defense, *Nuclear Posture Review Report* (Washington: April 2010), <<http://www.defense.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf>> [Accessed 26 November 2013].

⁷ See John Page, ‘Bringing the UN Disarmament Machinery Back to Life’, APLN/CNND *Policy Brief* 6 (Canberra: Asia-Pacific Leadership Network and Centre for Nuclear Non-Proliferation and Disarmament, October 2013), available at: <<http://cnnd.anu.edu.au/policy-briefs/>>.

Progress on Recommendations and Commitments

DISARMAMENT

The stalled nuclear disarmament agenda is shown in Table 1, with progress being minimal or zero on 77 per cent of the items. Probably the best example of “Some Progress” is with respect to nuclear arms reductions. The global stockpile stood at nearly 18,000 nuclear weapons at the end of 2012. While nearly half of these were earmarked for dismantlement, there was little prospect of further major reduction. Significant cuts in Russian and US stockpiles, mainly under previous treaty obligations, have continued, but no agreement on further cuts is likely while divisions over missile defence and conventional weapons remain. France has met the limited disarmament objective it set itself in 2008, and the United Kingdom could complete planned reductions in warhead numbers ahead of schedule. But elsewhere—in China, India, and Pakistan—nuclear arsenals are growing.

Table 1: NPT RevCon, NSS and ICCND Recommendations and Commitments

	Nuclear Disarmament	Nuclear Non-Proliferation	Nuclear Security	Peaceful Uses	Total
Fully Implemented	3	2	1	1	7
Significant Progress	4	10	8	10	32
Some Progress	8	23	58	16	105
Minimal Progress	25	5	0	0	30
No Progress	25	13	1	0	39
Total	65	53	68	27	213

Source: Ramesh Thakur and Gareth Evans (eds), *Nuclear Weapons: The State of Play* (Canberra: Centre for Nuclear Non-Proliferation and Disarmament, 2013), pp. 231-69.

On “Minimal Progress”, there have been no significant publicly declared shifts in nuclear doctrine in recent years, although US doctrine has given some acknowledgement to President Obama’s 2009 undertaking to “reduce the role of nuclear weapons in national security strategy”, and an interagency review is examining revised constructs of deterrence and stability. The picture is the same on nuclear force posture. Apart from the reductions in deployed US and Russian strategic weapons under the New START treaty, the only significant changes in deployment practice elsewhere have been aimed at enhancing the survivability of nuclear weapons in case of attack. No progress has been made in reducing the dangerously high alert state of large numbers of US and Russian weapons.

There has been no progress on disarmament objectives and strategy or on parallel security issues that impact on nuclear weapons numbers and postures, like ballistic missile defence, weapons in outer space and conventional arms imbalances. Nuclear-armed states pay at best lip-service to the ultimate elimination of nuclear weapons, and none has committed to any “minimisation objective”, nor to any specific timetable for their major reduction—let alone abolition. Tensions between the United States and Russia and China continue unabated over ballistic missile defence and an emerging new generation of advanced US conventional weapons, and prospects for progress in conventional arms control have receded. This complicates an already very difficult environment for nuclear disarmament.

NON-PROLIFERATION

On non-proliferation too some of the individual commitments and recommendations that were fully implemented or showed significant progress turn out to be not very consequential. Probably the best example of this is the call for a conference on a Middle East NWFZ to be convened in 2012. The calls to designate a facilitator and a host government were fully implemented, but the conference itself was indefinitely postponed.

However, “Some Progress” was achieved on safeguards and verification issues and on providing modest additional resources to the International Atomic Energy Agency (IAEA). Additional Comprehensive Safeguards Agreements and Additional Protocols have entered into force but there is still strong resistance by some states to the idea of making the latter obligatory. The IAEA’s evolving state-level approach to safeguards has been criticised—albeit not compellingly—as discriminatory by some states who want the emphasis to return from an information-driven and detection-focused approach, back to traditional nuclear material accounting. A growing number of countries are also making use of multilateral guidelines in developing national export controls. But the Nuclear Suppliers Group’s 2008 decision to exempt India from its comprehensive safeguards requirement, and China’s determination to supply more nuclear reactors to Pakistan, have damaged this key mechanism’s credibility, and no progress has been made towards adopting a criteria-based approach to cooperation agreements with states outside the NPT.

“Minimal Progress” was made on NWFZ, nuclear testing, and fissile materials. No new NWFZ has been established or is under negotiation. There has been only modest movement on protocol ratifications. Of nine Annex 2 states which had not ratified the CTBT in May 2010, only one, Indonesia, had since done so by the end of 2012. The United States and China are among those who have not. Voluntary moratoriums on nuclear tests remained in place but North Korea, which never subscribed to the moratorium, conducted its third test in February 2013.

There has been no progress in beginning negotiations on a global ban on the production of fissile material for nuclear weapons purposes, a central non-proliferation policy objective. But NPT nuclear weapons states (NWS) have not produced highly enriched uranium (HEU) or weapon-grade plutonium for years and the facilities used for these purposes have been either shut down or converted to other uses in at least four of them: the status of facilities in China is unknown. The most significant growth in fissile material may be occurring in the non-NPT nuclear-armed states but, as with nuclear weapons stockpiles, their total stock is still hugely below that of the five NPT-recognised NWS.

The 2010 NPT RevCon made “no progress” on non-compliance and withdrawal issues and none has been made since. Efforts by the five permanent members of the UN Security Council (P5) and Germany to negotiate a resolution of the stand-off with Iran had made no substantive progress in 2012, although a “historic breakthrough” deal was announced in late November 2013. If it is indeed implemented, this agreement will reduce Iranian breakout potential in the short term, and might lead to a final agreement to resolve outstanding issues in the longer term.

NUCLEAR SECURITY

“Significant Progress” was made on national nuclear security regulations. UN Security Council Resolution 1540 has played a significant role in this area, resulting in a substantial increase in the number of states with legislative measures to prohibit proliferation of nuclear weapons. But more needs to be done in national implementation. Significant international cooperation is taking place in detecting and thwarting illicit trafficking, but this needs to be expanded as gaps are identified. States need to deepen cooperation also in developing and sharing nuclear security best practices.

“Some Progress”—the dominant category of progress for nuclear security (Table 1)—was made on global nuclear architecture. States have implemented many NSS commitments, additional states have ratified the Convention on the Physical Protection of Nuclear Materials (CPPNM) and its Amendment, more are taking advantage of IAEA tools and services, and states have cooperated with one another. The IAEA is providing a wide range of advisory services and other assistance on nuclear security issues. The centrality of the IAEA’s role makes a predictable and stable budget for nuclear security essential. However, NPT 2010 RevCon and ICNND-recommended support for universal application of the CPPNM and early ratification of the 2005 amendment is not in sight. Much of the architecture lacks any means to judge whether commitments are being met.⁸

⁸ See Ramesh Thakur, ‘The Global Governance Architecture of Nuclear Security’, *Policy Analysis Brief* (Muscatine, Iowa: Stanley Foundation, March 2013).

Some progress has been made also on sensitive nuclear materials, nuclear forensics, nuclear security culture, and advancing the role of nuclear industry. While progress is being made on minimisation of civil HEU use, states have been reluctant to ban outright HEU use in civilian applications. On non-civilian uses, the United States and Russia were on track to complete the conversion of 500 tonnes of HEU to low enriched uranium by the end of 2013 and have committed to the elimination of significant quantities of excess weapon-grade plutonium. In addition to national efforts, the IAEA continues to provide assistance with building nuclear forensics capacity, both through its own activities and by teaming with member states to hold workshops and other training. Increasing organisational activity suggests some progress on nuclear security culture, but the extent to which such a culture genuinely exists is unclear because of the lack of monitoring and reporting on whether states are implementing best practice standards and recommendations. There is general understanding that effective nuclear security is strongly in the interests of the nuclear industry. More work is needed on identifying practical ways the nuclear industry and state authorities can work together to improve nuclear security.

The one instance of “no progress” is in relation to ICNND Recommendation 30 to establish an intelligence clearing house: obviously a bridge too far at this stage for most states. In addition international standards, transparency and accountability are lacking in nuclear security.

PEACEFUL USES

“Some Progress” best describes the state of affairs on mitigating proliferation risks associated with the use of nuclear energy for peaceful purposes. Most states are meeting their NPT peaceful use commitments, but non-compliance cases—especially Iran and North Korea—are cause for concern. Issues of nuclear latency and hedging are not being addressed. The spread of sensitive nuclear technology and the prospective spread of fast reactors and plutonium fuels in the future will present serious challenges unless addressed. The establishment of two fuel banks and the work of the International Framework for Nuclear Energy Cooperation are positive developments, but further elaboration, and acceptance, of multilateral approaches have a long way to go. Not all states with significant nuclear activities have joined the Convention on Nuclear Safety, and there is a lack of international standards, transparency and accountability. Many states with power reactors remain outside the liability regimes.

SOURCES OF COMMITMENTS AND RECOMMENDATIONS

The results can also be divided by source: the 2010 NPT RevCon, the 2010 and 2012 NSS, and the ICNND commitments, action points and recommendations. One would expect the last, because it is an independent international commission made of people committed to achieving progress on the toughest issues, to contain the most challenging agenda and therefore the most difficult to implement. The NPT RevCon, because it is an

intergovernmental body, is likely to be much less ambitious and therefore demonstrate a higher level of compliance than the ICNND with its outcomes. But because it is comprised overwhelmingly of NPT non-NWS, the conference may still be expected to issue some calls for movement on items that the five NWS will resist and disregard.

Table 2: Progress by Source of Commitments and Recommendations

	NPT RevCon	Nuclear Security Summits	ICNND
Fully Implemented	5	1	1
Significant Progress	22	8	2
Some Progress	25	52	28
Minimal Progress	12	0	18
No Progress	12	0	27
Total	76	61	76

Source: Thakur and Evans (eds), *Nuclear Weapons: The State of Play*.

The NSS, finally, one would have expected to be the least problematical of the three when it comes to implementation of outcomes, for several reasons. To begin with, in the post-9/11 international environment, almost all countries do recognise the gravity of the challenge of securing all nuclear weapons and materials against illicit, unauthorised, criminal and terrorist transfers. They are aware that this is a common danger to all humankind and that international tolerance for lax standards has fallen dramatically. In addition, the summits have included only those states that are relevant to the agenda and at the same time they have avoided the problem that still bedevils the NPT conference, namely a distinction between NWS and others. At the NSS all participants accepted the same obligations.

All were also subject to the structural and peer pressures of summit diplomacy. Because expectations are raised before a summit is convened, leaders come prepared bearing gifts of low-hanging fruits: they came to confirm work already in train and to make additional individual promises they knew they could keep. These general structural pressures were given extra force in the case of the Washington NSS in 2010 because the host nation was the most powerful country in the world, and because the host was a president at the peak of his international popularity and aura and could leverage his reputation into tangible outcomes.

All this is indeed borne out in Table 2. But there is a risk of being misled by numbers at the cost of the weight of progress. An assessment of national commitments on nuclear security by the Arms Control Association concluded that of the more than sixty national commitments made by thirty participants in the 2010 summit, 80 per cent had been completed by the Seoul 2012 summit.⁹ Yet in a subsequent analysis the authors concluded that “Four years ago, President Barack Obama called preventing nuclear terrorism a top security priority, but the U.S. is only marginally safer from that threat today.”¹⁰

The explanation for the apparent discrepancy lies in the softness and incompleteness of the commitments entered into by the NSS participants in Washington. If a robust nuclear security culture is to be created, some existing gaps will have to be filled, including lack of universality, binding standards, transparency and accountability mechanisms, compulsory IAEA oversight, and broadened scope to include nuclear weapons and other non-civilian dimensions of the problem. The current regime is reliant almost entirely on national protection and control systems; the key to strengthening and improving the nuclear security regime is “balancing the principles of national sovereignty with international responsibility.”¹¹

Stepping Back from the Nuclear Cliff

Nuclear weapons are the common enemy of humanity. Overall, the *State of Play* report documents pockets of progress on nuclear security, non-proliferation and disarmament that are, however, overshadowed by the persistent drag of historical inertia in sustaining nuclear weapons programs, arsenals, doctrines and deployments. The sad reality is that while nuclear weapons continue to pose an existential threat to humanity, progress on their abolition, and on strengthening barriers to their proliferation, remains worryingly slow.

The existence of nuclear weapons is a sufficient guarantee of their proliferation and, some day again, use. Nuclear weapons could not proliferate if they did not exist. Nuclear disarmament is a necessary condition of nuclear non-proliferation. We must make the transition from a world in which the role of nuclear weapons is seen as central to maintaining national and international security, to one where they become progressively marginal and eventually unnecessary. This must be done while avoiding two

⁹ Michelle Cann, Kelsey Davenport and Margaret Balza, *The Nuclear Security Summit: Assessment of National Commitments* (Washington D.C.: Arms Control Association, March 2012).

¹⁰ Kenneth C. Brill and Kenneth N. Luongo, ‘Obama’s Modest Gains in Nuclear Security Vision’, *Politico*, 18 January 2013.

¹¹ Nuclear Security Governance Experts Group, *Improving Nuclear Security Regime Cohesion: Summary Report and Initial Policy Recommendations* (Muscatine, Iowa: Stanley Foundation, September 2012), p. 2.

unintended consequences. Care must be taken that efforts to make the world safe from nuclear weapons do not tip us back into a world safe for major power conventional wars. And allies sheltering under the nuclear umbrella must be sufficiently reassured not to break out with nuclear weapons themselves.

Like chemical and biological weapons of mass destruction, nuclear weapons cannot be disinvented. But like them, nuclear weapons too can be controlled, regulated, restricted and outlawed under an international regime that ensures strict compliance through effective and credible inspection and verification. What we need is a multi-phased roadmap to abolition that prioritises concrete immediate steps in the first few years, like introducing more robust firewalls to separate possession from use of nuclear weapons; further significant cuts in existing nuclear arsenals and a freeze on production of fissile materials in the medium term; further constraints on the deployment of nuclear weapons on the territories of other states, for example by means of regional NWFZ; and an enforceable new international nuclear weapons convention that requires credible, total and verified destruction of all nuclear stockpiles within our lifetime.

As part of a forward-looking agenda, the United States and Russia could initiate negotiations for a new treaty to reduce stockpile numbers for all classes of weapons, significantly cut back on their 2,000 warheads held in high alert status, and embrace the principle of “No First Use” in their nuclear doctrines. Washington could also address Chinese and Russian concerns about ballistic missile defence and prompt global strike capabilities. The United States, China, India and Pakistan could move to rapid ratification of the CTBT with the last three not holding their ratification conditional to the United States. China, India and Pakistan could freeze their nuclear capabilities at present levels and Pakistan could helpfully lift its veto on negotiations for a Fissile Materials Cut-off Treaty. India and Pakistan should avoid destabilising steps like the development of battlefield tactical nuclear weapons and missile defences. Finally, US allies could accept a significantly reduced role for nuclear weapons in their security protection, in particular by accepting and clearly stating support for the United States declaring that so long as nuclear weapons exist, the “sole purpose” of its nuclear weapons is to deter their use by others. None of these steps would jeopardise the national security of the country concerned; each would make the world a little bit safer and all together would make the world much safer.

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An Astute Choice: Anglo-Australian Cooperation on Nuclear Submarines in Historical Perspective

Wayne Reynolds

This article assesses the strategic dilemma posed by the decision to acquire twelve submarines for the Royal Australian Navy. It evaluates the history of US and British collaboration with Australia with respect to submarines, noting the US commitment to supporting allied surface fleets, but not necessarily submarine capability. It challenges the argument that the submarine should be conventional and suggests that any attempt to create a hybrid using Air Independent Propulsion (AIP) is likely to see an expensive re-run of the Collins problems. There could now be scope to leverage a long association with Britain and utilise that country's work on nuclear attack submarines.

On 16 January 2013 Australia and Britain, at the annual summit of the Australia-United Kingdom Ministerial Consultations (AUKMIN), signed the Defence and Security Co-operation Treaty. British Foreign Secretary William Hague, in a statement that would have seemed fitting in a much earlier era of imperial cooperation, argued that the treaty would give “*strategic direction*” to the defence relationship. What strategic means is unclear but Australian Defence Minister Stephen Smith indicated “preliminary talks” with Britain on possible collaboration on frigates and submarines had begun.¹ The British Defence Secretary, Phillip Hammond, pointed to the economic advantages of pooling work on the development of a fleet of twelve submarines. What was of particular significance in Hammond’s statement, however, was the suggestion that “Australia might find Britain a more comfortable fit than the US in jointly developing military equipment”.²

The issue before the Australian Cabinet now is what sort of submarine could deliver the many tasks required in operating in some of the greatest expanses of water on the planet.³ The Europeans lead in conventional (i.e. non-nuclear) designs, but as Heather Ridout, the former Chief Executive of the Australian Industry Group, has argued: “Unlike the Europeans, who

¹ *The Australian*, 18 January 2013. Emphasis added.

² *The Australian*, 16 January 2013.

³ In 2008 Australia claimed jurisdiction over 27.2 million km² of the earth’s surface, dwarfing the next two largest claims, Russia with 21.5 million km² and the United States with 20 million km². ‘Australia Can Be a Superpower—Just Add Water’, *Sydney Morning Herald*, 20 March 2009.

operate their conventional submarines closer to base than the Australian Defence Forces, Australia's strategic requirements require range and autonomy".⁴ She was also clear, in a reminder of the rationale for the Collins class submarine four decades earlier, that such a large project was essential to Australian manufacturing, arguing against "an unfortunate desire within sections of Defence to at first seek an imported military off-the-shelf solution to meet Australia's defence capability requirements".⁵

On one point there is agreement among analysts—no such conventional submarine currently exists. Steve Davies, the executive director of the Submarine Institute of Australia and the former Royal Australian Navy (RAN) commander of the submarine fleet, was emphatic on the clear advantages of nuclear submarines:

on balance our need for range means our needs would be technically met best by a nuclear propelled system ... in terms of capability, nuclear [submarines] are probably 80 per cent better overall.⁶

In the assessment of Carlo Kopp of *Defence Today*, "a nuclear power train is the ultimate AIP [Air Independent Propulsion] as it presents no restrictions on submerged time" but, he argues, it is ruled out due to political risk:

It is unlikely therefore that nuclear propulsion will be studied and publicly assessed from an objective and rational perspective. The politics of perceptions rather than hard fact would dominate any attempt to pursue nuclear powered submarines.⁷

There has, however, been support for an approach to the United States to buy nuclear attack submarines, such as the Virginia class. This option would fit both the capability requirements of the RAN and the production schedule of the United States Navy (USN), with production set at the rate of one or two a year. The USN's forty-three remaining Los Angeles class will be replaced by the Virginia class which would be still in production in the 2030s when the Collins class submarines are due to be replaced.⁸ Tom Mahnken, professor of strategy at the US Naval War College, suggests that the price tag for conventional submarines would be similar to that of nuclear submarines. In Australia the former head of the Kokoda Foundation, Ross Babbage, thought it a good idea, claiming that ten Virginia class submarines could be purchased for \$28 billion. They could also be operated with American submarines, and maintained by US experts, at an Australian

⁴ *The Australian*, 29-30 May 2010.

⁵ Ibid. The Kinnard review had in fact called for a Military-off-the-shelf option (see <<http://www.defence.gov.au/dmo/publications/dprreport.pdf>>). I thank a reviewer for Security Challenges in making this point.

⁶ 'Secret Fleets', *Reveille*, vol. 85, no. 4 (July-August 2012), p. 29.

⁷ C. Kopp, 'Air Independent Propulsion—Now a Necessity', *Defence Today*, vol. 8, no. 5 (December 2010), p. 11.

⁸ A. Davies and M. Thomson, 'Mind the Gap: Getting Serious about Submarines', *ASPI Strategic Insights*, no. 57 (April 2012), pp. 4, 12.

submarine base.⁹ Peter Reith, former Defence Minister in the Howard Government, added his weight to the call and argued that nuclear submarines could be run from a joint Australian-US base in Western Australia,¹⁰ a step that would accord Australia the same sort of treatment that has so far only been extended to Britain with the acquisition of the Polaris missile.¹¹

However, cooperation on Polaris was based on the Anglo-US “special relationship” in the Cold War, with the USN basing the submarines at Holy Loch in Scotland followed, later, by President Kennedy’s decision in December 1962 to supply the Polaris nuclear missile submarines to the Royal Navy (RN). Possibly with this in mind the foreign affairs editor of *The Australian* newspaper, Greg Sheridan, took up the call and argued that a compelling case could be made by “a really creative Australian government” to convince the Americans to rotate or base the submarines in Australia. The addition of twelve Australian boats, he reasoned, would make a valuable contribution to the allied effort. Sheridan wrote of a “joint project”, which would “mean an even more intimate US-Australian alliance”.¹² The week after Sheridan’s article, however, Defence Minister Stephen Smith, who was in Washington to discuss a number of “strategic” issues that would bear on “interoperability and capacity building”, ruled out nuclear submarines, arguing that because Australia did not have a nuclear industry, such a decision would result in the RAN’s submarine operations being dependent upon foreign assistance.¹³

The Problem with US Assistance

Paul Dibb has given one plausible hint of the government preference for conventional submarines: “the US has never exported or leased a naval nuclear reactor. The US will not simply hand over sensitive nuclear military knowledge, even to its close ally”.¹⁴

The United States did in fact supply a Skipjack reactor to Britain, but the overarching point is that, as John Hardy argues: “A critical argument against

⁹ B. Nicholson, ‘Nuclear or not, We’ll Need Prefab Subs’, *The Australian*, 9 February 2011.

¹⁰ *The Australian*, 26-27 May 2012.

¹¹ Davies and Thomson, ‘Mind the Gap’, p. 15. Polaris was a nuclear powered ballistic missile submarine, carrying warheads in the range of 200 kilotons to 1.2 megatons. It was the mainstay of the US submarine leg of the nuclear triad deployed around the periphery of the Soviet Bloc from 1960 to 1975. Andrew Priest, ‘In American Hands: Britain, the United States and the Polaris Nuclear Project 1962-1968’, *Contemporary British History*, vol. 19. no. 3 (September 2005), pp. 353-76.

¹² Greg Sheridan, ‘Paralysed by our Crazy Anti-Nuclear Hysteria’, *The Australian*, 23-24 July 2011.

¹³ ‘Minister for Defence—Transcript—Press conference’, 23 April 2013, <<http://www.minister.defence.gov.au/012/04/23/minister-for-defence-transcript-press-conference/>> [Accessed 29 August 2013].

¹⁴ Paul Dibb, ‘Nuclear not an Option for Next Generation of Submarines’, *The Australian*, 18 January 2013.

purchasing US submarines has been a perception that America would not be interested in supplying their latest generation of submarines to Australia.”¹⁵

The submarine problem seems part of a general trend. A former senior defence official, Allen Behm, warned that the impulse to “buy American was well entrenched”, but there was a lack of “decisive lethality” in some weapons purchased from the United States, “especially underwater systems”. The problem, wrote Behm, was that “when it comes to Australian access to US source codes or advanced technology ... the relationship has been less forthcoming”.¹⁶

The Canadians have experienced similar problems. Strategic analyst Paul Mitchell argues that American restrictions on network access by allies impede full interoperability:

The real difficulty is not so much technical as policy oriented ... Releasability software helps to move information onto coalition networks in a timely fashion, but they are not gateways to the information that American officers use on a day-to-day basis.¹⁷

Mitchell stresses the problems of Canadian frigates working with US carrier groups, but the prospects of cooperation on nuclear submarines is even more problematic. On 5 June 1987 Prime Minister Brian Mulroney, tabled in the Canadian House of Commons a Defence White Paper, *Challenge and Commitment: A Defence Policy for Canada*. The “crown jewel” in the paper was the proposal to build between ten and twelve nuclear-powered attack submarines. Despite US defence ties the White Paper sought to plug the “capability gap” with boats that had the endurance to patrol the vast icy wastes and to have the endurance to move under the ice cap itself.¹⁸

In the end the program did not go ahead: it was cancelled by Mulroney in 1991, justified by claims of budgetary pressures. Operationally it was not the prospect of facing the much larger force of some 142 cruise-missile equipped Soviet submarines that provided added pause, but the fact that the United States saw the North West Passage as an international waterway and that any prospect of a Canadian nuclear submarine force was “unnecessary and even unwelcome”.¹⁹

¹⁵ J. Hardy, ‘The Case for an Australian Nuclear Submarine Fleet’, *Pnyx: Comment on Global Security and Politics*, 25 February 2012, <<http://www.pnyxblog.com>> [Accessed 29 August 2013].

¹⁶ A. Behm, ‘Strategic Tides: Positioning Australia’s Security Policy to 2050’, *Kokoda Paper*, no. 6 (November 2007), p. 77.

¹⁷ P. T. Mitchell, ‘Small Navies and Network-Centric Warfare: Is There a Role?’, *Naval War College Review*, vol. LVI, no. 2 (Spring 2003), p. 95.

¹⁸ A. Lajeunesse, ‘Sovereignty, Security and the Canadian Nuclear Submarine Program’, *Canadian Military Journal*, vol. 8, no. 4 (Winter 2007-2008), <<http://www.journal.forces.gc.ca/vol8/no4/lajeunes-eng.asp>> [Accessed 26 August 2013].

¹⁹ *Ibid.*

It is not at all clear that Washington has faith in Australia's submarine capability, especially if it comes at the expense of surface vessels. John Angevine of the Brookings Institute released a study in 2011 of Australian defence strategy in which he warned that attempts to acquire advanced air and sea platforms would only serve to limit US operational options.²⁰ Angevine argued that the "core" assumptions of the 2009 Australian Defence White Paper were "wrong ... Australia should not structure its defence force around the remote possibility of having to fight a major conflict alone". An American security guarantee, he argued, would "free" Australia from spending billions on "high end defence capabilities such as the twelve submarines envisaged in the White Paper and more on low-level capabilities".²¹ The conclusion that may, therefore, be drawn is that Collins submarines and their successors are not meant to play a role in such conflicts. Indeed, after the publication of 2013 Defence White Paper, Paul Dibb asked "If we are no longer structuring the defence force to fight a major power in high intensity combat why do we still need 12 large submarines?"²²

These views have attracted predictable support from Army circles. Former head of the Army Land Warfare Studies Centre, Michael Evans, noted that it was the army that historically carried the main burden and argued for an Australian Defence Force (ADF) role in the middle and lower spectrum of military operations in the Asia-Pacific. It would, he argued, be the USN that would have to carry the burden of any conflict with China: "As John Angevine notes, in the event of any USA-China confrontation over Taiwan or in the South China Sea, any ADF air-sea contribution would be of minimal relevance."²³

Evans leaves it to American strategy, such as that identified in the 2012 US Joint Operational Concept, to address issues such as "air-sea battle and denial capabilities directed at China".²⁴

What Evans ignores is the US pressure on Australia to share in the naval defence burden in such a strategy. It is simply not credible that the United States would simply write off an Australian commitment in a maritime conflict with China. Norman Friedman herein pointed to "two main positive developments" since the 2009 Defence White Paper: "the proclaimed US pivot towards Asia and a long-overdue expansion of the RAN *surface* force,

²⁰ John Angevine, *Dangerous Luxuries: How the Quest for High-End Capabilities Leaves the ADF Vulnerable to Mission Failure and More Dependent on the United States*, Lowy Institute for International Policy, June 2011; Michael Evans, 'The Essential Service: The Future of the Australian Army in a Global Age', *Quadrant*, vol. LVI, no. 10 (October 2012), p. 14.

²¹ *Sydney Morning Herald*, 31 May 2011.

²² *The Australian*, 6 May 2013.

²³ Evans, 'The Essential Service', pp. 10-19.

²⁴ *Ibid.*

in the form of the three Aegis destroyers and two large amphibious ships”.²⁵ Friedman argues that the “Chinese are working to make the Western Pacific an uncomfortable place for US carriers, which are the main vehicles of improvement in the Australian security situation.”²⁶

With the deployment of anti-carrier ballistic missiles such as the DF-21D, Australia can furnish both bases and escorts.²⁷ Pointedly, Friedman argued in a paper written for the RAN’s Maritime Studies Program in the year before the Howard Government’s 2000 Defence White Paper:

What can a medium-size navy do, then? It will probably rely mainly or completely on surface combatants. To make them truly effective it needs to connect them to some kind of wide-area sensing system. Its sensors need to be space-based ... It will be essential then, for the ships to have some sort of highly capable quick-reaction air defence system.²⁸

The issue ceased to be theoretical in April 2013 when the Gillard Government, amidst high tensions over the Senkaku-Diaoyu islands in the Ryukus, despatched HMAS *Sydney* to join the US carrier strike group operating out of Yokosuka. Australian Strategic Policy Institute (ASPI) head Peter Jennings, a strong supporter of the air-warfare destroyer bid, spoke of the significance of the move as rebuilding of relations with the US Pacific Command, although he conceded that it was a “small contribution compared with the firepower of the massive Seventh Fleet”.²⁹

US strategy has always been about the maintenance of the Mahan doctrine. Sea power, argued Alfred Thayer Mahan in his 1911 work *Naval Strategy Compared with the Principles and Practice of Military operations on Land*, was the key to the survival of any industrialised state. Access to raw materials and markets, secured by a blue water fleet and bases, was essential.³⁰ In more recent times Zbigniew Brzezinski has summed up US strategy on Asia as resting on “the advantages of being an offshore, maritime power” maintaining a balance of power in the region.³¹

In September 1998 the Nuclear Posture Review reaffirmed Washington’s future reliance on the triad of the Cold War—nuclear weapons launched from bombers, ICBMs (intercontinental ballistic missiles) and submarines.

²⁵ Norman Friedman, ‘The Strategic Environment’, *The Navy*, Special Edition: The Defence White Paper 2013 (Maritime), vol. 74, no. 4 (October-December 2012), pp. 12-6. Emphasis added.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Norman Friedman, ‘New Technology and Medium Navies’, *Working Paper No. 1*, RAN Maritime Studies Program, August 1999, p. 38.

²⁹ ‘Warship to Join US Fleet in Hot Zone’, *The Australian*, 26 April 2013.

³⁰ J. Baylis, J. Wirtz, E. Cohen and C. S. Gray, *Strategy in the Contemporary World* (Oxford: Oxford University Press, 2002), p. 34.

³¹ Z. Brzezinski, *Strategic Vision: America and the Crisis of Global Power* (New York: Basic Books, 2012).

Extended deterrence was reaffirmed at the Washington Summit in 1999, held fifty years since the inception of NATO (North Atlantic Treaty Organization), and allies were asked to adopt a new strategic concept that would see their forces operate with those of the United States well beyond their traditional borders. It would be costly, but allies would access state of the art facilities in command and control, communications, computers, intelligence, reconnaissance and precision-guided munitions. So armed they would be, as Kugler saw it, “reconfigured as regional hubs for power projection”.³²

US maritime strategy, like that of the British Empire before it, gave pride of place to Allied assistance based on surface forces. To strategic analyst George Friedman, Australia’s role since 1900 “comes down to trade and access to sea lanes”. Its role is to export commodities to pay for manufactured goods; a challenge which requires it to align with the “leading global maritime power”. Australia has accordingly chosen to rely, he argues, on US sea lane protection and to deepen “economic relations with the US to balance its economic dependencies in Asia”. This means that it will “accept the military burdens this entails” and to create “regional forces able to handle events in Australia’s near abroad, from the Solomon Islands through the Indonesian archipelago”.³³ The point was underscored by Patrick Cronin of the Center for a New American Security at a recent forum on the Australia-US alliance organised by ASPI, where he stressed that there is a need for a “rebirth of Mahan”. Admiral Gary Roundhead, USN (Rtd.) added that there needed to be an alignment between strategy and acquisitions: “You are what you buy”. Jennings understood the view, stressing that Australia needed a fourth Air Warfare Destroyer and its SM3 missiles.³⁴

It is hard to avoid the conclusion that the USN has no role for the RAN submarines. Despite the fact that the Nuclear Non-Proliferation Treaty (NPT) treated nuclear propulsion differently to nuclear weapons since they were not “explosive” military uses of atomic power,³⁵ the USN has restricted information on naval reactors and its nuclear submarines do not need foreign ports.³⁶ Pointedly the US submarines based at Cockburn Sound in Western Australia during the Second World War did not operate under General Douglas MacArthur’s command, nor did they work with the RAN, instead they worked directly to the US submarine command. The Australia, New

³² R. L. Kugler, ‘Future US Defense Strategy’, in R. L. Kugler and E. L. Frost, *The Global Century: Globalisation and National Security*, vol. 1 (Washington DC: National Defense University, 2001), p. 381.

³³ G. Friedman, ‘Why Australia Has to Go To War’, *Australian Financial Review*, 24 May 2012.

³⁴ ASPI Canberra, ‘*The Future of the Australia-US Alliance*’, YouTube, 5 November 2012, <www.youtube.com> [Accessed 12 November 2012].

³⁵ See W. Reynolds and D. Lee, *Australia and the Nuclear Non-Proliferation Treaty 1945-1974* (Canberra: Department of Foreign Affairs and Trade, 2013).

³⁶ M. Pugh, *The ANZUS Alliance, Nuclear Visiting and Deterrence* (Cambridge: Cambridge University Press, 1989), pp. 5, 47, 91-4.

Zealand, United States Security Treaty (ANZUS) itself was from the beginning based on a commitment to both regional and alliance security and the operational area of the RAN limited under the Radford Collins Agreement to the Southwest Pacific.³⁷ In the assessment of Friedman, the future trajectory of Australian naval strategy was apparent—to develop a “long-overdue expansion of the RAN *surface* force, in the form of three Aegis destroyers”. Such vessels could, along with a US carrier base in Western Australia, contribute to the capacity of the USN to counter Chinese attempts to deny operations in the Western Pacific.³⁸

The 2000 Defence White Paper foreshadowed that the first replacement air warfare destroyer would be available in 2014 with two more by mid-2017.³⁹ Vice-Admiral Russ Crane explained at the time that the White Paper was “an essentially maritime strategy based on *expeditionary* concepts” with a capacity for “high end war fighting”. But he also issued a cautionary note:

we must be able to act independently where we have unique strategic interests at stake ... interoperability with our major allies are balanced against capability and value for money considerations in any system / equipment selection.⁴⁰

This has long been Australian strategy, but it brought to the fore squarely the tension about the relative priorities of building a navy around force projection and escort—a traditional RAN role—and the need to secure sea control as well as develop a strategic strike capability using submarines.

Cold War restraint herein saw the NPT model extended to submarines with submarine-launched ballistic missiles confined to the great powers. Yet the taboo on nuclear power extended also to attack submarines where the allies could have been expected to have a substantial role. This precedent is possibly more revealing of US intentions in the 2010 Quadrennial Defence Review which foreshadowed the greater use of Australian bases by the USN as part of the Pentagon’s so-called “air-sea battle concept”. Long-range strike assets such as submarines would be used in a naval blockade of China in the event of war.⁴¹ Australia’s role in the US air-sea Battle Plan is more uncertain. What does seem clear is that the United States, as Peter Layton explains, “remains more concerned about East Asia as a geographic entity” than on the broader Indo-Pacific region.⁴²

³⁷ Radford Collins Agreement—Defence Co-ordination in the Pacific and Indian Oceans. National Archives of Australia (NAA): A1209/116, 1965/6242.

³⁸ Norman Friedman, ‘The Strategic Environment’, *The Navy*, vol. 74, no. 4 (October-December 2012), pp. 12-5.

³⁹ Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030* (Canberra: Australian Government, 2009).

⁴⁰ *Defence Today*, December 2009, pp. 8-10.

⁴¹ A. Davies, ‘US To Seek More Help from Its Allies’, *The Australian*, 29-30 October 2011.

⁴² P. Layton, ‘Australia’s Defence White Paper: Revolution or Evolution?’, *Defence Today*, vol. 10, no. 4 (September 2013), p. 16.

There is a view that interoperability required Australian submarines to operate in the warm and shallow waters of Asia.⁴³ This suggests a division of labour between the US nuclear submarine role and the conventional submarine role of allies. In such a role it may well be that the United States might be attempting to extend the commitments of Commonwealth forces that operated under the Five Power Defence Agreement.

Exercises by elements of the Five Power Defence Forces date from 1971, in the wake of Britain's withdrawal from the East of Suez. Initially the parties had focussed on air defence, but following the Soviet deployment of naval forces to Cam Ranh Bay in Vietnam in the 1980s submarines were used in joint exercises, which have more recently focused on the security of sea lines of communication linking North East Asia to the South China Sea.⁴⁴ However in June 2012 the Defence Secretary Leon Panetta visited Cam Ranh Bay, the highest ranking official to visit Vietnam since 1975, to secure access to the port for visiting USN vessels. In doing so he declared that the United States would maintain a fleet of six carriers and Virginia class submarines "that can operate in deep and shallow waters". This may foreshadow cooperation with the RAN but it is also likely that Panetta was underscoring the fact the USN was quite capable of carrying out their own warm and shallow water operations.⁴⁵

Any decision to make nuclear submarines available to the RAN would be based on a strategy to operate with US submarines from HMAS *Stirling*, where they would be beyond the range of China's anti-access capabilities. This was the assessment of the November 2013 study of ANZUS by the US Center for Strategic and Budgetary Assessments. Significantly the report concluded that there is a stronger case for nuclear submarines than a conventional replacement for the Collins.⁴⁶ This view underscored the RAND Corporation report on Australia's future conventional submarines concluded that while there were clear advantages in "reaching back" or leveraging cooperation of the United States, especially in the provision of combat systems, but "there appears to be little investment in facilities dedicated to propulsion". However the United States seemed little better placed to help since in the Australian case there might be a need for a "hybrid" approach given the need to integrate *emerging* technologies. For

⁴³ P. Yule and D. Woolner, *The Collins Class Submarine Story: Steel, Spies and Spin* (Melbourne: Cambridge University Press, 2008); *Sydney Morning Herald*, 17 July 2009; *The Australian*, 26-27 May 2012.

⁴⁴ C. A. Thayer, 'The Five Power Defence Arrangements: The Quiet Achiever', *Security Challenges*, vol. 3, no. 1 (February 2007), pp. 79-96.

⁴⁵ 'US Seeks Vietnamese Base To Counter China', *Sydney Morning Herald*, 5 June 2012.

⁴⁶ *The Australian*, 8 November 2013.

that reason the report put particular emphasis on an early decision around propulsion, a crucial problem for conventional submarines.⁴⁷

Such a move is likely to be an expensive gamble. The Kokoda Foundation's work on the future submarine noted that "AIP increases the size, weight and complexity of a submarine and may need specialised facilities in port for refuelling".⁴⁸ The RAND report, however, ruled out assistance from non-US sources arguing that if the major systems in the submarine, such as the propulsion/power train, were provided by "international vendors", "then assistance from the US is severely limited and intellectual property issues come to the fore".⁴⁹

The problem is that the United States left work on conventional submarines to the Europeans, Japanese and South Koreans. An associated issue arises with closer defence collaboration with India, which is already equipped with nuclear submarines.⁵⁰ Significantly, Washington cannot act on the provision of nuclear technology without unhinging an alliance structure in Asia that has endured through the Cold War.⁵¹ Instead it will continue to insist on a Mahan strategy with allies committed to assisting with sea lane security in any 'containment' of China.

In any event, despite all of the arguments, the Obama Administration has closed the door on nuclear cooperation. In Prague on 5 April 2009, Obama declared a need to secure all fissile material, including Highly Enriched Uranium (HEU). The UN Security Council in Resolution 1887 called on states to minimise the use of HEU "to the greatest extent that it is technically and economically feasible".⁵² The question then is where else can Australia look for support on nuclear submarines?

Rear Admiral David Holthouse raised this issue at the Navy League in November 2010. Holthouse declared that it had taken him thirty years to get permission to look inside a US nuclear submarine from his first visit to Pearl Harbour in 1958. He also held open the possibility that the RAN might

⁴⁷ RAND, *Australia's Submarine Design Capabilities and Capacities: Challenges and Options for the Future Submarine*, General Distribution Report (Santa Monica: RAND, National Security Division, 2011), pp. 32, 47, 50, 77.

⁴⁸ B. Pacey, 'Sub Judice: Australia's Future Submarine', *Kokoda Papers*, no. 17 (January 2012), p. 35.

⁴⁹ RAND, *Australia's Submarine Design Capabilities and Capacities*, p. 77.

⁵⁰ D. Berlin refers to the "continuing development of ties with the US" which has seen "moderated" Indian views of naval cooperation with the USN—symbolised by the first naval exercises in Malabar 05 employing aircraft carriers. D. Berlin, *Naval War College Review*, vol. 59, no. 2 (Spring 2006), p. 64; G. Kampani et al., 'Debating India's Pathway to Nuclearization', *International Security*, vol. 37, no. 2 (Fall 2012).

⁵¹ See S. Bateman and D. Sherwood, *Strategic Change and Naval Roles: Issues for a Medium Naval Power*, Canberra Papers on Strategy and Defence, no. 102 (1993), p. 15; L. Buszynski, 'Emerging Naval Rivalries in the Indian Ocean: Implications for Australia', *Security Challenges*, vol. 5, no. 3 (Spring 2009).

⁵² *Bulletin of Atomic Scientists*, 13 April 2010.

approach the RN to supply submarine nuclear propulsion technology independent of the United States. While this might risk Australia's privileged access to USN technology, he surmised that times may have changed and that the United States might "not reject an overture from us out of hand today".⁵³

While this might be the case it is most unlikely that support will extend to the transfer of nuclear technology. The Hawke Government discontinued work on the full nuclear fuel cycle, and with it enrichment work, when it abolished the Australian Atomic Energy Commission (AAEC) in 1984, replacing it with ANSTO (Australian Nuclear Science and Technology Organisation). Hawke therefore resolved to work within the US International Nuclear Fuel Cycle organised by the Carter Administration.⁵⁴ Australia went on to develop an advanced laser enrichment process, but the owner of the patent, Silex Systems, sold the process to General Electric, which has gone on to develop the process for possible commercial applications.⁵⁵

'Reach Back' to the Anglo-Australian Joint Project

When the Johnson Administration terminated its bilateral nuclear agreement with Australia in the mid-1960s and subsequently refused any clear commitment to supply enriched fuel for "nuclear non-explosive defence"⁵⁶ purposes under the NPT, Australian interest turned to the uranium enrichment consortium (URENCO), composed of Britain, the Federal Republic of Germany and the Netherlands.⁵⁷ It was not unnatural given the British support for the fledgling nuclear program at Lucas Heights after 1955. But any such cooperation had to operate in the context of the restrictions governing "third party" technology transfer that had underpinned Anglo-

⁵³ 'Nuclear-Powered Submarines for Australia', Navy League, November 2010, <<http://navyleague.org.au/wp-content/uploads/2011/05/nuclear-powered-submarine-paper-nov-2010.pdf>> [Accessed 31 August 2013].

⁵⁴ W. Reynolds, 'The Yellow Cake Road: Malcolm Fraser, the Ranger Enquiry and Australia's Role in the US International Fuel Cycle Project', *Australian Journal of Politics and History*, vol. 57 (December 2011), pp. 511-25.

⁵⁵ The Australian company Silex signed an agreement with the US Enrichment Corporation which saw the process classified as "Restricted Data". F. Barnaby, *Secrets, Lies and Uranium Enrichment: The classified Silex Project at Lucas Heights* (Sydney: Greenpeace, 2004). In May 2013 the technology was being engineered to a commercial scale at the GE-Hitachi Laser Enrichment facility in Wilmington. Test Loop Milestone Achieved (Lucas Heights: Silex Systems Limited, 21 May 2013).

⁵⁶ The United States argued in 1973, after Australia had ratified the NPT, that it would not provide fuel for nuclear propulsion under this clause. Only "civil" applications would be considered. The United States position was based on the 1958 International Atomic Energy Agency Statute that required safeguards on all "military" as opposed to "nuclear explosive" uses employed in the NPT. Document 191, Reynolds and Lee, *Australia and the Nuclear Non-Proliferation Treaty*, p. 335.

⁵⁷ R. B. Kehoe, *The Enriching Troika: A History of Urenco to the year 2000* (Urenco, Buckinghamshire, 2002).

American cooperation since the 1948 *modus vivendi*.⁵⁸ Given this qualification Britain may have no such inhibitions about accelerating defence links. It has extensive interests in the Southern Oceans and, as the Falklands war demonstrated, the will to protect them. London not only recognises Australia's claims in Antarctica, but also partnered with Australia in securing the Polar routes well before the Second World War. More importantly, however, as William Hague pointed out, this collaboration was "strategic" and as Hammond said, there would be a "more comfortable fit" in providing defence equipment.⁵⁹

Here Canberra could indeed remember a joint project which Washington could not match. In 1960 Britain cancelled the Blue Streak intermediate-range ballistic missile, the centrepiece of its air delivered nuclear deterrent to be developed at Woomera in Australia. The story is an old one and there is a rich literature on London's difficulties in working within the "Special Relationship" with Washington, one that was particularly tested by the sudden cancellation of Skybolt⁶⁰ by the Kennedy Administration. Only at Nassau in December 1962 was the relationship put back on track when Kennedy formally concluded the offer of the Polaris missile carrying submarine. Such a fleet would, of course, need protection by attack submarines as well as aircraft—areas where Australia could play a role in following Britain to a sea-based nuclear deterrent.⁶¹ Pointedly there was an assumption dating from at least August 1967 that Britain would deploy its conventional fleet to Cockburn Sound near Perth.⁶²

British Polaris submarines were not expected to be deployed until the end of 1969, but a decision on Far Eastern deployment was needed by the end of 1967, when the North West Cape VLF (very low frequency) station was to be operational.⁶³ The key was to find a base for the Polaris fleet and Australian support seemed logical given its geographical position, close historical defence relationship with Britain and the determination of Canberra to keep a British commitment East of Suez. Lord Mountbatten, who had long championed the development of a submarine-based nuclear deterrent, argued that "whatever we did, we could not halt the historical processes

⁵⁸ For the history of this cooperation see W. Reynolds, *Australia's Bid for the Atomic Bomb* (Melbourne: Melbourne University Press, 2000).

⁵⁹ 'Defence Treaty to Cement UK Alliance', *The Australian*, 18 January 2013.

⁶⁰ Skybolt was an air-launched ballistic missile which the United States agreed to supply to equip British Mk. 2 Vulcan aircraft. For details see Humphrey Winn, *RAF Nuclear Deterrent Forces* (London: HMSO, 1994).

⁶¹ Staging facilities at Learmonth and Cocos had been planned from the late 1940s but had been left in abeyance "to allow any US interest in staging facilities". Decision No 139 (FAD), 9 April 1954, NAA: A5827/1.

⁶² 'Atomic/Nuclear Weapons: Policy: Deployment of Polaris Submarines', COS 38/68, 13 June 1968, The National Archives (TNA), London: FCO 16/241.

⁶³ 'Polaris: East of Suez Deployment', note 62/2, 11 August 1966, TNA: DEFE 24/505.

which led inevitably to the loss of our remaining bases in such places as Aden and Singapore”.⁶⁴

The case for remaining East of Suez would be “the defence of Australasia” with the resulting need temporarily to station UK forces there.⁶⁵ Australian Prime Minister Robert Menzies was briefed on New Year’s Eve 1965:

Mr (Harold) Wilson has referred to the possibility of transferring Polaris submarines to the area east of Suez. The question cannot be considered in isolation from our nuclear policy generally ... The introduction by British forces of nuclear weapons would constitute one of the possible alternatives to our manufacturing our own nuclear weapons whereby Australia could independently or otherwise become a nuclear power.⁶⁶

Hammond’s “more comfortable fit” had occurred to others well beforehand. As far as Australian leaders were concerned a British nuclear capability “raises far less political problem (sic) for us than the basing of an American capability in Australia”.⁶⁷ It is instructive that the question of basing British submarines in Australia post-dated the East of Suez decision. There was indeed a clear “Foreign Affairs interest”, noted the Australian Defence Committee in 1973, in having British and American nuclear submarines visiting Australia given the “difficulties in servicing their nuclear-powered warships in the Indian and Pacific Oceans”.⁶⁸

The Polaris submarines were based in the Atlantic, and given the great distances from their base at Faslane, these submarines would need a complex range of facilities including command and control, communications, maintenance, logistics, surveys of patrol and launch areas and those needed to support “nuclear propulsion”.⁶⁹ The British entered discussions with the Australians in June 1966 on the basis that the Royal Air Force would deploy fourteen F111 strike aircraft (and other tactical and air defence squadrons) and the navy would deploy one or two cruisers, four missile destroyers, eight other destroyers/ frigates, and various other support ships. There would also be four nuclear propulsion submarines (SSN) and a submarine depot ship. What is interesting here was the designation SSN—attack submarines—to

⁶⁴ UK Chiefs of Staff Committee Minutes, 14 July 1964, Document 23, in S. R. Ashton, C. Bridge and S. Ward, *Documents on Australian Foreign Policy: Australia and the United Kingdom 1960-1975* (Canberra: DFAT, 2010).

⁶⁵ *Ibid.*

⁶⁶ ‘British Defence Review’: Report by Defence Committee, January 1966, Document 47, Ashton, Bridge and Ward, *Documents on Australian Foreign Policy*.

⁶⁷ Minute, Griffith to Bunting, 19 January 1966, Document 49, in Ashton, Bridge and Ward, *Documents on Australian Foreign Policy*.

⁶⁸ ‘Defence Committee: Visits by Nuclear-powered warships to Australia’, 19 February 1973, NAA: Agendum 2/1973.

⁶⁹ ‘Polaris: East of Suez Deployment’, note 62/2, 11 August 1966, TNA: DEFE 24/505. The “first short study” in Britain of the practical needs of Polaris in Australia, probably Fremantle, was made in January 1965 by the Navy Department. M. Jones and J. W. Young, ‘Polaris, East of Suez: British Plans for a Nuclear Force in the Indo-Pacific, 1964-1968’, *Strategic Studies*, vol. 33, no. 6 (December 2010), p. 855.

the force which did not then exist in the RN's order of battle. Four was also the number of Oberon class submarines that Australia originally ordered from the Royal Navy.⁷⁰

Andrew Priest argues that one area of "independence" in the development of the British Polaris system in the 1960s was the design of the warhead for the advanced A3 missile. This missile had a range of 2500 nautical miles, but for the purposes of strategic strike planning, the United States wanted Polaris tied to Europe and strictly under their control.⁷¹ While the missile was an issue in Anglo-American relations, so was propulsion. In 1963 the Congressional Joint Committee on Atomic Energy declared that "nuclear propulsion provides significant military advantages" and "would free US strike forces from reliance on a worldwide propulsion and fuel distribution system".⁷² The State Department finally dispelled any Australian illusions in February 1965 by announcing that the cooperation on naval nuclear propulsion would not be forthcoming.⁷³ There were also broader issues in cooperating with the United States on propulsion. Duncan Redford argues that the adoption of nuclear propulsion was developed "at a time when the Empire and the economy were under increasing pressure". The decision in 1966, he goes on to argue, to end fixed-wing carrier aviation meant that the nuclear submarine was their last "hallmark of a first-class navy".⁷⁴

That decision coincided with the launch of the RAN's first Oberon class submarines, a force that played a significant part in the development of a more self-reliant Australian defence strategy in the late 1960s. There is a hint of Australia's ambitions for a role in Polaris deployments in the 1968 study of the Australian-American alliance by prominent historian Harry Gelber.

The RAN's four new hunter-killer submarines are conventionally-powered Oberon class submarines from Britain. It seems likely that their successors will be nuclear-powered (whether they will have nuclear-tipped missiles is another matter) ... Unless Australia has enriched fuel for boats from an enrichment facility it will need the US—as does the UK. ... Matters of

⁷⁰ Brief for Holt, 'British Bases in Australia', 27 June 1966, NAA: A1945, 287/3/26.

⁷¹ A. Priest, 'In American Hands: Britain, the United States and the Polaris Nuclear Project 1962-1968', *Contemporary British History*, vol. 19, no. 3 (September 2005), p. 366. The United States sought to coordinate nuclear strike plans under the 1960 Strategic Integrated Operational Plan and later planned—unsuccessfully as it turned out—a NATO nuclear submarine force. The RN, however, retained the option to use the submarines independently when necessary.

⁷² Hearings before the Joint Committee on Atomic Energy, 88th Congress of the US, 30, 31 October and 13 November 1963.

⁷³ Memo. 228/65, Australian Embassy, Washington, to External Affairs, 15 February 1965, NAA: A1838/1720/12.

⁷⁴ D. Redford, 'The "Hallmark of a First-Class Navy": The Nuclear-Powered Submarine in the Royal Navy 1960-77', *Contemporary British History*, vol. 23, no. 2 (June 2009), pp. 184, 193.

procurement and training have obvious implications for the larger fields of science and technology ... Work on nuclear power is a case in point.⁷⁵

In fact members of the AAEC were long involved in this sort of thinking. One of the leading scientists, Clifford Dalton, who had worked at the Dounreay nuclear reprocessing complex in Scotland (which also housed a US Pressure Water Reactor), argued in February 1960 that Australia should build a nuclear vessel for “naval training (and) Antarctic activism”. The RAN agreed: “From a naval defence aspect ... there would be considerable enthusiasm for a nuclear vessel and that experience could be gained in docking and maintenance.”⁷⁶

What is clear is that while the Oberons were the mainstay of *both* the RN and RAN submarine fleets throughout the Cold War, their replacement raised significant issues. The RAN, faced with expanding maritime challenges brought about by the Britain’s withdrawal from the region, planned a new generation of larger submarines with a 10,000 mile range, seventy days at sea and a weight of 2000 tonnes. The Chief of the Naval Staff, Admiral Mike Hudson, stressed the need for “long range vessels” to defend the sea lanes which stretched from Heard and Macquarie islands in the South, to Cocos and Norfolk on the Indian Ocean and Pacific flanks. To academic Joseph Camilleri, Australia’s maritime strategy gave it a virtual “imperial role” over such an area.⁷⁷ Writing at the same time, Michael Pugh drew attention to the problems of extended sea patrols, noting in particular that nuclear propulsion was “distinct from nuclear weapons and would solve problems of replenishment and propulsion”.⁷⁸ The question of cooperation in nuclear propulsion did arise later, in August 1978, against the backdrop of an increasing Soviet naval presence in the Indian Ocean. In Yule and Woolner’s opinion, however, at that time “almost all submariners agree that nuclear propulsion is best” but the Pentagon would not hear of it and Britain, which was now in the nuclear submarine business, could not sell technology without American consent.⁷⁹

It is apparent that Australia was well aware of the advantages of a nuclear replacement for the Oberons. In February 2013 the Navy League of Australia opined that it had been a mistake to rule out the future acquisition of nuclear submarines for the RAN. The League had been arguing since the replacement of the Oberons to acquire a fleet of SSNs and now moved to repeat its position as the end of the Collins submarine capability loomed. While there was as yet no consensus on the Collins replacement, “a shift to

⁷⁵ H. G. Gelber, *The Australian-American Alliance: Costs and Benefits* (Harmondsworth: Penguin, 1968), pp. 37-8.

⁷⁶ Summary of discussion at AAEC, Coogee, 24 February 1960, NAA: A3211/21, 1963/911 Part 1.

⁷⁷ J. A. Camilleri, *ANZUS: Australia’s Predicament in the Nuclear Age* (South Melbourne: Macmillan, 1987), p. 204.

⁷⁸ Pugh, *The ANZUS Alliance: Nuclear Visiting and Deterrence*, p. 5.

⁷⁹ Yule and Woolner, *The Collins Class Submarine Story*, p. 23.

nuclear propulsion would put Australia in line with its major allies".⁸⁰ Indeed, but would they be prepared to assist? Developments in NATO after the Cold War might provide such an opportunity.

Anglo-French Defence Cooperation

One of the more bizarre outcomes of the 2008 global financial crisis and the subsequent cuts to Britain's budget by the Cameron Conservative-Liberal Democrat Alliance was the announcement of a formal defence treaty with France, the first since the Treaty of Dunkirk in 1947. David Cameron and Nicholas Sarkozy announced a wide-ranging plan to coordinate defences.⁸¹ Britain historically prioritised the "Special Relationship" with the United States but has a longer tradition of maintaining a strong relationship with France. It is therefore significant that some saw the Cameron-Sarkozy declaration as a hedge against reliance on the United States. Ian Godden, the chairman of Britain's ADS industry trade group, saw the agreement as ensuring a future for defence research and development:

The alternative, buying off-the-shelf from the US, is often not the appropriate solution for our troops and this development ensures that future governments will retain a choice of suppliers—both UK based and from overseas.⁸²

What was most surprising of all was the declaration that there would be for the first time collaboration on the future of the nuclear deterrent.⁸³ Anglo-French collaboration had been attempted briefly before but had run into determined opposition from Washington. In early 1973 the United States moved to block British acquisition of the Poseidon multiple independently targetable reentry vehicle (MIRV). Prime Minister Edward Heath therefore looked across the Channel to France, now a fellow partner in the European Community, as a possible partner in the development of a replacement for Polaris. Henry Kissinger, however, opposed both the sale of a MIRV missile for Britain and also the possibility of a European "bloc" which might cooperate to that end. His displeasure resulted in a ban on intelligence sharing, although Robb notes this was also a by-product of Watergate hysteria.⁸⁴ The step was taken, however, in all likelihood against both France and Britain who threatened to challenge the US monopoly of the sale of nuclear fuel. It was, in any event, a threat that reaped rewards as Britain ruled out collaboration with France and ultimately secured, under Thatcher,

⁸⁰ 'Nuclear Debate Finally Surfaces', *The Navy*, vol. 75, no. 1 (January-March 2013), p. 2.

⁸¹ *Financial Times*, 3 November 2010. See 'Treaty Between the United Kingdom of Great Britain and Northern Ireland and the French Republic for Defence and Security Cooperation', 2 November 2010, <<http://www.official-documents.gov.uk/document/cm79/7975/7975.pdf>>.

⁸² *Financial Times*, 3 November 2010.

⁸³ A new joint warhead simulation facility will be built at the Valduc Nuclear Studies Centre by 2015 along with a joint Technology Centre at Aldermarston. Hans M. Kristensen and Robert S. Norris, 'British Nuclear Forces, 2011', *Bulletin of Atomic Scientists*, vol. 67, no. 5 (2011), p. 93.

⁸⁴ T. Robb, 'Antelope, Poseidon or a Hybrid: The Upgrading of the British Strategic Nuclear Deterrent, 1970-1974', *Strategic Studies*, vol. 33, no. 6 (December 2010), pp. 797-817.

the US Trident submarine with an effective lease on its accurate counter-force II D5 missile.⁸⁵

In 2004 the mutual defence treaty with the United States, which governed arrangements by which Britain would continue to receive US support for Trident, was renewed. This arrangement came, however, as Britain reassessed the prospects for its own nuclear industry, which included the possibility of working closely with the French Areva Company in designing future reactors. There was also scope for the development of a project to fuel SSNs, a step indicated in 2005 when *Janes Defence Weekly* revealed that the government had funded new submarine propulsion studies.⁸⁶ The first Astute submarine was launched in 2007 with a Rolls Royce Pressurised Reactor (PWR2) and development started on a new PWR3 with a twenty-five year life. Davis points to the French utilising the new agreement to access information on the Astute for its “equivalent” Barracuda class SSN. The planned nuclear Barracuda submarines at 2600 tons (submerged) are smaller than the Astute and have a lower enrichment level- requiring refuelling every ten years.⁸⁷ Collaboration with France was formalised under the 2010 Defence Co-operation Treaty which authorised a study into the potential collaboration on nuclear submarine components and technology. Ian David, the Director of NATO Watch, has written herein, that the study “raises the prospect of future joint procurement of a whole new submarine.” While the Defence Treaty largely covered collaboration on conventional defence, there was at the same time a separate treaty on nuclear co-operation which would allow sharing of “cutting edge new research facilities” which are expected to be operational after 2015.⁸⁸

Pointedly what marked both nations, apart from the fact that they provided over fifty-five per cent of the European Union’s armed forces and seventy per cent of defence research and development, was that they were the only Nuclear Weapon States recognised by the NPT.⁸⁹ It was this factor that led some to conclude that the agreement marked a determination by both countries to

retain global reach ... The fact of even limited co-operation in an area as acutely sensitive as nuclear deterrence attest to this understanding that if Europe’s two military powers do not hang together they will hang separately.⁹⁰

⁸⁵ R. Green, *Security without Nuclear Deterrence* (Christchurch: Astron Media, 2010), p. 46.

⁸⁶ Nick Ritchie, ‘Replacing Trident: Britain, America and Nuclear Weapons’, *Contemporary Security Policy*, vol. 28, no. 2 (August 2007), p. 384 and no. 9, p. 400.

⁸⁷ Ian Davis, ‘The UK-France Defence Pact and Nuclear Modernization’, *NATO Watch*, Briefing Paper No. 16 (6 January 2011), p. 4.

⁸⁸ Davis, ‘The UK-France Defence Pact and Nuclear Modernization’, p. 3.

⁸⁹ ‘Anglo-French Deal Rewrites Military History’, *The Independent*, 2 November 2010.

⁹⁰ *Financial Times*, 2 November 2010.

In fact the collaboration could herald a strengthening of a nuclear “US-Anglo-French strategic triangle”. Defence Minister Liam Fox informed the House of Commons on 2 November 2011 that there had long been discussion about making the separate defence relations between Britain and the United States and between Britain and France, a “trilateral” arrangement. The decision had been then taken, he said, “for the moment to strengthen the Anglo-French part”.⁹¹

The Prospects of Working with Australia

The Anglo-French “independent” nuclear deterrent, covered by a separate treaty on Joint Radiographic / Hydrodynamics Facilities, is a commitment under Article 5 of NATO and deployed subject to the NPT and Comprehensive Nuclear Test Ban Treaty (CNTBT). There are two points of interest for Australian policy-makers here. First the Anglo-French Defence and Security Co-operation Treaty is global in scope, envisaging deployments either multilaterally through the UN, NATO and in coalition—or bilaterally. It also allows one party to conduct operations without the engagement of the other on a “case by case” basis.⁹² At the Lancaster House Summit in June 2012 the parties reaffirmed that they had taken their collaboration to “unprecedented levels” and “called for stronger cooperation among European allies and *partners* to develop flexible, deployable [forces].”⁹³ It is important to note in this context that the treaty envisages the creation of a joint maritime expeditionary force.⁹⁴ Indeed Washington itself has impressed upon NATO powers at the 1999 fifty year anniversary of the organisation, as we have seen, that it needs to develop a global capability. Operations in Libya were a case in point. France is pointedly re-engaging with NATO as that organisation expands its activities geographically and operationally, although funding these commitments remains a current issue.

The second issue for Australian analysts is the emphasis in the treaty on the NPT and the CNTBT. This does not rule out collaboration with the British or French on nuclear submarines themselves—as opposed to the nuclear weapons that they might carry. At the same time as the Lancaster House Summit, June 2012, amidst the debate over the Gillard Government’s cut to the defence budget an equally significant issue received little attention. *The Australian* reported that the University College London (UCL) would conduct a study in its first overseas campus at Adelaide on whether Australia could

⁹¹ Davis, ‘The UK-France Defence Pact and Nuclear Modernization’, p. 4.

⁹² Article 1 (3). <http://www.diplomatie.gouv.fr/en/IMG/pdf/Co_opertion_Trety.pdf> [Accessed 8 November 2013].

⁹³ *Anglo-French Summit Defence and Security Declaration*, 17 February 2012, <<http://www.defenceviewpoints.co.uk/defence-news/anglo-french-summit-and-security-declaration>> [Accessed 8 November 2013], emphasis added.

⁹⁴ John Stevens, ‘Some Remarks on the Anglo-French Defence Treaty’, Strategic Update 11.4, London School of Economics and Political Science, <http://www.lse.ac.uk/IDEAS/publications/reports/pdf/SU11_4.pdf> [Accessed 23 January 2013], p. 4.

use nuclear propulsion in a future submarine. The Adelaide research would “evaluate the nation’s role in the nuclear fuel cycle, uranium enrichment and opportunities for the Australian market”. In this context the research would focus on nuclear submarine technology and “third generation submarine capabilities”.⁹⁵ In August 2013, the International Energy Policy Institute of UCL released a Green Paper which indeed confirmed that there were significant advantages in Australia planning to use nuclear submarines. Apart from the operational aspects such as greatly enhanced endurance, there could be a transfer of naval nuclear propulsion technology, employment for “several thousand skilled workers”, considerable opportunities for business investment’ and a chance to allow Australia to ‘champion’ a verification regime for nuclear material used in naval programs. In looking at design options, the Green Paper lists the French Rubus class, the US Virginia class and underscores that “any UK-Australia co-operation would likely be based on the Astute class SSN”.⁹⁶

In that context collaboration with Britain draws on a long history. The ‘Astute choice’ is one that reaches back to Anglo-Australian nuclear cooperation and foreshadows a renewed joint project of some strategic significance and which could at last equip the RAN with nuclear submarines.⁹⁷ Peter Hennessy gives an interesting example of the enduring strategic bonds with Britain. He has located a file in the British National Archives which indicates that each Trident submarine commander was given four choices in the event of nuclear war: retaliate, do not retaliate, use your own judgement or “put yourself under the command of the United States, if it is still there; or sail to Australia, if it’s still there”.⁹⁸ Australian links to Britain date to the beginning of settlement and the sacrifices in the name of that empire reflect the strength of the relationship. The nuclear partnership that emerged after the Second World War was developed in good faith by both sides but could not be accommodated in an American global order. The attempted alliance with URENCO in the 1970s served as an important reminder that Britain still provided the basis of a strategic future partnership built on the development of enrichment centrifuge technology. The crucial factor, as former Foreign Minister Bill Hayden wrote in 1996, was that it was not in Australia’s national interests to “fall behind in nuclear technical competencies”.⁹⁹

⁹⁵ ‘Sub Study To Look at Nuclear Options’ and ‘Win Gold in London ... Or Strike It in Adelaide’, *The Australian*, 20 June 2012. The International Energy Policy Institute in UCL promotes the concept of “Value adding to energy assets, particularly Australian uranium production”, <ucl.ac.uk>.

⁹⁶ ‘Could Australia’s Future Submarines be Nuclear-powered?’, Adelaide: Green Paper, UCL, August 2013, p. 14. Original emphasis.

⁹⁷ A decision on the future of Trident will be taken in 2016. Robert Golan-Vilella, ‘UK Postpones Trident Replacement Amid Cuts’, *Arms Control Today*, November 2010, <http://www.armscontrol.org/act/2010_11Trident> [Accessed 8 November 2013].

⁹⁸ P. Hennessy, *The Secret State: Preparing for the Worst 1945-2010* (London: Penguin, 2010), p. 311.

⁹⁹ B. Hayden, *Bill Hayden: An Autobiography* (Pymble: Angus & Robertson, 1996), p. 422.

A partnership with both British nuclear and defence contractors would be a sensible option. URENCO and Astute builder BAE have extensive knowledge of Australia. The Astute could operate in the vast southern oceans and has specially reinforced bridge fins allowing surfacing through ice caps.¹⁰⁰ Analyst Stuart Klosinski has provided, albeit accidentally, another consideration. He was concerned by the failure of Britain to plan beyond the Astute, noting overlaps in submarine construction between conventional and nuclear programs. But, he argued, "With nations like Australia now recently committed to a large uplift in submarine capability, skills could be attracted away from Britain".¹⁰¹ Klosinski made these remarks in 2010, the year before Anglo-Australian discussions on closer defence relations with a pronounced emphasis on maritime security.

There may be scope for Australian collaboration with an Anglo-French SSN, especially given the fact that the French have barely begun work on the SSN Barracuda class. If history is any guide, Canberra's willingness to work closely with both the British and the French could be continued as they move to coordinate their defence arrangements. Little, however, is written on Australian attitudes to the French presence in the Pacific. The decision of the French to move their nuclear tests from Algeria to the Pacific test site in Tahiti in the early 1960s has more than anything cast the French as an unwelcome intruder in a peaceful neighbourhood. In fact while the French were conducting nuclear tests the AAEC developed close ties with French nuclear scientists. Australian governments from the early 1960s resisted calls for a Nuclear Free Zone in the Pacific and some nuclear scientists championed the purchase of French nuclear reactors.¹⁰² To that end Paris gave permission for senior enrichment experts from the AAEC the opportunity to see for the first time gaseous diffusion technology at their highly secret enrichment plant at Pierrelatte.¹⁰³ The AAEC accepted at the end of 1966 a secret French proposal to sell a "hot cell" as a stage in reprocessing and further to build the entire reprocessing plant.¹⁰⁴

As the British experience emphasised, however, such initiatives were not likely to go down well in Washington. Sir Lawrence McIntyre, the Acting Secretary of the Department of External Affairs on 9 November 1966 warned the AAEC's Maurice Timbs that an acceptance of French nuclear equipment

¹⁰⁰ *The Guardian*, 26 December 2012.

¹⁰¹ Stuart Klosinski, 'Nuclear Subs Are Potent Defence Assets', *Defence Management*, 16 April 2010, <<http://www.defencemanagement.com>> [Accessed August 2013].

¹⁰² Cable 87, British High Commission, Canberra, to FCO, 29 January 1969. Timbs was seen as influential as securing the French bid for a research reactor and that he was 'something of a Francophile'. 'Civil Uses of Atomic Energy: Australia: Sale of Reactors to', TNA, London: FCO 55/301.

¹⁰³ Keith Alder, *Australia's Uranium Opportunities* (Sydney: Pauline Alder, 1996), p.53.

¹⁰⁴ The French had provided safeguards on supplied fuel, but not on the equipment. This meant, of course, that the Australians would get access to the technical knowhow Cable 1530, British High Commission, Canberra, to FCO, 11 December 1968, 'Civil Uses of Atomic Energy: Australia: Sale of Reactors to', TNA: FCO 55/301.

would alienate the United States.¹⁰⁵ Nevertheless, there remained sympathy for the French connection. On 10 September 1971 M. J. Cook of the Defence Policy Branch argued that France had developed a nuclear retaliatory policy and that their defence policy was “very sensible”.¹⁰⁶

France is a Pacific power; has a presence in Antarctica and accepts Australia’s extensive claims there; has always been a key player in Australian defence procurement and has offered close support for Australia’s participation in a full nuclear fuel cycle. A French re-engagement with NATO, as that organisation develops a more global outlook, could well herald collaboration with Australia as well as Britain in an area that all three have an interest—the development of SSNs. A question that arises then is whether Australia should maintain an option to develop a nuclear-powered submarine force as a hedge against a worsening strategic situation in the Asia-Pacific. It may be done, argues Stephan Frühling, if Australia was to have a serious attempt to link the RAN force structure to the 1987 Defence White Paper goals of developing a submarine force to ensure sea denial in its “home waters”. Frühling argues that there is a need to begin a program of continuing production of submarines, a focus of effort that could be affected by cancelling the building of Air Warfare Destroyers (AWD) and the new amphibious ships, which were not needed for a sea denial strategy.¹⁰⁷

In the end Australia may not have a choice. There is a veritable industry built around planning, as Paul Starobin astutely observes, for the next global age “after America”. Nuclear submarines are, in Starobin’s assessment, one of the hallmarks of this era with countries such as India and Brazil now investing in such capabilities.¹⁰⁸ This trend in turn parallels an ongoing debate on the emergence of a sort of “concert” of powers reminiscent of that in nineteenth century Europe.¹⁰⁹ The rapid progress of Chinese and Indian nuclear submarine capabilities may also drag the region into a naval arms race.¹¹⁰ China has committed itself to the development of nuclear power and has a growing fleet of nuclear submarines. India launched the 6000 tonne ballistic missile capable Anhan in 2009, built in India with Russian help, and was on track to acquire the 8140 tonne Charka II in 2012.¹¹¹

¹⁰⁵ Richard Broinowski, *Fact or Fission? The Truth about Australia’s Nuclear Ambitions* (Melbourne: Scribe, 2003), pp. 87-88.

¹⁰⁶ M. J. Cook, ‘French Defence Policy’, 10 September 1971, NAA: A1838/2, 919/10/5 Part 34: Nuclear: NPT.

¹⁰⁷ S. Frühling, ‘Golden Window of Opportunity: A New Maritime Strategy and Force Structure for the Australian Navy’, *Security Challenges*, vol. 4, no. 2 (Winter 2008), pp. 81-104.

¹⁰⁸ P. Starobin, *After America: Narratives for the Next Global Age* (New York: Viking, 2009), pp. 163, 181.

¹⁰⁹ J. Kluth, ‘Pillars of the Next American Century’, *The American Interest*, November/December 2009, pp. 12-3.

¹¹⁰ S. Bateman, ‘Perils of the Deep: The Dangers of Submarine Proliferation in the Seas of East Asia’, *Asian Security* vol. 7, no. 11 (2011).

¹¹¹ *Sydney Morning Herald*, 27 July 2009.

The ultimate hedging strategy, however, one that pays attention to technology transfer and industry development, is to build the submarines in Australia and to make a start on reviving the debate on nuclear power. The head of the Australian Submarine Corporation (ASC) leaves no doubt as to the Australian requirement. The next generation, he declared should be based on an Australian design and that “The ASC is quite capable of building nuclear submarines” which could meet Australia’s operational requirements in such places as the southern oceans with its great distances and huge swells”.¹¹²

Time is clearly needed to fully evaluate the submarine program, and with it the role of nuclear power and the relationship with key allies. US naval analyst Peter Wooley wondered about the role of allies in great power decline, noting that ancient Athens prohibited fortifications because walls would neutralise the power of the Athenian fleet. The lesson from this was, he argued, that the United States needed to cultivate key allies as “an indispensable element of the successful deterrence of full-scale war”.¹¹³ Australia as one of these allies has determined on a blue water capability for both alliance and national purposes, although this commitment faces budgetary pressure. The case for the AWD has been made and accepted, but the role of submarines, which sit at the heart of Australian planning, is unclear.

It is clear that a number of analysts in the United States and Australia, such as Angevin, Friedman, Mitchell, Dibb and Behm, see major problems in the provision of adequate US support for a RAN submarine that can fulfil the aims of the 2009 and 2013 Defence White Papers. Pointedly, the RN nuclear submarine was developed within the “Special Relationship” with the United States, but was also an area in which there was considerable tension. Indeed the whole history of nuclear development after the Second World War has been one where Britain has had to struggle with US determination to restrict sharing its nuclear secrets. Australia has played a significant role in this process seeking to ensure that its national interests informed as far as possible the evolution of grand strategy.

Davies makes the telling point that nuclear submarines require a sophisticated civilian and military nuclear industry that provides the infrastructure and expertise required to maintain and them.¹¹⁴ But Davies also noted in mid 2006 that the United States “looked favourably” upon

¹¹² ‘Defence: Deadline for Departure’, *The Australian*, 29-30 May 2010. On the strategic importance of Antarctica see A. Bergin and M. Haward, ‘Frozen Assets: Securing Australia’s Antarctic Future’, *ASPI Strategic Insight*, no. 34 (April 2007).

¹¹³ P. J. Woolley, *Naval War College Review*, vol. XLIX, no. 1 (Winter 1995), pp. 20, 23.

¹¹⁴ Andrew Davies, ‘Keeping our Heads Above Water: Australia’s Future Submarine’, *ASPI Policy Analysis*, no. 16 (30 January 2008), p. 2.

Australia and Canada as “value adding members of the GNEP.”¹¹⁵ John Howard herein embraced George W. Bush’s promise of a new Global Nuclear Energy Partnership which could see Australia and Canada develop nuclear enrichment.¹¹⁶ Public opinion is a factor and the Labor Party ruled out nuclear power, although that view was far from unanimous.¹¹⁷

The public case, however, has yet to be made. This paper, herein, stresses the need to focus on the strategic issues underlying the debate on the future of Australia’s submarine choices. The United States will take some persuading to support not only an Australian nuclear industry but also the means to fuel nuclear submarines. While the NPT does not prohibit the development of “non-explosive military” uses of nuclear power the US bilateral nuclear agreement does. The US commitment to the Mahan doctrine predates and postdates the Cold War. Beyond that the United States is focused on events in Northeast Asia. Submarines have been central to Australian defence planning since the 1960s. The vast increase in maritime jurisdiction from the 1980s has underscored the priority. The performance of the Collins, moreover, has reinforced the need for a nuclear propulsion capability.

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¹¹⁵ Andrew Davies, ‘Australian Uranium Exports and Security: Preventing Proliferation’, *ASPI Strategic Insights*, no. 28 (August 2006), pp. 15-16.

¹¹⁶ *The Australian*, 29 March 2006.

¹¹⁷ In June 2005 NSW Labor Premier Bob Carr called for a national debate on nuclear power as an alternative to fossil fuel, a move championed by Federal Opposition spokesperson for resources, Martin Ferguson. *The Australian*, 7 June 2005. Joel Fitzgibbon supported enrichment on the grounds that it would ‘exponentially’ increase uranium’s value and also stressed that “enrichment is a live issue ... because you don’t want rogue nations having the right to enrich uranium”, *The Australian*, 26 May 2005. See also views of Paul Howes, the national secretary of the AWU, *The Australian*, 18 May 2010.

Australian Defence: Challenges for the New Government

Paul Dobb and Richard Brabin-Smith

With the 2013 general election now out of the way, the new government is well placed, if it has sufficient strength of purpose, to address the various issues that are at risk of engulfing the Australian Defence Force (ADF) and Defence Department. The immediate and dominant issue is that likely levels of defence funding are not enough to sustain today's ADF and simultaneously to fund its modernisation. To resolve this core inconsistency will require dispassionate analysis of Australia's evolving strategic circumstances, so that decisions on the size and preparedness of the ADF and on the rate and direction of its modernisation can have a secure foundation. This will both allow assessments of strategic risk and provide a rigorous basis for arguing for different levels of funding.

The Framework for Priority Setting

For the past forty years or so, defence policy in Australia has in effect been bipartisan. While there have been different points of emphasis from time to time, these differences have been small when compared to what the two major parties have had in common. This has meant that there has been significant consistency in the policy principles that have guided defence priorities over this period.

There has also been continuity in the kinds of hard issues that defence has faced, in particular in getting consistency between the strategic ambitions that Australia aspires to and the level of defence funding needed to achieve these goals. Closely on the heels of this dominant issue is the subsequent matter of striking the balance within the defence budget between the current force and its preparedness (the "force in being"), and force modernisation ("the future force").

This is no truer than at the present time, with the new government inheriting a situation in which the costs of strategic ambition significantly exceed realistic funding levels, now and for the foreseeable future. While this position is hardly without precedent, the pressures do seem to be more acute now than in many previous years. The challenge, therefore, is to develop options to reduce this inconsistency to more manageable levels, and in so doing perhaps to establish the strength of the case for higher levels of defence funding—that is to set out, at least at a conceptual level, the relationship between funding and strategic risk.

It is necessary first to establish a rigorous intellectual framework within which to examine such options. There are four sources for this. First is the broad

conceptual framework that has guided Australian defence policy over these past forty years.¹ Second is the Coalition's election platform *Policy for Stronger Defence*. While defence issues did not feature much at all in the 2013 general election, this document is an important point of reference.² It draws closely on the Coalition's 2000 Defence White Paper, especially the latter's statements of Australia's strategic interests and objectives.³

The relative absence of disagreement on core policy issues encourages recourse to a fourth source, the preceding Labor Government's *Defence White Paper 2013*.⁴ The new government has undertaken to publish a new white paper within eighteen months of coming into office, but in the interim the 2013 Defence White Paper represents the agreed and collective view of the senior officials involved in its drafting—not just in Defence but also in other Departments such as Treasury, Finance, Foreign Affairs and Trade, and Prime Minister and Cabinet, and the Office of National Assessments.⁵

The first component of this conceptual framework is the policy principle of *self-reliance in the defence of Australia*. On this, the Coalition's 2000 Defence White Paper includes the following:

Australia's most important long-term objective is to be able to defend our territory from direct military attack. We therefore have an overriding strategic interest in being able to protect our direct maritime approaches from intrusion by hostile forces.⁶

Our armed forces need to be able to defend Australia without relying on the combat force of other countries. This principle of self-reliance reflects, fundamentally, our sense of ourselves as a nation.⁷

The former Labor Government's 2013 Defence White Paper takes a similar line:

The highest priority ADF task is to deter and defeat armed attacks on Australia without having to rely on the combat or combat support forces of another country. ... Australia's defence policy is founded on the principle of self-reliance in deterring or defeating armed attacks on Australia, within the

¹ R. Brabin-Smith, 'The Heartland of Australia's Defence Policies', SDSC Working Paper No. 396 (Canberra: Strategic and Defence Studies Centre, 2005).

² *The Coalition's Policy for Stronger Defence* (Canberra: Brian Loughnane, September 2013).

³ Commonwealth of Australia, *Defence 2000: Our Future Defence Force* (Canberra: Department of Defence, 2000), Chapter 4, pp. 29-32.

⁴ Commonwealth of Australia, *Defence White Paper 2013* (Canberra: Department of Defence, 2013).

⁵ An interesting parallel might be found in comparing the 1975 *Strategic Basis of Australian Defence Policy* prepared for the Whitlam Labor Government and the 1976 *Australian Strategic Analysis and Defence Policy Objectives* written for the subsequent Fraser Coalition Government. There were few if any changes of substance between the two assessments. See also S. Frühling, *A History of Australian Strategic Policy Since 1945* (Canberra: Department of Defence, 2009), pp. 487, 543.

⁶ Commonwealth of Australia, *Defence 2000*, p. 30.

⁷ *Ibid.*, p. 46.

context of our Alliance with the United States and our cooperation with regional partners.⁸

The second policy principle is that there are *limits to Australia's military resources and influence*. The 2000 Defence White Paper states that:

[W]e must be realistic about the scope of our power and influence and the limits to our resources. We need to allocate our effort carefully. To do that we need to define and prioritise our strategic interests and objectives.⁹

The 2013 Defence White Paper takes a similar approach, where it says that the government's responses to security threats and opportunities will have to acknowledge

the limits of our capabilities and reach. Choices must therefore be made to guide the allocation of finite resources to deal with challenges that are most likely or most dangerous, and where our responses can be most effective.¹⁰

This theme of *choice*, and by implication *difficult choice*, recurs throughout the document.

Third is the *strong priority for operations closer to home over more-distant operations*. The 2000 Defence White Paper is quite clear on this point, with carefully gradated language that differentiates between *ensuring* the defence of Australia, *fostering* the security of our immediate neighbourhood, *promoting* stability and cooperation in Southeast Asia, *supporting* strategic stability in the wider Asia Pacific region, and *supporting* global security.¹¹ This is also the language and differentiation that the Coalition's 2013 defence platform draws on: *ensuring* the defence of Australia and its direct approaches, *fostering* the security and stability in our immediate neighbourhood, *supporting* strategic stability in the wider Asia-Pacific region, and *supporting* global security.¹²

Again, the 2013 Defence White Paper adopts a similar position, where it spells out that the tasks for the ADF, *in priority order*, are: first, to deter and defeat armed attacks on Australia; second, to contribute to stability and security in the South Pacific and Timor-Leste; third, to contribute to military contingencies in the Indo-Pacific region; and fourth, to contribute to military contingencies in support of global security. The text makes it clear that the ADF will be structured around the first two tasks, "on the understanding that

⁸ Commonwealth of Australia, *Defence White Paper 2013*, p. 28.

⁹ Commonwealth of Australia, *Defence 2000*, p. 29.

¹⁰ Commonwealth of Australia, *Defence White Paper 2013*, p. 23.

¹¹ Commonwealth of Australia, *Defence 2000*, pp. 30, 31 [emphasis added]. Page 30 also reads that "[I]n general, the closer a crisis or problem to Australia, the more important it would probably be to our security and the more likely we would be able to help to do something about it." This careful differentiation was pilloried by some commentators as advocating *concentric circles*, but the policy has evidently lasted better than its critics. See also pp. 46-53.

¹² *The Coalition's Policy for Stronger Defence*, p. 3 [emphasis added].

the resulting force structure provides capabilities that can meet other needs.”¹³ This is an important and enduring point: there is a clear differentiation between the factors which determine the size and shape of the force structure, and those which relate to its use on other tasks.

The fourth principle brings together the issues of *level of contingency* (and the degree of discretion or obligation that might apply), *warning time*, and *force expansion*. This is perhaps the core and potentially most contested subject: *what are the contingencies that the government wants the ADF to be able to handle, and within what timescales?* It calls for a balance between expenditure levels and strategic risk. The 2000 Defence White Paper takes an orthodox line, to the effect that minor contingencies might be credible in the shorter term, but that the prospect of major attack was remote and would take time to develop:

Australia today is a secure country, thanks to our geography, good relations with neighbours, a region where the prospect of inter-state conflict is low, our strong armed forces and a close alliance with the United States.

A full scale invasion of Australia ... is the least likely military contingency that Australia might face. ... it would take many years of effort to develop [the necessary capabilities].

A major attack ... remains only a remote possibility.

Minor attacks ... would be possible with the sorts of capabilities already in service or being developed by many regional countries. But such attacks would become credible only if there were a major dispute.¹⁴

The 2000 Defence White Paper also makes it explicit that planning needed to recognise that, were Australia to be attacked, we would be obliged to respond—“Even if the risk of an attack on Australia is low, the consequences would be so serious that it must be addressed”¹⁵—but leaves implicit any consideration of force expansion.

The 2013 Defence White Paper makes more explicit than many previous White Papers the need to retain “a baseline of skills, knowledge and capability as the foundation for force expansion and mobilisation should strategic circumstances deteriorate.”¹⁶ And it reassures the reader that, in spite of military modernisation in our region, “We would still expect substantial warning time of a major power attack, including dramatic deterioration in political relationships.”¹⁷

¹³ Ibid., p. 28.

¹⁴ Commonwealth of Australia, *Defence 2000*, pp. 23, 24.

¹⁵ Ibid., p. 30.

¹⁶ Commonwealth of Australia, *Defence White Paper 2013*, pp. 44, 45.

¹⁷ Ibid., p. 30. See also p. 29, including the critical need for intelligence.

It is less clear, however, on contingencies to which Australia might want to respond in the shorter term. It is as if the matter of preparedness for such contingencies has been deliberately left for resolution until after the general election. But the 2013 Defence White Paper is full of references to the current “fiscal challenge” and the need to make choices. And it seems to suggest that the choices which could be made to help balance the books include reductions to the levels of preparedness of the force in being:

Adjustments to preparedness levels in particular can take effect relatively quickly compared to longer-term basing and force structure decisions.

Maintaining a large number of ADF capabilities at high preparedness levels would reduce Australia’s strategic risk but would not be desirable or affordable against our foreseeable strategic and fiscal circumstances.¹⁸

As the preceding paragraphs have illustrated, there is much agreement between the two sides of Australian politics on the policy principles that determine defence priorities. Significant (and expensive) new policy departures by the new government can most likely be ruled out. And there is likely to be continuity of advice given to the new government by the senior officials involved in the drafting of the strategic policy assessments and force structure priorities in the 2013 Defence White Paper and the consensus that these represent. So notwithstanding the change of government since its publication, the scene is now set for completion of the work which that paper left incomplete: making the hard decisions that are needed to get better consistency between Australia’s strategic ambitions and the funds available to achieve them.

Australia’s Evolving Strategic Circumstances

It is commonplace to assert in every era that Australia faces complex, uncertain and potentially dangerous strategic circumstances. That is certainly the case now when there has been a plethora of announcements claiming that dangerous times lie ahead for Australia, even the prospect of war.¹⁹ That is not our view: while we acknowledge that the dynamics of our strategic outlook involve a greater focus on the economic strength of the Asia-Pacific and the relative growth in the power of countries such as China and India, we consider that the prospect of major power war is highly unlikely. The reasons for this are twofold: the fear of the use of nuclear weapons will remain a huge deterrent, and the world is so interconnected economically these days that there would be no winners in a major war.

¹⁸ *Ibid.*, pp. 43, 44.

¹⁹ See, for example, Hugh White, *The China Choice* (Melbourne: Black Inc., 2012); J. Brown and R. Medcalf, ‘Fixing Australia’s Incredible Defence Policy’, Lowy Institute for International Policy, October 2013, <http://www.lowyinstitute.org/files/brown_and_medcalf_fixing_australias_incredible_defence_policy_web.pdf> [Accessed 28 October 2013].

Further and importantly, we do not consider that our immediate region is likely to become threatening: rather, Southeast Asia and Australia are more likely to join in a common endeavour that seeks to manage a significant period of peace. None of this is to argue that prudent Australian defence planning should not hedge against possible adverse strategic circumstances in the longer term. But in the shorter term we have the opportunity to adjust the preparedness and size of the force in being to our current relatively undemanding circumstances. The fact is that Australia would have time to build up a high-capacity, high-technology Defence Force, one which in the longer term would be capable of deterring or acting decisively as required.

In addition to the policy principles addressed in the first part of this article, it is important to set out some further enduring principles that the new government should observe in formulating its defence policy. First, we are an island continent and our maritime approaches offer the significant advantage of strategic depth. This would pose a major challenge to any potential adversary. As *Defence White Paper 2013* observes,

An adversary would need to project power and exert control over long range and across large areas, in difficult operating environments, while attempting to protect and sustain extended lines of supply and communication.²⁰

It goes on to say, however, that military modernisation in our region reduces these geographic advantages and potential adversaries may have capabilities that can reduce the protection provided by distance.²¹ Even so, for a major power an attack on Australia would be a large-scale endeavour over long distances. And for lesser powers, it is beyond their foreseeable capabilities in any serious way.

Second, it should be a fundamental tenet of Australia's strategic policy that the scale of our contributions to contingencies be determined not only by the limits of our capacity but also our national interests. Our military resources are limited and the first call upon them must always be in respect of our own national security tasks. In the event of high-intensity conventional combat operations in our region, we would always need to hold sufficient forces to defend ourselves. Distant regional conflicts are not to be seen as necessarily calling for a major military contribution by us. This principle is bipartisan and long-standing.

Third, we need to recall some of the enduring strategic judgements of the Fraser Coalition Government's 1976 Defence White Paper. That document argued sensibly that change does not necessarily mean insecurity, and that the use of military force is not a course adopted lightly by one country

²⁰ Commonwealth of Australia, *Defence White Paper 2013*, p. 30.

²¹ *Ibid.*

against another.²² These key policy judgements have well withstood the test of time. Despite major changes in Australia's circumstances, we have been free from threat of major military attack since the end of World War II. As the 1976 White Paper argued, military action against us must appear to offer worthwhile rewards; there must be substantial political hostility or ambition for conquest or adventurism to induce one nation to organise and sustain military attack upon the sovereignty and independence of another; and there would need to be apparently favourable strategic circumstances. The conjunction of such conditions is infrequent among the nations of the world and takes time to develop.²³

Fourth is the issue of intelligence warning time and our capacity to detect the build-up of threatening military capabilities. The 1976 Defence White Paper was prescient also in this regard: it argued that major threats, requiring both military capability and political motivation, are unlikely to develop without preceding and perceptible indicators and that the final emergence of a major military threat to Australia would be a late stage in a series of developments.²⁴ This basic principle is repeated in the 2013 Defence White Paper, as we quote earlier.

Central to this judgement is a defence intelligence capability that can identify the build-up of the expeditionary capabilities and forces an adversary would require to attack Australia. This warning would allow us to expand the ADF and mobilise additional resources. The 2013 Defence White Paper observes that a strong defence intelligence collection and analytical capability is critical now, and will be even more so in the future.²⁵ As military capabilities in our region develop and modernise, the concept of intelligence warning will assume even more importance. A close watch must be maintained on whether warning time is likely to fall short of the lead times necessary to increase preparedness and to expand the ADF.

The longer the warning time afforded to defence decision-makers, the longer the time available to generate the force posture necessary to match any projected threat.²⁶ The ADF should not be held at high levels of preparedness against contingencies for which there would be significant strategic warning. This is why more attention should be given to mobilisation and the expansion base; that is, there is a need to retain a baseline of skills, knowledge and capability as a foundation for force expansion and mobilisation should strategic circumstances deteriorate.²⁷ Having a core

²² Commonwealth of Australia, *Australian Defence* (Canberra: Australian Government Publishing Service, 1976), p. 2.

²³ *Ibid.*

²⁴ *Ibid.*, p. 10.

²⁵ Commonwealth of Australia, *Defence White Paper 2013*, p. 29.

²⁶ *Ibid.*, p. 44.

²⁷ *Ibid.*, pp. 44-5.

force that can be expanded within strategic warning time is a concept that requires greater prominence in these hard economic times.

The 2013 Defence White Paper makes it clear that Australia's geography requires a maritime strategy for deterring and defeating attacks against Australia and contributing to the security of our immediate neighbourhood and the wider region.²⁸ This requires the ability to generate a joint force able to operate in a maritime environment that extends from the eastern Indian Ocean to the South Pacific and from Southeast Asia to the Southern Ocean. This amounts to about 17 per cent of the Earth's surface, which is a challenging operational task for a Defence Force of less than 60,000. The security of Southeast Asia in particular is an enduring Australian strategic interest because of its proximity to our northern approaches and crucial shipping lanes.

Although the 2000 Defence White Paper also talked about Australia needing a fundamentally maritime strategy, it did not provide much detail and was overtaken by events in Iraq and Afghanistan for the next decade. Therein lies a problem: because of our preoccupation with sending expeditionary forces to distant theatres, we have run down some of the most crucial capabilities we now need to support a maritime strategy in our own region. These include: antisubmarine warfare, mine hunting and sweeping, electronic warfare, and maritime surveillance. We need to refocus on the highly demanding nature of military operations in an archipelagic environment and the unique operating challenges that this presents. This means re-familiarising the ADF with what is involved in operating in the seas and islands of Southeast Asia and the South Pacific, and rebuilding those capabilities that have been allowed to be run down.

There are three geographical areas that require the attention of the ADF. First, it needs to reacquaint itself with the north and north-west of our continent and our maritime approaches. The Force Posture Review found some of our northern bases have inadequate logistics support and infrastructure to support high-tempo military operations.²⁹ If we are to protect our extensive maritime territory and strategically significant offshore territories and economic resources, more attention will need to be given to the adequacy of air, naval and land bases, as well as access to commercial infrastructure in the north. The new government has stated it will consider having a greater presence for our military forces in northern Australia, especially in resource-rich areas with little or no current military presence.³⁰

²⁸ *Ibid.*, p. 28.

²⁹ A. Hawke and R. Smith, *Australian Defence Force Posture Review*, Department of Defence, 30 March 2012, <<http://www.defence.gov.au/oscdf/adf-posture-review/docs/final/Report.pdf>> [Accessed 28 October 2013], p. 28.

³⁰ *The Coalition's Policy for Stronger Defence*, p. 6.

The second area of strategic focus is our immediate neighbourhood where we have important interests and responsibilities. The security and stability of our immediate neighbourhood, which we share with Papua New Guinea, Timor Leste and the small island states of the South Pacific, are interests where Australia has a central strategic role. It is a part of the world where we must be able to intervene, if requested. The drawing down of our troop presence in Timor Leste and the Solomon Islands after more than ten years does not spell an end to the requirements in the South Pacific for humanitarian and disaster relief, capacity building and governance, and potential peacekeeping operations and military intervention.

The third area of strategic focus is Southeast Asia, which is the fulcrum between the Indian Ocean and the Pacific (or what the 2013 Defence White Paper calls the Indo-Pacific). This area includes the eastern Indian Ocean and the seas of Southeast Asia. The priority we give to Southeast Asia should include being able to help Southeast Asian partners meet external challenges, particularly given the uncertainties surrounding the strategic transformation of our wider region. This means Australia should be prepared to make substantial military contributions if necessary.³¹ In this context, we need to give much more thought to the sort of ADF joint force that might be appropriate to credible Southeast Asian contingencies, as well as to how the ADF might operate in closer partnership with Southeast Asian countries as they become more militarily capable over time. This analysis must also consider the need to avoid becoming hostage to any adventurism of other countries in issues in which we are not a principal party, and the timescales in which contingencies might arise, as this would affect judgements about preparedness levels.

We will also have a modest capability to contribute to high-intensity conventional conflict in Northeast Asia. That is not, however, a part of the world where we can make a real military difference. Even so, meeting our alliance commitments to the United States could involve niche contributions by some of the high-technology assets that we acquire for our own force structure purposes and that would also be relevant to Northeast Asian contingencies.

The 2013 Defence White Paper observes that our national prosperity is underpinned by our ability to trade through Indo-Pacific maritime routes and that the ADF needs to be prepared to play a role in keeping these sea lanes secure. That should not be interpreted to mean that the ADF will be required to defend sea lanes at a great distance in the north Pacific or the western Indian Ocean. Rather, we should concentrate our efforts on operations and focal areas closer to home, including the protection of trade vital to our nation and the protection of our key ports against mining.

³¹ Commonwealth of Australia, *Defence White Paper 2013*, p. 31.

All this means that, after a decade which has been dominated by predominantly land operations in Afghanistan and the Middle East, there now needs to be a serious re-examination of what our strategic priorities mean for the force structure and its preparedness. The required shift in focus to a maritime strategy will be a major challenge and will require the Defence Force to refocus on our own part of the world. This focus should be on credible contingencies, which may include conventional conflict in the region.

The Need for Economy

It has become a common observation that, with the end of the investment phase of the mining boom, Australia's economy will have to make some painful adjustments before serious and sustainable economic growth will resume, and that public finances will be held under a tight rein for several years, perhaps for the foreseeable future. The outlook for the Defence budget is therefore one of continuing austerity, both because of government's commitment to return to conditions of budget surplus as soon as practicable—most likely taking several years—and because of the other pressures on government expenditure, such as the costs of health, Australia's ageing demographic profile, education, and infrastructure development.

While the government has undertaken to increase the percentage of GDP spent on Defence from its present 1.6 per cent to 2.0 per cent within ten years, experience tells us that this should not be regarded as likely. Dr Mark Thompson of ASPI has calculated that it would require growth rates of some 5.3 per cent per annum sustained over the whole of that period.³² There is no precedent for such sustained growth, except in wartime or acute international crisis, and even then not for such an extended period. It is simply not credible and, further, there is the challenge that Defence would face in responsibly ramping up expenditure levels at the rate envisaged.³³

Lack of publicly available information means that it is not possible to assess with accuracy the degree of shortfall between the level of funds likely to be available and the costs of sustaining the current force and implementing the ambitious modernisation plan set out in the Defence Capability Program.

³² M. Thomson, '2%--can we, should we, will we?', *The Strategist*, ASPI, 10 September 2013, <<http://www.aspistrategist.org.au/2-percent-can-we-should-we-will-we/>> [Accessed 28 October 2013]. This calculation includes reasonable assumptions about the growth of GDP over the forward ten years.

³³ It might be noted that the opportunity costs associated with moving from 1.59 per cent to 2.0 per cent of GDP would be significant; even at Australia's present level of GDP it would still be some \$6.4 billion.

Suffice it to say that such analysis as has been attempted paints a persistently gloomy picture.³⁴

One important observation is possible, however. The proportion of the defence budget that is now spent on investment has fallen to 22 per cent, when historically it has been about 33 per cent. In particular, personnel costs have risen dramatically and now account for 42 per cent of defence spending. An option to consider is to cut defence personnel numbers to find the additional \$2.85 billion a year necessary to bring the investment share of the budget back up to 33 per cent—and even that might not be enough for the modernisation program currently envisaged. Even if the civilian defence workforce were cut by half (some 10,000), it would save only about \$1.1 billion annually and still leave a shortfall of \$1.8 billion in the historic share of capital investment. This would imply that cuts to the Defence Force, whose per capita costs are some 30 per cent higher than those of civilians, would also need to be made. To reduce ADF personnel costs by \$1.8 billion would require ADF numbers to fall by some 12,500, or about 20 per cent of the ADF target strength of 59,000 full-time personnel.

Such figures serve to show the magnitude of the problem, and neither of these options should be considered lightly, if at all. The trend over many years has been to civilianise military positions where possible, not least because of the significantly higher per capita costs associated with ADF personnel. This civilianisation has been implemented either through outsourcing (that is, the greater use of industry), or through greater use of public servants. It would make no sense now to make drastic reductions to civilian numbers only to have their work carried out by more-expensive ADF personnel. Further, many Defence civilians are subject-matter experts, in areas such as intelligence, policy, science, cyber, and the Defence Materiel Organisation. Similarly, a reduction of 20 per cent to the planned strength of the ADF would imply severe reductions in capability, a step to be taken only after searching analysis of the consequences.

This is not to say that some reductions should not be made, provided the consequences have been thought through and the risks assessed. Indeed, in the likely absence of increased funding, some reductions would appear inevitable if a good balance is to be struck between the present force and the future force. Another area for attention should be the creep in military and civilian rank structures in recent years.³⁵ But it would be a mistake to believe that radical and pain-free savings are easily available. Most easy savings have already been made, through such initiatives over recent decades as

³⁴ See M. Thomson, 'Defence Funding in 2013: Means, Ends and Make Believe', *Security Challenges*, vol. 9, no. 2 (2013), pp. 51-8; M. Thomson, *The Cost of Defence: ASPI Defence Budget Brief 2013-2014* (Canberra: Australian Strategic Policy Institute, 2013).

³⁵ See, for example, Thomson, *The Cost of Defence*, p. 50; M. Thomson and A. Davies, 'Defence', in *Agenda for Change: Strategic Choices for the Next Government*, ASPI Strategy series (Canberra: Australian Strategic Policy Institute, August 2013), p. 20.

the corporatisation and privatisation of the defence factories and dockyards in the 1980s, the market testing of non-core functions in the early 1990s, the implementation of the Defence Reform Program in the late 1990s, and the Strategic Reform Program of the 2000s.

Changes to the Defence Force: Preparedness, Size and Modernisation

What, then, do the observations on priorities set out in this article tell us about how the Defence Force might be adjusted to conform to the constraints of an austere budget outlook? What changes might best be considered to the force in being, its preparedness, and plans to modernise the force?

It is important to make clear that, over the longer term, we do not rule out situations developing in a manner adverse to Australia's interests. Defence policy must insure against such uncertainties and risks. Our military capabilities and competence must continue to command respect. In this context, it has long been a fundamental priority of Australian defence policy that we maintain a clear margin of technological superiority in our region, because we focus on capabilities, rather than on specific threats. This is becoming a greater challenge as regional defence forces acquire more sophisticated weapon systems. Therefore, modernising our Defence Force, so that it remains a highly competent, high-technology force, is fundamental.

The fact is, however, that the cost of projecting and sustaining military power is increasing and the range of our interests is expanding just as defence budgets are in effect tightening. The ADF will have to deal simultaneously with increasing sustainment costs for ageing equipment, as well as the highly ambitious new acquisition program set out in the 2009 Defence White Paper and, by and large, reiterated in the 2013 Defence White Paper. Absent large increases in the defence budget, this means government will need to be much more rigorous in setting priorities among competing military proposals than in the recent past. The current Defence Capability Plan is far too ambitious and needs to be zero-based, such that future acquisitions can be afforded and are more demonstrably relevant to our strategic circumstances. As the new government considers particularly big capability proposals, it will be important for it to understand what the scale of investment means in terms of opportunity costs, i.e. what other defence capabilities might need to be foregone.

Preparedness too needs much more rigorous treatment and analysis, both for the current force and the modernised force. As discussed earlier, this is a heartland issue. Preparedness might be imagined as a spectrum. At one end, there are force elements ready to conduct operations at short notice and sustain them for an indefinite period; there are force elements which would require some months to prepare and for which procurement action

could be necessary to ensure sustainability; other force elements, such as the Reserves, would require longer to reach the right level of readiness and sustainability; and the formation of new units, building on the expansion base, would take longer still, depending on the complexity of the skills involved and the time needed to procure materiel. There are costs associated with high levels of preparedness and in the present financial climate unnecessary levels of preparedness are wasteful and cannot be afforded.

Another important option is to re-examine the hugely expensive future defence projects, in particular the proposed twelve new submarines for about \$30 billion, 100 Joint Strike Fighters at \$16 billion, and Army's \$19 billion bid to replace its armoured and mechanised combat vehicles. These are projects which have gone well beyond the scale and potential risks of any previous big Defence projects, and which, through their sheer demands on future budgets, will crowd out other important elements of a technologically advanced force. Taken together, these three projects, costing some \$65 billion, account for fully one-quarter of the Defence Capability Plan extending out to 2030. They are by far the largest and most expensive projects that Defence will undertake—if they are in fact implemented. Let us briefly examine each of them.

Future Submarines

The most costly defence project in Australia's history will be the future submarines. They have been variously costed at anywhere between \$20 billion and \$40 billion, with the upper figure more likely to represent accurately the total program cost with project overheads.³⁶ If one adds to that through-life maintenance costs over a 25 to 30 year cycle, the total acquisition plus maintenance bill over the life of the submarines will be at least \$100 billion. This is a lot of taxpayers' money for what could well turn out to be a high risk venture if a brand-new design or evolved Collins is chosen, as was identified in the previous government's 2013 Defence White Paper.³⁷

However, unlike some other major projects in the Defence Capability Plan, submarines are a first-order priority for Australia's maritime strategy. Together with superior air combat power, they will be Australia's frontline deterrent force, with a formidable capacity to sink enemy ships and submarines. They will be equipped with an evolved version of the AN/BYG-1(V) 8 combat system developed for the US Navy's Virginia class SSN (nuclear attack submarine), and ADCAP Mark 48 torpedoes, ensuring Australia's technological advantage in submarine warfare in the region. We are the only other country in the world to operate such highly sensitive US

³⁶ A. Davies, 'The Future Submarine Project', *Security Challenges*, vol. 9, no. 2 (2013), p. 83.

³⁷ Commonwealth of Australia, *Defence White Paper 2013*, p. 83.

combat capabilities, which are already on the Collins class. These features alone will determine what type of future submarine we acquire, and where it will be built.³⁸

It will be important, however, for the new government to revisit why the 2009 Defence White Paper decided to double the number of submarines, from six to twelve, without any public justification. For the last forty-five years—including in the Cold War when Australia's Oberon class submarines operated against the Soviet Navy—we have never had more than six submarines. This does not mean that there might not be strategic justification for twelve submarines, but there was no supporting analysis in either the 2009 or the 2013 Defence White Papers. As a recent former Deputy Secretary of Defence observes "It is unclear whether there is any strategic basis to the current government's decision" to acquire twelve submarines.³⁹

The language of the 2009 Defence White Paper implied a belief that a submarine force of this size, armed with Tomahawk land-attack missiles, was needed to give Australia the option of strategic strike against China. This would be a dangerous indulgence. Rather, the primary force structure driver for the size and capabilities of Australia's future submarine fleet should be our requirement for independent submarine operations in our own region, including consideration of force expansion in the event of strategic deterioration.

Air Combat Capability

An abiding priority for Australia for many decades has been to have an air combat capability capable of the decisive use of force to deny the air approaches to the continent to a potential enemy. In the event that Australia is attacked, we must be able to dominate the sea and air gap from the military bases we have established in the north of Australia. As already mentioned, some of these bases now require logistic and fuel arrangements capable of supporting high tempo operations, as well as greater attention to their protection. As *Defence White Paper 2013* observes, the economic importance of northern Australia has increased, meaning that an effective, visible force posture in the north of the continent is necessary to demonstrate our capacity and will to defend our territory, offshore resources and extensive maritime areas.⁴⁰

Our strategic geography dictates that the primary force structure determinant of the ADF means focusing predominantly on forces that can exert air

³⁸ P. Dibb, 'A Sovereign Submarine Capability in Australia's Grand Strategy', *The Centre of Gravity Series* (Canberra: Strategic and Defence Studies Centre, ANU, December 2012), p. 3.

³⁹ P. Jennings, 'Defence Challenges After the 2013 Defence White Paper', *Policy*, vol. 29, no. 2 (Winter 2013), p. 50.

⁴⁰ Commonwealth of Australia, *Defence White Paper 2013*, p. 24.

superiority and sea denial in our approaches. The 2013 Defence White Paper observes that emerging advanced air combat and air defence capabilities within the region, together with the proliferation of modern electronic warfare systems, will make the air combat tasks of controlling the air, conducting strikes and supporting land and naval forces increasingly challenging.⁴¹ The previous government asserted that it would not allow a gap in our air combat capability to occur.⁴² As a result, as an apparently prudent measure to ensure Australia's air combat capability through the transition period to the Joint Strike Fighter (JSF), it decided to retain the twenty-four F/A-18F Super Hornets in their current air combat and strike capability configuration and, in addition, to acquire twelve EA-18G Growler electronic attack aircraft instead of converting twelve of the existing Super Hornets into the Growler configuration.⁴³

Australia's will be the only defence force other than America's to operate Growler, which will give us a major advantage of being able to suppress enemy air defences in the event of a serious regional conflict. Given the importance of electronic warfare in modern high-intensity warfare, this decision is welcome, as it will help fill a significant capability gap, although there is scope to question the apparent urgency of the decision and the effect that the \$2.77 billion cost will have on the Defence Capability Plan, as well as the associated Net Personnel and Operating Costs (NPOC) amounting to a further \$3.14 billion over seventeen years.⁴⁴

The decisions involving the acquisition of Super Hornets must inevitably affect future decisions surrounding numbers of Joint Strike Fighters. It will also lead eventually to the increased costs of operating a mixed fleet of Super Hornets and JSFs with two separate operating, training, engineering and logistics systems.⁴⁵

A risk for Australia's air power capabilities is that decisions on significant numbers of JSF will be delayed such that they compete for available money with the future submarines. We are firmly of the view, however, that decisions on the JSF—whether to continue with acquisition and how many to acquire—should be deferred until there is clarification about the technological faults and delays involved and the likely final costs.

Army Modernisation

The Army has been heavily involved in Afghanistan since 2001 and the South Pacific since 1999, and has changed as a consequence. It has grown

⁴¹ *Ibid.*, p. 88.

⁴² *Ibid.*

⁴³ *Ibid.*

⁴⁴ J. Blackburn, 'The Future for Aerospace Forces', *Security Challenges*, vol. 9, no. 2 (2013), p. 69.

⁴⁵ *Ibid.*, p. 70.

from less than 25,000 in the year 2000 to 30,000 today. The Army now accounts for half of our Regular Armed Forces and the vast majority of our Reserves. Its program costs at \$5.3 billion a year are about \$1 billion year more than either Navy (\$4.3 billion) or Air Force (\$4.2 billion).⁴⁶ Army undoubtedly has done much of the ADF's heavy lifting in the last fourteen years: it did an outstanding job in Timor Leste and its contribution to the conflict in Afghanistan has been very demanding for over a decade. Now, however, it faces a different strategic challenge: it must adjust or face the sort of traumas that it brought on itself after Vietnam.

It is worth recalling that in the mid-1980s, more than a decade after the end of the Vietnam War, the Australian Army was still struggling with the government's directive that it focus on the defence of Australia. The Army Office prepared the *Army Development Guide*, which postulated a conventional military threat where the enemy had lodged essentially a four-brigade divisional group (including supporting troops). It proposed that Australia would require a field force element of some 135,000 personnel, and the whole Army some 270,000 personnel.⁴⁷ As an interim measure, Army argued for an Objective Force-in-Being with a strength of 94,000, which would provide the base from which expansion for higher levels of conflict could occur. Army recognised that it would not be possible to man this Objective Force-in-Being in the foreseeable future even with full use of the Reserves. But it took the view that the force structure and capabilities needed in the expansion base for this force would be suited also for countering shorter-term credible contingencies.

Needless to say, this concept did not conform with the government's strategic guidance. The then Chief of the General Staff, Lieutenant-General Peter Gration, accepted that this was not a sensible basis for future force planning for the Army. In this context, the assertion recently by some that Defence civilians presided over the strategies that allegedly ran the Australian Army down during the 1980s and 1990s has no substance.⁴⁸ It needs to be clearly understood that it is the Australian Government that makes the decisions (not the ADF or defence civilians), based on the merits of the arguments presented to it and its own judgements.

What is the relevance of this to today? The Army appears again to be struggling to come up with force structure priorities relevant to Australia's new strategic circumstances. Under Project Land 400, it has proposed a \$19 billion project to replace all of Army's armoured and mechanised fighting vehicles. The aim of this costly proposition is to be able to defeat "a peer in

⁴⁶ Thomson, *The Cost of Defence*, p. 58.

⁴⁷ *Review of Australia's Defence Capabilities*, March 1986, p. 84.

⁴⁸ P. Leahy, 'The Future for Land Forces', *Security Challenges*, vol. 9, no. 2 (2013), pp. 65-6.

terms of military capability” on the battlefield.⁴⁹ To our knowledge, there is no endorsed strategic guidance—either classified or in the public domain—that would underpin such a provocative idea. The question needs to be asked: which peer competitor—is it in Southeast Asia or the Middle East, or elsewhere?

Army would be much better advised to focus on the serious challenge ahead of adjusting to its new role with the ADF's greatly enhanced amphibious capability, based on the two new 27,000 tonne LHDs (Landing Helicopter Dock). They will be the largest ships ever operated by the ADF and will represent what the 2013 Defence White Paper terms "a step change" in the way Australia deploys its land forces and their supporting systems in amphibious operations.⁵⁰ The initial focus will be on security, stabilisation, humanitarian assistance and disaster relief tasks. Of course, the LHDs will be able to operate much further afield, but if they were to undertake high-intensity operations it would take a great deal of the ADF's key military assets, including substantial elements of the Navy and the Air Force, to protect them. The demands of such operations in a hostile environment would risk the ADF becoming a one-shot Defence Force—something we must avoid, especially if the potential operational gain were not worth the strategic risk and were to compromise the ADF's ability to defend the Australian homeland.

It would be extremely unwise for Army to dismiss its new amphibious challenge as "a narrow role as a strategic goalkeeper for the defence of Australia or for limited paramilitary duties in the South Pacific".⁵¹ What does Army have in mind instead? Is it an opposed amphibious landing against a peer competitor army? In fact, the Chief of Army acknowledges that even permissive entry operations are formidable and that "land effects from sea platforms is the most demanding military task that can be asked of a joint force".⁵²

In our view, Army is on much sounder ground with its Plan Beersheba. This aims to restructure the Army into three multi-role combat brigades with similar organisational structures including armour, artillery, infantry, communications, engineer and aviation elements. This means Army would have the capability to deploy and rotate a brigade size force.⁵³ Each multi-role combat brigade would be supported by two Reserve Brigades. This would allow a "Total Force" concept where multi-role brigades could be

⁴⁹ Speech to the Australian Strategic Policy Institute by the Chief of Army, 11 April 2012. In a later speech to the RAN's Seapower Conference on 7 October 2013, the Chief of Army talks about "a peer competitor or a potent irregular enemy".

⁵⁰ Commonwealth of Australia, *Defence White Paper 2013*, p. 77.

⁵¹ Leahy, 'The Future for Land Forces', p. 65.

⁵² Chief of Army address to the Chief of Navy's Sea Power Conference, Sydney, 7 October 2013, pp. 14-5.

⁵³ Leahy, 'The Future for Land Forces', p. 61.

deployed or elements of them deployed separately on discrete tasks.⁵⁴ Being able to deploy and sustain a brigade in our immediate region, or for credible contingencies on Australian territory, would clearly be of strategic relevance.

It is not clear, however, what the additional personnel, equipment, training and maintenance costs would be, or the degree of preparedness that would be appropriate. It is unlikely that an “ideal” approach could be afforded—that is, would command sufficient priority in times of financial austerity—so it would be necessary to look at less expensive options, perhaps based on smaller or less capable brigades, or options that had one or more brigades that made less use of Regular personnel and greater use of the Reserves. Such options would acknowledge that relevant contingencies would take time to emerge, giving Australia time to increase the preparedness of those force elements which were not yet ready to deploy. It would also accept that, other matters being equal, it takes less time to train many Army personnel than those in the ADF requiring more technically demanding or complex skills.

Care would need to be taken to ensure that these brigades did not mutate into heavy armoured forces suitable for contributions to coalition forces in high-intensity conflicts, as the Howard Government's 2000 Defence White Paper warned against.⁵⁵

These three examples of highly expensive force structure proposals in the Defence Capability Plan, costing in excess of \$60 billion in acquisition costs alone (and at least another \$120 billion in sustainment costs over their expected life-in-service), raise some serious questions about their affordability and strategic relevance in our current circumstances.

Conclusions

In this article we have argued that there is a set of enduring policy principles that have guided the defence policies of both sides of Australian politics, and that defence policy in Australia is in effect bipartisan. We should therefore not expect any surprises as the new Coalition Government comes to terms with the challenge of reducing the gap between the cost of Australia's strategic ambitions and the funds available to achieve them. Given the size of this gap, and the prospect of enduring austerity in the defence budget, this challenge will prove formidable.

We have developed these policy principles to see how they might best be applied in contemporary circumstances. We have demonstrated that the policy focus on the defence of Australia and operations in our immediate

⁵⁴ Commonwealth of Australia, *Defence White Paper 2013*, p. 85.

⁵⁵ Commonwealth of Australia, *Defence 2000*, p. 79.

region continues to be inviolable, especially with the expected continued growth of the economies and military potential of the major and middle powers of the Indo-Pacific. We have re-emphasised the centrality of a strategy that is maritime in focus.

But the nature of the imbalance between the costs of the ambition set out in the 2009 and 2013 Defence White Papers of the previous Labor Government and likely funding levels means that there are no easy solutions to the challenge of restoring the balance. Essentially, there will have to be reductions both to the preparedness (and therefore potentially also to the size) of the force in being and to the modernisation program. In judging the best balance implied by this choice between the present and the future, it is important that expediency not cause undue weight to be given to preserving the force in being at the expense of the future force. Australia's strategic circumstances are relatively benign at present but the longer term future, on which the more critical and costly parts of the modernisation program are focused, is likely to prove much more demanding.

These observations require that renewed attention be given in defence planning to using the ideas of warning time, the core force, preparedness and the expansion base, and to acknowledging the need to identify and manage strategic risk. They imply that force elements which can be expanded relatively quickly should now be reduced, especially with the pending draw-down from Afghanistan. They imply that those force elements which have long lead-times and which are critical to a maritime strategy should continue to receive priority, although even here there could well be scope in the shorter term to go to lower levels of preparedness, at least selectively.

Giving priority to modernisation, however, does not imply that there is no scope to review the modernisation program. As we have argued, there is a need to review the capability and size of the Future Submarine force, and the numbers of JSF to be acquired, in spite of the centrality of both capabilities to a successful maritime strategy. Modernisation proposals for the Army are, however, in a different category. In brief, the government should instruct the Army to abandon its preoccupation with planning for fighting a "peer competitor" and to focus instead on more credible contingencies involving the defence of Australia and our nearer maritime region, including Southeast Asia.

Importantly, the process of reviewing preparedness and modernisation should lead to a clear understanding of any additional strategic risks being run—that is, the risk that Australia's ability to respond to a contingency would not be timely or strong enough. Such analysis would of course need to differentiate between those contingencies to which Australia would be obliged to respond and those for which a response would be discretionary. It would provide a solid basis for discussions with other areas of government

concerning levels of defence funding—and a far more substantive argument than assertions based only on percentages of GDP.

For our part, were the funding situation to prove less dire than we have anticipated, we would advocate a strong preference for maritime capabilities and their modernisation. This is not to say that the Army should be ignored but, rather, in the hard world of decision-making on resource allocation, our priorities have to reflect the enduring reality of Australia's strategic geography.

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The Funding Illusion: The 2% of GDP Furphy in Australia's Defence Debate

Andrew Carr and Peter J. Dean¹

One of the most effective rhetorical punches thrown by the Coalition during its period in Opposition was the (accurate) claim that Australia's defence spending had slipped to the lowest levels since 1938. In turn the Coalition nominated a target of spending two per cent of Australia's gross domestic product on Defence, should it win the 2013 election. This promise was later echoed by the Labor Government. This article explores how the 1938 comparison emerged, how it morphed into a two per cent of GDP policy target and argues that this debate has been unhelpful for Australia's security. It argues that the Coalition, now in office, should abandon the two per cent target and return to a more orthodox approach to funding defence.

In the lead up to the 2013 Australian Federal election both of the major political parties committed to a significant increase in defence spending. While pre-election bidding wars are not unusual, this one was different. First, a bipartisan consensus was reached over the funding target. Second, this target was not to fund particular capabilities or even a specific dollar figure, but rather to peg the Defence budget at two per cent of Australia's Gross Domestic Product (GDP). Third and finally, the vast majority of portfolios are not funded in this way² and the use of GDP, as an explicit target, goes against a long tradition of defence budgets (at least theoretically) being a negotiation between an assessment of the strategic environment, the capabilities sought to meet those challenges, and the available financial capacity of the nation.³

While the two per cent of GDP policy target has been welcomed by many in Australia's defence community,⁴ there are a significant number of analytic and practical difficulties associated with using a nation's GDP as a way of

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² A policy target using Gross National Income has been applied to Australia's Foreign Aid budget, as part of a global push under the Millennium Development Goals for a global standard. For reporting purposes GDP is also used in some official reports and academic publications as one of many ways to discuss and examine larger portfolios such as Health or Education.

³ For a detail analysis of the budget for the 2013 Defence White Paper see Mark Thompson, 'Defence Funding in 2013: Means, Ends and Make Believe', *Security Challenges*, vol. 9, no. 2 (2013), pp. 51-58.

⁴ See, 'Defence in Depth: Expert views on the Defence Budget', Lowy Institute for International Policy, <<http://www.youtube.com/watch?v=ekLtlf69Szk&feature=youtu.be>> [Accessed 13 November 2013]. See in particular the comments of former Army generals Jim Molan and Peter Cosgrove.

both analysing and enacting defence policy.⁵ This article sets out to explore how the two per cent policy target was adopted in Australia and its implications for the nation's defence policy. It shows how the GDP measure emerged as a way for the Coalition and commentators to draw a historical link between Australia's defence spending in 2012 and 1938,⁶ a comparison that both captured and distorted the public debate. This article will demonstrate how the repeated heavy use of the 1938 comparison legitimised the use of GDP to measure defence and in turn led to the adoption of the two per cent target by both the Coalition and Labor parties.

The funding of a portfolio involving billions of dollars, spent on tens of thousands of individuals, hundreds of major projects and dozens of operations and locations is a necessarily complex effort. It is not surprising, nor automatically harmful, that politicians use simplified measures to communicate their approach to this or any other portfolio. Earlier periods have seen politicians and the military use GDP as one way to assess and guide the defence budget.⁷ For instance the 1997 Strategic Review stated that one of the "most common measures of defence spending is the proportion of GDP spent." However it also noted that while this "is a handy shorthand comparison ... it has no strategic significance in indicating whether a government is spending enough to achieve its strategic objectives."⁸ In the Howard and Rudd years the most persistent financial pledge was in relation to achieving an annual three per cent 'real growth' in

⁵ Notably, the Australian Department of Defence does not publish its funding as a proportion of GDP. For this reason the authors have largely had to rely on the work of the Australian Strategic Policy Institute, cross checked against the work of Joan Beaumont, *The Australian Centenary History of Defence. Vol. 6, Australian Defence: Sources and Statistics* (Melbourne: Oxford University Press, 2001) to identify and verify GDP figures used.

⁶ For example see Peter Hartcher in 'Defence in Depth: Expert Views on the Defence Budget'; Dennis Shanahan, Brendan Nicholson and Cameron Stewart, 'Incoming Defence Chief's Warning on Spending Cuts', *The Australian*, 18 September 2012; Tony Abbott, 'Labor Leaves Australia Vulnerable to Wolves', *The Daily Telegraph*, 26 September 2012; Peter Jennings, 'The Politics of Defence White Papers', *Security Challenges*, vol. 9, no. 2 (2013), pp. 10, 14; James Brown and Rory Medcalf, *Fixing Australia's Incredible Defence Policy*, Lowy Institute Analysis, October 2013, p. 3.

⁷ The 1987 Defence White Paper noted that "the levels of defence capability and the priorities reflected in this Paper, there is a need, over the life of the program, for an allocation of resources generally within the order of 2.6 per cent to 3.0 per cent of GDP" *The Defence of Australia* (Canberra: Australian Government Publishing Service, 1987), p. 112. The 1994 Defence White Paper also stated that 'the Government plans that defence spending will be sustained at approximately 2 per cent of Gross Domestic Product', though this target was not met. *Defending Australia Defence White Paper 1994* (Canberra: Commonwealth of Australia, 1994), p. 146.

⁸ *Australia's Strategic Policy* (Canberra: Commonwealth of Australia, 1997), p. 50. Of the two other major reviews in the 1990s the 1991 *Force Structure Review* only mentions that defence spending could decline as a percentage of GDP if financial resources fall significantly over the decade. *Force Structure Review* (Canberra: Commonwealth of Australia, 1991), p. 6. In relation to the 1993 Strategic Review the only mention of GDP is a reference to the comparative size of Australia's economy in the region and in reference to declining defence spending in New Zealand. See *Strategic Review 1993* (Canberra: Commonwealth of Australia, 1993), pp. 14, 21.

the defence budget.⁹ A focus on GDP to measure defence funding can also be found overseas where the North Atlantic Treaty Organisation (NATO) has had a policy, since 2006, of member nations spending two per cent of their GDP on defence. A problem emerges however, when one type of measurement dominates the debate above all others, and replaces more nuanced thinking about what and where Australia needs to spend its limited resources to ensure its security.

This article argues that what was new during the 2012-2013 period was that GDP as a form of measurement, and specifically two per cent of GDP, became something of a 'magic number', replacing sensible debate about what Australia wants from its defence force. This article argues that the new Abbott Government should quietly abandon the use of GDP to measure defence and return to more traditional model of determining the defence budget; one based on a long term budget certainty¹⁰ built on assessments of the strategic environment and capability requirements needed to protect Australia's strategic interests and achieve its strategic objectives. The ideal time to return to this more orthodox approach to defence funding will be via a new Defence White Paper, which was part of the election platform of the Coalition, and is due for release in 2015.

This article touches on, but does not seek to directly engage the debate over whether increases in Australia's defence spending are needed. Both authors believe defence spending should be driven by a clear assessment of Australia's strategic environment, interests and objectives, and appropriate force structure and capabilities. For Australia's current position, this may well require higher spending on defence. The major concern addressed in this article is the emergence of an arbitrary form of budget analysis and policy development. Understanding what is required to ensure Australian security is a function not of spending, but an assessment of the regional environment and potential threats. It is only when examining the capacity of a nation to spend enough to counter the threats it faces or obtain its objectives does the size and scope of a nation's economy become relevant. While GDP can be useful as one amongst a number of measurements of defence spending, as an indicator of the government's priorities,¹¹ or as a rhetorical tool, when it becomes the sole touchstone for policy development there is great potential for poor policy outcomes. It is sound-bite policy for a sound-bite era; and while it may well have been an effective political

⁹ Only four of NATO's 28 members currently meet this target. *The Secretary-General's Annual Report 2012*, NATO Public Diplomacy Division, 2013, p. 11.

¹⁰ The authors acknowledge that achieving long term budget certainty in the face of short election cycles and an evolving national and global economy is very difficult to accomplish and has rarely, outside of wartime, been achieved.

¹¹ Mark Thomson, 'There's No Perfect Measure for Defence Spending', *The Strategist*, 23 April 2013, <<http://www.aspistrategist.org.au/on-measures-of-defence-spending/>> [Accessed 13 November 2013].

approach to discuss defence funding from opposition, it is a poor approach to making policy in government.

The Rise of GDP Spending for Defence in the Public Debate

Before discussing the merits and flaws of the GDP comparison as a form of analysis and policy ambition, it is important to chart the rise of the GDP comparison in the Australian debate, as well as the adoption of a two per cent of GDP target by both major political parties. Australia's leading expert in relation to assessments of defence funding is the Australian Strategic Policy Institute's senior analyst of Defence Economics Mark Thomson. His analysis of the defence budget and his financial assessments of defence white papers are seen as authoritative and they are widely cited. Therefore it is of note that in an article for the special edition of *Security Challenges* in 2009 assessing the Rudd Government's Defence White Paper, *Force 2030*, Thomson made no mention of defence funding as a percentage share of GDP but rather charted 'real growth' in defence funding and the cost of major capability acquisitions (current and future). He argued that an "analysis of the underlying trend in the cost of delivering military capability shows that real funding growth of around 2.7 per cent per year is needed to maintain a modern defence force."¹²

However by the time of his 2013 *Security Challenges* article on the new Defence White Paper, defence spending as a percentage of GDP had become a feature of the public debate and thus was given additional focus in his analysis. Thomson rightly despairs in his 2013 article that the rise of the GDP measurement meant that

far from a having robust debate over what sort of ADF Australia needs and how much it should spend, the discussion has been reduced to echoing recitals of "aspiring" to spend two per cent of GDP on defence—without any explanation of why this is necessary or when it might be achieved.¹³

The use of GDP to measure and assess Defence's budget can be attributed to a number of factors, but primarily to an eye-catching comparison between Australia's defence budget in 2012 and 1938. This comparison struck a public nerve due to a growing sense that Australia's defence budget was underfunded and conjuring up immediate pre-Second World War vulnerability. The origins of this will now be discussed, including the continued rise of regional powers and a series of forced and voluntary cuts and deferrals to Defence's budget since 2009.

While the years 2009 to 2012-2013 were peaceful in the Asia-Pacific, they saw the intensification of a number of regional disputes and potential

¹² Mark Thomson, 'Defence Funding and Planning: Promises and Secrets', *Security Challenges*, vol. 5, no. 2 (Winter 2009), p. 91.

¹³ Thomson, 'Defence Funding in 2013', pp. 55-6.

flashpoints. Central to these developments was the rise of China. This period witnessed a “new assertiveness” from Beijing,¹⁴ featuring a number of disputes with regional neighbours such as over islands in the South China Sea and East China Sea. In turn, the region responded with a steady growth of regional military spending.¹⁵ New threats such as in the cyber domain also became more apparent in these years. In partial response, the United States announced in 2011 that it would “pivot” or “rebalance” to the region and this has come to be seen as placing more pressure on Australia to increase the size and capacity of its armed forces so as to support its major ally.¹⁶

Alliance politics also played into this debate. During the period of 2012-2013 a number of prominent US commentators weighed into the argument over Australian defence spending. Admiral Samuel Locklear, Commander of US Pacific Command as well as former Deputy Secretary of Defense in the Bush administration, Richard Armitage and Senator John McCain, then ranking member of the US Senate Armed Services Committee, all commented on the decrease in Australian defence spending.¹⁷ Locklear stated that Australia's defence spending had fallen below the level the United States expected of its allies. The *Sydney Morning Herald* noted that he had specifically stated that he had just returned from a meeting of the “North Atlantic Treaty Organisation where the standard for defence spending

¹⁴ David Shambaugh, ‘The year China showed its claws’, *Financial Times*, 16 February 2010, <<http://www.ft.com/cms/s/0/7503a600-1b30-11df-953f-00144feab49a.html#axzz2jdJJ53H6>> [Accessed 13 November 2013].

¹⁵ ‘Asia: Military Modernisation Continues’, chapter 6, *The Military Balance* (London: International Institute for Strategic Studies, Routledge, 2013), pp. 245-352. See also Commonwealth of Australia, *Defence White Paper 2013* (Canberra: Commonwealth of Australia, 2013), pp.14-15, it noted that “Australia's relative strategic weight will be challenged as the major Asian states continue to grow their economies and modernise their military forces.” The Prime Minister Julia Gillard also cited one of the key factors for bringing forward the 2013 White Paper was the “accelerated shift of economic and strategic weight to our region ... and the global financial crisis”. ‘Government Releases 2013 Defence White Paper’, *Defence News*, 13 May 2013, <<http://www.defence.gov.au/defencenews/stories/2013/may/0503.htm>> [Accessed 13 November 2013].

¹⁶ Nick O'Malley, ‘Abbott Criticises Australian Defence Cuts in US’, *The Sydney Morning Herald*, 18 July 2012, <<http://www.smh.com.au/federal-politics/political-news/abbott-criticises-australian-defence-cuts--in-us-20120718-22989.html>> [Accessed 13 November 2013]. The 2013 Defence White Paper calls the US Alliance Australia's “most important defence relationship and ... a pillar of Australia's strategic and security arrangements.” It also notes that it is “unambiguously in Australia's national interest for the United States to be active and engaged in our region as economic, political and military influence shifts towards it.” See paragraphs 6.8 and 6.10.

¹⁷ Daniel Flitton, ‘US Commander Warns Australia on Defence Spending Cuts’, *The Sydney Morning Herald*, 13 July 2012; Alan Stephens, ‘Australia's Defence Budget Is More than Adequate’, *The Canberra Times*, 26 July 2013; see also Greg Sheridan, ‘US Voices Fears Over Defence Cuts’, *The Australian*, 21 July 2012; Greg Sheridan, ‘McCain Slams Labor for “Imprudent” Cuts’, *The Australian*, 27 April 2013; Christopher Joye, ‘Free Ride on US Defence Must Stop’, *Financial Review*, 19 August 2013.

is 2.5 per cent of a country's economy."¹⁸ Armitage called the new defence funding figures, post the 2012-2013 budget, "inadequate" and accused Australia of wanting a "free ride" on the United States.¹⁹

These concerns are also broadly reflective of the United States' desire for burden sharing. The United States has produced a number of reports on *Allied Contributions to the Common Defense* that discuss issues such as the 'Evaluation of Fair Shares'. The 1995 report noted that "there is no single, universally accepted formula for calculating each nation's 'fair share' of the responsibility for cooperative security." The report noted that while GDP "is seen as a key indicator of economic well-being" it is just one of the "different measures and analyses ... [that include] quantitative analysis and subjective judgment."²⁰ However by 2002 the report noted that

National contributions are generally assessed relative to ability to contribute by measuring each nation's share of total allied contributions relative to its corresponding share of total allied Gross Domestic Product (GDP). A nation is considered to be doing its *fair share* in a particular category if its share of total contributions is in balance with its share of total GDP.²¹

There were also a number of domestic factors which suggested the Australian Defence Budget was underfunded. At the release of the 2009 White Paper, the Rudd Government had promised a "new era" of growth for Defence's budget thanks to the funding plans in the *Force 2030* White Paper. The onset of the Global Financial Crisis (GFC) in late 2008 and into 2009-10 meant that there was a growing concern about the fiscal plausibility of Australia's defence portfolio more broadly. The Rudd Government's promises to Defence lasted only ten days before it changed tack and began delaying and deferring the new funding.²² Though Australia avoided a recession, there was a significant hit to the overall strength of the economy

¹⁸ Flitton, 'US Commander Warns Australia on Defence Spending Cuts'. This may well have been a misrepresentation as the standard NATO GPD spending is 2 per cent not 2.5 per cent of GDP.

¹⁹ Joye, 'Free Ride on US Defence Must Stop'.

²⁰ 'An Overview of the 1995 Report on Allied Contributions to the Common Defense', Office of the Secretary of Defense, Washington DC, 1995, <http://www.defense.gov/pubs/allied_contrib95/alliedov.html> [Accessed 13 November 2013].

²¹ 'Report on Allied Contributions to the Common Defense', Office of the Secretary of Defense, Washington DC, 2002, <http://www.defense.gov/pubs/allied_contrib2002/allied2002.pdf> [Accessed 13 November 2013], p. 1. This document reinforced the 2 per cent of GDP measure and noted that in 2002 NATO members on average spent 1.9 per cent GDP. As part of the Coalition's aspiration for two percent of GDP the Shadow Defence Minister Senator Johnston quoted the NATO standard as part of the rationale for the Coalition's funding target at the ASPI defence debate during the 2013 election campaign. See Senator Johnston's comments at ASPI-Hewlett Packard Defence and Security Lunch: 'The ASPI-HP Great Defence Debate', ASPI, 29 August 2013, <<http://www.aspi.org.au/events/aspi-hewlett-packard-defence-and-security-lunch-the-aspi-hp-great-defence-debate>> [Accessed 13 November 2013].

²² Thomson, 'Defence Funding and Planning', p. 93.

and the government's tax revenue base, which, almost certainly, now faces long term structural problems.²³

The Australian political debate also changed between 2009 and 2013. Julia Gillard replaced Kevin Rudd in 2010 and re-committed to achieving a promised return to an overall budget surplus by 2012-13.²⁴ As Defence accounts for around six per cent of government outlays, the Gillard Government saw additional cuts to Defence as a way to achieve its promise in the face of deteriorating revenues. One of the major problems was that the government's cuts, deferrals and delays to Defence's budget came with a pledge not to impact on current operations in the Middle East²⁵ while at the same time not adjusting the existing plans for new capabilities. This left the department with a long shopping list and shrinking purse to pay for it. Lastly, in late 2009 the Liberal party switched leaders to Tony Abbott, who embraced a more politically combative style and approach. It was in this atmosphere of a changing regional environment and cuts and delays at home that the comparison of Australia's Defence budget in 2012-13 with 1938 was first identified and soon captured the public debate.

The Lowest Defence Spending since 1938!

In his budget reply speech of 10 May 2012, Tony Abbott made a single reference to defence spending, noting that

The Treasurer insisted that military spending could be cut—breaking more commitments in the process—without harming our defence capability even though defence spending, as a percentage of GDP, will soon be at the lowest level since 1938.²⁶

This seems the first time public attention had been drawn to the comparison between Australia's intended Defence spending in 2012-13 and its record in 1938. Technically Abbott was not the first to note it, as another Coalition MP (now Assistant Minister for Defence), Stuart Robert mentioned it during a speech in Parliament earlier that day,²⁷ suggesting the Coalition had recognised early on the potency of the line and shared it around. After

²³ 'Statement 5: Revenue', *Budget 2013-14*, Department of Treasury, Canberra, Commonwealth of Australia, <http://www.budget.gov.au/2013-14/content/bp1/html/bp1_bst5-02.htm> [Accessed 13 November 2013].

²⁴ Wayne Swan, 'Budget Speech 2010-11 on the Second Reading of the Appropriation Bill (No.1) 2010-11', Canberra, Commonwealth of Australia, 10 May 2010; 'Gillard Defends Defence Spending Cuts', *The Sydney Morning Herald*, 4 May 2012.

²⁵ Defence receives explicit supplementation for the net additional cost of operations in the Middle East and elsewhere, although because of the blurring of operational preparation activities and routine training, especially in Army, there may well be some shortfall with the drawdown from operations.

²⁶ Tony Abbott, *Appropriation Bill (No. 1) 2012-2013 Second Reading Speech*, 10 May 2012.

²⁷ Stuart Roberts, House of Representatives Ministerial Statements, Afghanistan Speech, 10 May 2012.

Abbott's televised budget reply speech included the 1938 comparison, the line was quickly embraced in the public debate.

In the days after the Opposition Leader's speech, two of Australia's leading commentators Paul Kelly and Greg Sheridan both wrote articles on the Defence budget and prominently highlighted the 1938 comparison. Kelly argued that defence spending based upon proportion of GDP was "the measure that matters".²⁸ Notably both relied on the comments and work of ASPI (Australian Strategic Policy Institute) analyst Mark Thomson to lead their pieces rather than the Opposition leader. Thomson's work may well have been the source for the Coalition's calculations, as he had previously used percentage of GDP to assess the 2011-12 Budget while ASPI's *2011-12 Defence Almanac* lists GDP spending figures going back to 1901 although GDP is not a prominent focus of either publication.²⁹

It was the Coalition who first identified and highlighted the similarity between 2012 and 1938, and in turn led to the embrace of GDP spending as a valid method of assessing the Defence budget. Other journalists and analysts soon followed either reciting the 1938 comparison or using GDP as the way to measure defence's budget such as Peter Hartcher,³⁰ Ross Babbage,³¹ Christopher Pearson,³² Dennis Shanahan,³³ Peter Cosgrove,³⁴ Rodger Shanahan,³⁵ Jim Molan,³⁶ Peter Layton³⁷ and David Uren.³⁸ In contrast some commentators and analysts such as Bruce Haigh,³⁹ Alan Kohler,⁴⁰ Alan Stephens,⁴¹ Andrew Davies⁴² and Mark Thomson⁴³ pushed back against the 1938 comparison and use of GDP to measure defence funding.

²⁸ Paul Kelly, 'Military Spending Slumps to 1930s Level', *The Australian*, 11 May 2012; Greg Sheridan, 'Our Forces Reduced to Impotence', *The Australian*, 12 May 2012.

²⁹ Mark Thomson, *The Cost of Defence: ASPI Defence Budget Brief 2011-2012* (Canberra: Australian Strategic Policy Institute, 2011); Rupal Khosa, *Australian Defence Almanac 2011-12* (Canberra: Australian Strategic Policy Institute, 2011).

³⁰ Peter Hartcher, 'Toothless among Asian Tigers', *The Canberra Times*, 21 July 2012.

³¹ Quoted in Peter Hartcher, 'Defence is Headed for its own Crisis', *The Sydney Morning Herald*, 29 January 2013.

³² Christopher Pearson, 'Coalition has cred on Defence', *The Australian*, 29 September 2012.

³³ Dennis Shanahan, 'Incoming Defence Chief's Warning on Spending Cuts', *The Australian*, 18 September 2012.

³⁴ 'Defence in Depth', Lowy Institute for International Policy.

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ Peter Layton, '2% of GDP: It Might Be Logical, but is it Rational?', *The Strategist*, 10 September 2013.

³⁸ David Uren, 'Government Spending to be Slashed', *The Australian*, 26 August 2013.

³⁹ Bruce Haigh, 'Getting by on Less Defence Spending', *The Drum*, 17 May 2012.

⁴⁰ Alan Kohler, 'What's GDP got to do with Defence', *Business Spectator*, 6 May 2013.

⁴¹ Alan Stephens, 'Australia's Defence Budget is more than Adequate', *Canberra Times*, 26 July 2012.

⁴² Andrew Davies, 'Biding their Time: The Opposition's Defence Statement', *The Strategist*, 3 September 2013.

⁴³ Mark Thomson, '2%—can we, should we, will we', *The Strategist*, 10 September 2013. (Although Thomson did use the 1938 comparison in his 2012 Budget Brief.)

The partisan origins of the comparison with 1938 are worth highlighting since it is a comparison which on first reading suggests an atmosphere of inadequacy, incompetence and to some degree indifference to defence policy. This is a particular powerful analogy, linked as it was to a retrospective view of a specific period of Australian history in the lead up to the onset of a global war. The spectre of 1938 allowed the public, policy community and commentariat to conjure up images of the period just prior to the Second World War; a period commonly associated with defence unpreparedness during an era of intense escalating threats. In this respect, it was a rather effective rhetorical tool. However as a point of historical comparison and form of analysis of Australia's contemporary strategic environment and defence spending it is a gross distortion and misrepresentation.

One notable irony of this comparison being used by the Coalition in the lead up to the 2013 election is that in 1938 the country was being run by the conservative United Australia Party Government led by Joseph Lyons. While the level of GDP was indeed similar,⁴⁴ in 1938 Australia's military forces included only 2,795 full time soldiers out a total permanent force, including Air Force and Navy, of just 10,885 personnel. In addition the Royal Australian Air Force (RAAF) had no frontline modern planes in service and the government had only just signed a contract to turn the Wirraway, a training aircraft, into an all-purpose frontline aircraft.⁴⁵ In addition the Defence Act at the time did not allow for a permanent Army field force. This force was, instead, provided by a volunteer part-time militia equivalent to today's Army Reserve. In comparison the present day Australian Defence Force (ADF) consists of three regular Army brigades plus support troops and enablers for a total force of 29,847 regular personnel. Combined with the Royal Australian Navy (RAN) and RAAF the personnel strength of the ADF in 2013 is 58,645.⁴⁶ The figures are even starker when the number of public servants in the defence is considered. In 2013 there were 21,217 Australian Public Service (APS) civilians in the Department of Defence (including 5,670 in the Defence Materiel Organisation).⁴⁷ In his Centenary History of Defence volume on the *Department of Defence* historian Eric Andrews noted that prior to the Second World War "the number of staff in the department [of

⁴⁴ In 2012-13 the Australian Government intended to spend 1.56 per cent of GDP on Defence, which would be the lowest figure since the 1.55 per cent of GDP spent in 1938. Due to changes in spending and the economy, the Australian Government ended up spending 1.60 per cent of GDP on Defence for 2012-13. For 2013-14 the Australian Government intends to spend 1.59 per cent of GDP which is also on track to be the lowest since 1938, but again the final figures may change by end of the financial year.

⁴⁵ Gavin Long, *To Benghazi*, Series 1, volume 1, Australia in the War of 1939-1945 (Canberra: Australian War Memorial, 1952), p. 14.

⁴⁶ Mark Thompson, *The Cost of Defence: ASPI Defence Budget Brief 2012-2013* (Canberra: ASPI, 2012), p. 38. These numbers are based on the 2013 Defence budget allocation.

⁴⁷ *Ibid.*

defence] grew slowly as the effects of the depression eased—from 42 in 1935 ... to 57 in 1938.”⁴⁸ These are hardly comparable figures.

In real terms, as opposed to GDP, Defence’s financial position in 2013 is also a long way from the late 1930s era. 1938 was year one of a new defence rearmament program. In 1937-38 the defence budget was 11.5 million pounds, an increase of three million pounds over the year before. In the 1938-1939 budget 16.7 million pounds was allocated (around \$1.1 billion in 2011-12 dollars⁴⁹). In a public address in 1938 the Federal Treasurer R.G. Casey noted that

I can tell you this, that defence is the only department of the Commonwealth Government that, from the financial point of view, has been able to write its own ticket. Any money defence wants it can get, and I assure you this situation will remain.⁵⁰

The Treasurer’s response in 1938 to defence spending was due to the deteriorating international security situation. While great power tensions in the Asia-Pacific region may well be on the rise in 2013, they are nothing in comparison to 1938. At that time it was becoming increasingly clear that war clouds were gathering. In 1935 Fascist Italy had invaded Abyssinia, in 1936 Nazi German had sent forces to fight in the Spanish civil war and Imperial Japan had invaded China in 1937. In 1938 the Nazis effected an Anschluss (unification) with Austria and then acquired the Sudetenland from Czechoslovakia after negotiating an agreement with Great Britain, France and Italy in Munich in September. This is a vastly different to the strategic circumstances facing Australia in 2013.

There are however three aspects in relation to defence policy, funding and the public debate that are comparable between 1938 and 2013. First, a need for budgetary caution based on an uncertain fiscal outlook is recognisable in both years. In 1938 the government was “conscious of... unemployment... [and] the fears of another economic recession.”⁵¹ Second, in both 1938 and 2013 the government undertook a review of defence and set out new policy directions. Finally, as in 2013, the “Opposition had alleged that the [Government] ... had failed to show leadership in regard to urgent national problems and referred *inter alia* to its handling of defence,”⁵² although in this instance it was a Labor opposition attacking a conservative government.

⁴⁸ Eric Andrews, *The Department of Defence, Centenary History of Defence* (Melbourne: Oxford University Press, 2001), p. 89.

⁴⁹ Raspal Khosa, *Australian Defence Almanac 2011-2012*, p. 88

⁵⁰ Paul Hasluck, *The Government and the People, Series 4, Volume 1, Australia in the War of 1939-1945* (Canberra: Australian War Memorial, 1952), p. 104.

⁵¹ *Ibid.*, pp. 102, 104.

⁵² *Ibid.* Emphasis in original.

The Emergence of a 2% Goal by Both Parties Prior to the 2013 Election

In the closing month of 2012 through to early 2013, the criticism that Australia was now spending its lowest level on defence as a portion of GDP since 1938 (slowly) morphed from a talking point into a policy 'target' of spending two per cent of Australia's GDP on defence. While Tony Abbott and Coalition MP's used their budget reply speeches in mid-2012 to criticise the defence cuts in the 2012-13 budget⁵³ they were, at that juncture, not willing to commit to reversing them. In the weeks after his Budget reply speech Abbott rejected setting an explicit target for Defence's budget, telling Sky News on 18 July "I don't want to put figures on it ... I would want to get the advice of the defence chiefs as to what the impact of this [changes in spending] will be on our military capability."⁵⁴ Part of Abbott's reluctance may have been because complaints about defence cuts sat awkwardly alongside the Coalition's larger critique that the ALP (Australian Labor Party) Government was spending too much, resulting in increasing deficits and rising debt.⁵⁵

To thread the needle of a pledge to increase defence spending while continuing to attack the government for being fiscally irresponsible, the Opposition used two approaches. First, it regularly highlighted the Howard Government's record as proof of the party's capacity and as a guide to its ambitions. As Abbott told a Returned and Service League conference, "for the Coalition, the bottom line is that our military forces should always be at least as capable as they were when the Howard government left office."⁵⁶ This pledge was also repeated in the 2013 *Stronger Defence Policy* the Coalition launched in the week before the election.⁵⁷ Like the two per cent pledge, using a past government's spending and capacity as a baseline also goes against the grain of the wider literature on how to undertake successful defence planning. The other, and more enduring, approach by the Coalition was to announce their desire to change Defence's budget, when "Australia's economic situation" enabled it. In August 2012, the Shadow Defence Minister David Johnston argued that

⁵³ Roberts, House of Representatives Ministerial Statements, Afghanistan Speech. Defence Budget was cut by \$5.5 billion across the Forward Estimates (to 2015-16). Total Defence funding for 2012-13 was set at \$24.2 billion, down from the estimated actual outcome of \$26.3 billion for 2011-12. See Australian Government, *Portfolio Budget Statements 2012-13: Budget Related Paper no. 1.5A: Defence Portfolio*, Commonwealth of Australia, Canberra, 2012, p. 23

⁵⁴ O'Malley, 'Abbott criticises Australian Defence Cuts in US'.

⁵⁵ Paul Osborne, 'Budget Needs Emergency Rescue: Hockey', *The Sydney Morning Herald*, 16 May 2013.

⁵⁶ Tony Abbott, Address to the 2012 Returned and Services League National Conference, 25 September 2012, <<http://www.liberal.org.au/latest-news/2012/09/25/leader-oppositions-transcript-address-2012-rsl-national-conference>> [Accessed 13 November 2013].

⁵⁷ 'The Coalition's Policy for Stronger Defence', September 2013, <<http://paweb-static.s3.amazonaws.com/13-09-02%20The%20Coalition%27s%20policy%20document%20for%20Stronger%20Defence.pdf>> [Accessed 13 November 2013], p. 4.

we now require an investment by way of an increase in funding of around six per cent for five years to raise the curve just to get back on track to the 2009 plan ... As soon as the Coalition can repair this unholy, unsustainable mess of Defence, we will deliver it and return to three per cent real growth.⁵⁸

The following month the Coalition leader Tony Abbott made a similar pledge that

our aspiration, as the Commonwealth's budgetary position improves, would be to restore the three per cent real growth in defence spending that marked the final seven years of the Howard government.⁵⁹

At this time in late 2012 the focus of the Coalition was simply on restoring the annual rate of increase at three per cent of the defence budget, rather than achieving a specific dollar figure or share of GDP.⁶⁰

The use of an 'aspirational' pledge was a neat way to combine a criticism of specific cuts, within a larger argument that general cuts to spending and reducing taxes were needed. Still, it left critics wondering about both the size and timeline for restoring Defence's budget. By early 2013 the deep nature of the Gillard Government's cuts to Defence had become clearer, and as the criticism of the government increased, in turn the pressure rose on both parties to suggest how they would address it. On 7 February during a doorstep interview, the Opposition Defence Spokesman David Johnston was asked about increasing Defence's budget. He told reporters that

What we have done firstly is to commit to no further cuts ... What I will do is say look at our track record. We aspired to two per cent and delivered it under Howard, we left at 1.9 per cent ... [but] for me to commit to time frames and dollars is ridiculous, and I won't do it ... we believe that two per cent of GDP is the place to be and we want to get there with three per cent real growth.⁶¹

Johnston was careful not to commit the Opposition to a specific target, but he clearly indicated the desired direction. Notably Johnston also compared Australia's defence budget with the even lower 1937 levels and argued that "the proper measure of expenditure in Defence in comparable economies and countries is a measure of GDP."⁶² On 17 February the ALP's Defence Minister Stephen Smith dismissed the 1938 comparison as "overblown", yet suggested similar to Johnston that "I have an aspiration—I would much

⁵⁸ David Johnston, 'Matter of Public Interest—Defence Funding', Parliamentary Speech, Senate, Canberra, 15 August 2012, <[http://www.senatorjohnston.com.au/Speeches/Parliamentary Speeches/tabid/72/articleType/ArticleView/articleId/266/Matter-of-Public-Interest--Defence-funding.aspx](http://www.senatorjohnston.com.au/Speeches/Parliamentary%20Speeches/tabid/72/articleType/ArticleView/articleId/266/Matter-of-Public-Interest--Defence-funding.aspx)> [Accessed 13 November 2013].

⁵⁹ Abbott, Address to the 2012 Returned and Services League National Conference.

⁶⁰ It should be noted that a 3 per cent target is only marginally higher than the 2.7 per cent figure Mark Thompson has identified to merely maintain the defence budget.

⁶¹ David Johnston, 'Doorstop with Senator David Johnston, Defence funding, Coalition commitments, military superannuation', Defence Alert, 7 February 2013, <<http://www.defencealert.com>> [Accessed 13 November 2013].

⁶² *Ibid.*

prefer to be closer to two per cent of GDP than I am at 1.6 but in a tough fiscal environment ... frankly an aspiration doesn't mean much."⁶³ Soon after in a 1 March essay for *Quadrant Magazine*, Major General Jim Molan (retd.)—who later became an advisor to the Opposition—argued that “the magic number that produces usable military capability for Australia in the strategic environment today is about two per cent of GDP”.⁶⁴

In clarifying the Coalition's position, the record of the Howard Government clearly guided their approach. On 18 March 2013, in a speech to the Parliament, David Johnston stated that “The Defence portfolio, which was once running at about 1.98 per cent of GDP under John Howard—towards the end of the Howard government—is down to 1.49 per cent.”⁶⁵ Johnston's claim is one he commonly made yet is somewhat hard to verify.

Under the Howard Government Defence spending as a percentage of GDP had peaked at 1.87 per cent in 1996. It then trended down over the rest of his term, reaching 1.68 per cent in 2007, with an average percentage of GDP for the four terms of office of 1.78 per cent.⁶⁶ This is despite significant increases over the Howard Government's lifetime, with Defence's budget rising from \$9.9 billion in 1996 to \$19.9 billion by 2007 (or from \$15.0 billion to \$22.3 billion in 2011-12 dollars). The reason the GDP figure does not reflect this is because Australia's economy grew even faster than Defence's budget.⁶⁷ A few days after Senator Johnston's speech, on 27 March 2013, the Coalition announced an addition to its policy 'aspiration' for Defence. During a doorstep interview, Tony Abbott stated that

the Coalition wants to go back with the right budgetary conditions to the circumstances that applied in the time of the Howard Government where we

⁶³ Quoted in AAP, 'Smith would rather defence at 2% of GDP', *Australian Associated Press General News*, 12 February 2013.

⁶⁴ Jim Molan, 'Why Our Defence Forces Face Terminal Decline', *Quadrant Online*, 1 March 2013. Molan appeared with Tony Abbott at a pre-election Press Conference on 25 July 2013 and was later appointed a 'special envoy' to assist the incoming Abbott Government deal with the issue of irregular migration, see David Wroe, 'Abbott Advisor handed new paid role as envoy', *The Sydney Morning Herald*, 6 September 2013.

⁶⁵ David Johnston, Speech to Parliament 'Bills: Appropriations Bill (No. 3) 2012-2013, Appropriation Bill (No. 4), 2012-2013, Second Reading, 18 March 2013, <<http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22chamber%2Fhansards%2F4def9134-f2c6-41b0-800e-52463ea41273%2F0032%22>> [Accessed 13 November 2013].

⁶⁶ Raspal Khosa, *Australian Defence Almanac 2011-2012*, pp. 90. The authors contacted Senator Johnston's office to clarify his figures, but had not received a response at the time of publication.

⁶⁷ *Ibid.* A reduction in growth of GDP spent on defence while achieving a real growth in defence spending is not isolated to Australia during this time. For instance, between 2003 and 2011 Singapore defence spending reduced from 5 per cent GDP to 3.7 per cent GDP, while at the same time it moved from \$1,353.6B (USD) to \$1,858.2B (USD) at an average of 2.5 per cent yearly real growth. This was because, over the same period, the average real growth Singaporean GDP was 6.58 per cent.

had three per cent real increases in defence spending with the objective of having defence spending at two per cent of GDP. That is our objective.⁶⁸

This seems the first solid embrace of the two per cent target as policy rather than future ideal. In around ten months, the Coalition had shifted from a historical comparison based upon measuring Australian defence spending as a percentage of the country's GDP to adopting a specific GDP spending target as a policy objective.⁶⁹

The ALP obviously rejected comparing Australia's current position to 1938, yet it soon followed in embracing the concept of using proportion of GDP as a way to guide the Defence budget. As noted above, Stephen Smith had suggested his aspiration for a two per cent target in February 2013. At the release of the 2013 Defence White Paper on 3 May 2013, the Gillard Government announced it would "increase Defence funding towards a long-term target of two per cent of GDP in an economically responsible manner, as and when fiscal circumstances allow".⁷⁰ The Defence Minister Stephen Smith told reporters, somewhat implausibly, that this was "an aspiration that the Government has and an aspiration that previous governments have also had ... So, we have had an aspiration as a country for two per cent of GDP since the year 2000."⁷¹ Yet there had been no mention of a two per cent target under the first Rudd Government, and the 2000 Defence White Paper had only identified a figure around two per cent as roughly in line with the pre-existing spending. It also did so in a way that was much more in line with traditional defence budgeting, i.e. using strategic objectives and national interest to determine the appropriate level of spending

If our economy grows on average as fast over the next decade as it has over the last two decades, then the Government's defence funding projections will mean that in 2010 we will be spending about the same proportion of GDP on defence as we are today. That remains 1.9 per cent. We believe this level of funding is justified within our overall national

⁶⁸ Tony Abbott, Joint Doorstop interview, Williamstown, Melbourne, 27 March 2013, <<http://www.tonyabbott.com.au/LatestNews/ArticleswrittenbyTony/tabid/87/ArticleType/ArticleView/ArticleID/9123/Default.aspx>> [Accessed 13 November 2013].

⁶⁹ During the election campaign Senator Johnston reiterated the 1938 GDP comparison and the Coalitions commitment to 2 per cent of GDP after "ten years". See ASPI-Hewlett Packard Defence and Security Lunch: 'The ASPI-HP Great Defence Debate'.

⁷⁰ Julia Gillard, 'Media Release—Release of the 2013 Defence White Paper', 3 May 2013, Canberra, Commonwealth of Australia, <<http://pmtranscripts.dpmc.gov.au/browse.php?did=19297>> [Accessed 13 November 2013].

⁷¹ Stephen Smith, 'Minister for Defence—Speech at the Launch of the 2013 Defence White Paper', 3 May 2013, <<http://www.minister.defence.gov.au/2013/05/03/minister-for-defence-speech-at-the-launch-of-the-2013-defence-white-paper/>> [Accessed 13 November 2013]. This position was later rejected by Mike Kelly during the election campaign. Kelly had emerged as the Government's spoke person on defence when the current Defence Minister Stephen Smith announced that he was going to retire from politics after the election. Kelly warned against the use of GDP share and instead argued for the commitment of spending over the forward estimates on specific measure and capabilities. See ASPI-Hewlett Packard Defence and Security Lunch: 'The ASPI-HP Great Defence Debate'.

priorities and will ensure that we can achieve the strategic objectives we have identified.⁷²

This is a very different approach to simply setting a two per cent target. Julia Gillard was replaced as Prime Minister on 26 June 2013 and her successor, Kevin Rudd, announced his support for the two per cent target during the election campaign.⁷³ Like Gillard, Rudd did not set a timetable for achieving the target, while the Coalition sought to achieve it “within a decade”.⁷⁴ To see why the 2000 Defence White Paper took a different approach, and why the two per cent target is contradictory to the consensus on Defence budgeting, this article will now demonstrate why the use of GDP is a poor way to measure and shape defence spending and argue that the Abbott Government should abandon the two per cent target.

Why GDP % is a Poor Way to Plan Defence Spending

As the preceding sections highlight the measurement of Australia's defence spending as a percentage of GDP has the advantage of providing sound-bite ready historical comparisons and easily identifiable funding targets. Yet there are also at least five significant arguments against measuring and organising defence budgeting via a nation's gross domestic product. These are;

- First, there is no automatic link between the security of a nation and the percentage of its GDP spent on defence;
- Second, increases in the GDP variable can be negatively associated with security;
- Third, the GDP variable is highly misleading as a form of historical and regional comparison;
- Fourth, very few other portfolios are measured in such a way;
- Fifth and finally, by starting with the funding ambition this approach contradicts proper strategic planning logic.

Together these five arguments strongly suggest that the use of proportion of GDP as a method of analysis and policy development hinders more than it assists. These five arguments will be taken in turn, before discussing the

⁷² Department of Defence, *Defence 2000: Our Future Defence Force* (Canberra: Commonwealth of Australia, 2000), p. 118.

⁷³ AAP, 'PM wants to spend more on Defence, DFAT', *The Australian*, 27 August 2013, <<http://www.theaustralian.com.au/news/latest-news/pm-wants-to-spend-more-on-defence-dfat/story-fn3dxiwe-1226704895788>> [Accessed 13 November 2013].

⁷⁴ 'The Coalition's Policy for Stronger Defence', p. 4.

implications for the incoming Abbott Government and its approach to defence spending.⁷⁵

The first major counter-argument to the use of the GDP comparison is that there is no logical link between a nation's security and its spending on defence as a percentage of GDP. While more spending on security issues probably helps the nation defend itself, it is not automatic or inevitable. Higher spending may be directed towards the wrong threats, such the United States found in 2001 when its vast military was a target rather than protector against non-state actors. Higher defence spending may also come at the cost of the nation's overall economic strength, as the USSR found to its detriment in the 1980s. Despite claims by some, there can never be a 'magic number' of spending which ensures security. What a nation needs to spend on its defence to ensure its security is a function of the threats it faces, and the interests and objectives it seeks in order to develop a sufficiently flexible planning capability and dynamic military posture.⁷⁶ Once that assessment has been made, only then does the nation's capacity to spend and budgeting become relevant. Guiding defence spending according to a specific proportion of GDP provides an illusion of safety by suggesting a quantifiable answer can be provided to an inherently unquantifiable question.

Australia was not at risk in the lead up to the Second World War simply because it was spending less than two per cent of its GDP, it was at risk because it was not spending sufficient to address the plausible threats it faced (in part this was because it was struggling to spend at the level required due to resource and capability development problems as well as working with a fundamentally flawed one dimensional strategy).⁷⁷ What is more, when nations face pressing existential threats they exhibit very different spending patterns to those who do not. For example, while Australia spent 1.06 per cent and 1.55 per cent of GDP in 1937 and 1938, by 1941 it was spending 23.42 per cent of GDP on defence and 34.02 per cent

⁷⁵ The new Defence Minister Senator Johnston reiterated the 2 per cent GDP commitment as recently as his speech to the Kokoda Foundation Annual Dinner 'Addressing Divergent Futures in the Asia-Pacific', Trilateral Dinner with Australia, the United States and Japan, Thursday 31 October 2013.

⁷⁶ Colin S. Gray, 'Strategic Thoughts for Defence Planners', *Survival*, vol. 52, no. 3 (2010), pp. 157-178

⁷⁷ Paul Hasluck, *The Government and the People*, Series 4, Volume I, Australia in the War of 1939-1945 (Canberra: Australian War Memorial, 1952), p. 104. For a discussion of the problems of Australian Strategy in the inter-war period see David Horner, *High Command: Australia's Struggle for an Independent War Strategy 1939-1945* (Sydney: Allen and Unwin, 1982), chapter 1; David Day, 'A Great and Impotent Friend: The Singapore Strategy', in Martin Crotty and David Roberts (eds), *The Great Mistakes of Australian History* (Sydney: UNSW Press, 2006), pp. 125-6; Ian Hamil, *The Strategic Illusion: The Singapore Strategy and the Defence of Australia and New Zealand, 1919-1942* (Singapore: SUP, 1981); and Augustine Meaher IV, *The Road to Singapore: The Myth of the British Betrayal* (Melbourne: Australian Scholarly Publishing, 2010).

in 1942.⁷⁸ The United States and the United Kingdom saw similar substantial changes in their defence spending between their pre-war and wartime budgets. Against such significant changes between peacetime spending and wartime spending on defence, the assumption that pervaded the Australian debate in 2012/13 that 1.5 per cent of GDP puts Australia at risk, while two per cent would ensure some measure of security is unsustainable.

Second, it is sometimes the case that a rising proportion of GDP spent on defence *negatively* correlates with a nation's security. One of the foundational assumptions of defence planning is that countries with strongly growing economies have much greater capacity to respond to security threats than nations with slower growing security threats. As the experience of the Howard Government from 1996-2007 shows, a rapidly growing economy enabled the Australian Government to double its defence spending (from \$9.9 billion to \$19.9 billion), and thus take an increasingly leading role in addressing domestic, regional and even global security concerns. Yet an assessment based on proportion of GDP over this same period would actually suggest Australia was increasingly at risk because the GDP figure trended down from 1.87 per cent to 1.60 per cent. The only time it has significantly moved up toward two per cent (reaching 1.94 per cent in 2008-09) was during the Global Financial Crisis, which saw a slowdown in the Australian economy and shrinking government revenue, but a rise in defence spending through 2009-10. Yet no one would sensibly assume that Australia was more secure during this austere period than in the more prosperous years before.

This is a fundamental problem with this measurement. If a fixed ratio of GDP spending is established then changes to the economy will change the size of the defence budget. So a two per cent target could be reached by keeping spending equal while the economy slows down (as effectively happened in 2008-09). Poor economic performance would ironically make it easier for the Abbott Government to reach its two per cent target than if the economy booms during its time in office. While GDP is used as a measurement to tell us what nations are spending, because it is tied to an external variable (the size of the economy) sometimes it masks declines (or increases) in capacity. Likewise, in the globalised market economy of the twenty-first century we should be increasingly sceptical of those suggesting a link between the size of a nation's economy and the spending capacity of that nation's government.

Third, no specific figure for spending can ever guarantee security, not without reference to the regional environment. Yet using proportion of GDP to assess the defence spending of multiple states is a potentially highly misleading approach. Unless comparing two countries with very similar

⁷⁸ Kohosa, *Australian Defence Almanac 2011-12*, p. 88.

sized economies, the use of the GDP comparison does not provide a very meaningful picture. For example, in Asia today, Japan is constitutionally limited to spending only one per cent of its GDP on defence.⁷⁹ Yet, it has the second largest defence budget in the region (fifth largest in the world), worth 20 per cent of total regional spending. Australia accounts for eight per cent of regional defence spending with its 1.60 per cent of GDP spent, while Singapore has to devote 3.7 per cent of its GDP to purchase just 3.1 per cent of the total regional spend on defence.⁸⁰ All three are developed economies with advanced militaries, and all with concerns about the impact of rising powers and a changing regional environment. Yet no sensible interpretation about the nature of their concerns, the nature of their response, or even their national security can be drawn from these figures alone. Without context these factors suggest an absence of concern (Japan, Australia) or fear (Singapore) when an analysis of their internal debates may suggest otherwise. The use of GDP also “disregards differences in the efficiency of forces”,⁸¹ meaning that it is not possible to suggest similar outcomes from similar spending levels, or the overall effectiveness of similar levels of investment. Thanks to Australia’s advanced bureaucracy and alliance-derived access to world class hardware, it should consistently be able to use its defence dollars in a more efficient manner than Laos or Myanmar. For this reason, those analysts who are currently seeking to understand regional arms spending and especially those testing whether an arms race is occurring tend to recognise the dangers inherent in using the GDP comparison and either ignore it or use it as only one of several types of measurements.⁸²

If GDP is poor at comparing two different states, it is equally poor at comparing two eras within one country. While there may be a similarity in GDP proportion spent in 1938 and 2012, there is no comparable similarity between the capacity, size, or scope of Australia’s defence forces, nor and more fundamentally is there any similarity between the security of Australia in 1938 and 2012-13. When assessing security by reference to GDP spending, the past really is another country. We are no more informed about

⁷⁹ At the time of writing the Japanese Government is still considering moves to change the Japanese Constitution, while also pursuing alternate funding arrangements for its military, see Reuters, ‘Japan Eyes Government Support for Military Aircraft Exports’, *Reuters*, 4 November 2013, <<http://uk.reuters.com/article/2013/11/04/uk-japan-military-exports-idUKBRE9A30Y820131104?feedType=RSS&feedName=topNews>> [Accessed 13 November 2013].

⁸⁰ ‘Asia: Military Modernisation Continues’, chapter 6, *The Military Balance* (London: International Institute for Strategic Studies, Routledge, 2013), pp. 245-352.

⁸¹ Ellen Hallams and Benjamin Schreer, ‘Towards a ‘Post-American’ Alliance? NATO Burden-sharing after Libya’, *International Affairs*, vol. 88, no. 2 (2012), p. 315.

⁸² Geoffrey Till, ‘Asia’s Naval Expansion: An Arms Race in the Making?’, *Adelphi Series*, vol. 52, no. 432-433 (2012), pp. 249-51; Thomson, *The Cost of Defence: ASPI Defence Budget Brief 2012-2013*; Desmond Ball, ‘Asia’s Naval Arms Race: Myth or Reality?’, Paper prepared for the 25th Asia-Pacific Roundtable, Kuala Lumpur, Malaysia, 29 May-1 June 2011, <http://www.isis.org.my/files/25APR/paper_cs_2_desmond_ball.pdf> [Accessed 13 November 2013].

Australia's security in 2013 thanks to the comparison with 1938 than we would be if we remained ignorant of the historical similarity. Indeed, as Thomson rightly notes, we are the worse for it as it distracts us from what matters.⁸³

Fourth, the use of proportion of GDP tends not to be used or prominent in other portfolios. Even when government spending becomes the key debate (such as the tussle over education and the 'Gonski reforms' in the 2013 election⁸⁴), it is far more often that specific dollar terms become the focus of the debate rather than trying to establish a link between the amount invested and the size of the economy. This uniqueness and use of abstract GDP figures may prevent the general public engaging with the Defence funding debate, understanding why this level of spending is needed and how it provides for Australia's security. Without public understanding and support, it will be very difficult for the Abbott Government to achieve its two per cent target⁸⁵ and even more unlikely they can sustain it long term. As Mark Thompson has noted for the Abbott government to achieve the 2 per cent GDP over a decade it would require a 5.3 per cent growth per annum (assuming steady growth).⁸⁶ This is a growth rate that has only been achieved in wartime and never over a ten year period. While the two per cent target is far more central to the Coalition's policy than the use of GDP has been in earlier eras, it is worth noting both the 1987 and 1994 Defence White Papers identified GDP related funding targets which were subsequently not achieved.⁸⁷ Without a clear and compelling rationale for the specific dollars spent, the public will rightly wish for limited government funds to be re-directed to other policy challenges or returned in the form of reduced taxation.

Indeed it is unlikely that advocates of the two per cent target actually believe the two per cent figure is important in-itself. For example, it is highly implausible they would support a future government cutting funding from Defence should the Australian economy stall and thus the proportion spent on defence in reference to the size of the economy rise above two per cent. Rather they see two per cent as a minimum, and latched onto the 1938 comparison use of GDP as a bid to support higher spending. Thus not even those advocates of setting a two per cent target support a firm ratio being established between the size of the economy and size of defence funding.

⁸³ Thomson, 'Defence Funding in 2013', pp. 55-6.

⁸⁴ Justine Ferrari, 'Gonski Reforms Overhaul of Schools to Cost \$6.5bn', *The Australian*, 23 July 2012.

⁸⁵ Paul Dibb and Richard Brabin-Smith, 'Australian Defence: Challenges for the New Government', *Security Challenges*, vol. 9, no. 4 (2013).

⁸⁶ Mark Thompson, '2% – can we, should we, will we?', *The Strategist*, 10 September 2013, <<http://www.aspistrategist.org.au/2-percent-can-we-should-we-will-we/>> [Accessed 8 November 2013].

⁸⁷ *Funding Australia's Defence*, Report of the Joint Standing Committee on Foreign Affairs, Defence and Trade (Canberra: Commonwealth of Australia, 1998), p. 27.

While Defence is an admittedly hard area to quantify outputs for (war or conflicts prevented do not exactly reveal themselves neatly on spreadsheets), it is not impossible to let outcomes and other forms of measurement be the guide. Indeed, if we turn to the fifth and final argument against the proportion of GDP used as a way to measure defence spending, we will see that there is a considered literature which has thought deeply about this problem and come up with a much more sophisticated way to guide defence spending than a simplistic focus on a GDP input.

The fifth and final argument against the GDP comparison is that it goes against the established wisdom of the wider strategic literature. As a wide variety of scholars and practitioners have advocated, best practice for defence spending involves a considered process of assessment, negotiation and policy judgements, between the strategic environment the nation faces, the strategic interests it wishes to protect, the strategic objectives it seeks to achieve, the necessary and desired capabilities for achieving these interests and objectives and the nation's overall budgetary situation.⁸⁸ To allow one of these factors to over-rule all others is to distort the analysis, potentially resulting in poor judgement and policy. Sometimes the accusation is made that governments allow a desire for a smaller defence budget to influence their willingness to acknowledge the true nature of the strategic environment.⁸⁹ This wilful analytic distortion is just as troubling as the less common case when a nation indulges its defence budget and therefore again finds its spending and purchases out of alignment with reality.

Conclusion: Why the Abbott Government Should Abandon the Two Per Cent Target

The authors believe that for the above reasons:

⁸⁸ This strategic planning logic is evident throughout the history of Australian strategic policy. For the period from 1945-1976 see Stephan Frühling, *A History of Australian Strategic Policy since 1945* (Canberra: Department of Defence, 2009). In the period from 1976 see the various Defence White Papers and reviews at <<http://www.defence.gov.au/oscdf/se/publications.htm>>. The following academic studies investigate various elements of this logic in both Australia and overseas: P. H. Liotta and Richmond M. Lloyd, 'From Here to There: The Strategy and Force Planning Framework', *Naval War College Review*, vol. 58, no. 2 (Spring 2005); Terry L. Deibel, *Foreign Affairs Strategy: Logic for American Statecraft* (New York: Cambridge University Press, 2007); James Fallows, *National Defense* (New York: Random House, 1981), chapter 1; Colin S. Gray, 'Strategic Thoughts for Defence Planners', *Survival*, vol. 52, no. 3 (June-July 2010), pp. 159-178; Hugh White, 'The New Defence White Paper: Why We Need It and What It Needs To Do', *Lowy Institute Perspective*, Lowy Institute, Sydney, April 2008; Hugh White, 'Strategic Interests in Australian Defence Policy: Some Historical and Methodological Reflections', *Security Challenges*, vol. 4, no. 2 (Winter 2008), pp. 63-79; Robert Ayson, 'Understanding Australia's Defence Dilemmas', *Security Challenges*, vol. 2, no. 2 (July 2006). Of course these strategic documents are all conceived within an political environment see Peter Jennings, 'The Politics of Defence White Papers', *Security Challenges*, vol. 9, no. 2 (2013), pp. 1-14.

⁸⁹ Neil James, 'Beyond the once-over analysis and partisan waffle', *The Strategist*, 9 May 2013, <<http://www.aspistrategist.org.au/beyond-the-once-over-analysis-and-partisan-waffle/>> [Accessed 13 November 2013].

- that there is no automatic link between the security of a nation and the percentage of GDP spent on defence;
- increases in the GDP variable can be negatively associated with security;
- that the GDP variable is misleading as a form of regional and historical comparison;
- that very few other policy areas are measured via this form of input and;
- by starting with the funding ambition it puts the 'cart before the horse', contradicting strategic planning logic.

This as a result this breeches strategic planning logic—thus, in our view, the use of a GDP target for Australia's defence spending should be abandoned.

Ending the pledge to reach two per cent of GDP for defence funding within ten years government would not be out of place with the broad approach to public policy that the Abbott Government has demonstrated since the 2013 election. It has moved cautiously in regards to major policy reform. As such, a return to the traditional formula for determining the size of the defence budget would be in line with this strategy. This also fits the Abbott Government's 'messaging' on policy reform as it attempts to avoid a sense of policy 'on the run' and takes a more considered, and an 'adult' approach to policy formulation. Indeed Abbott recognised this in mid-2012 when, though using the 1938 comparison as a talking point and critique, he rejected using GDP as a policy guide, preferring to seek "the advice of the defence chiefs as to what the impact of this [change to spending] will be on our military capability" when setting the Defence Budget.⁹⁰

In addition, abandoning the two per cent pledge is likely to be viewed positively both at home and in the region. Furthermore with some clear and unambiguous discussion about future spending the government would be able to present a robust justification to the United States, its major alliance partner. Without the furore of an election, an Abbott Government could persuade the Australian public that a long term thoughtful approach to funding defence, based on credible assessments of Australia's environment, provides more plausible strategic guidance to the portfolio. While some in the Defence community who championed the two per cent pledge may be disappointed, if reassured that ending the pledge does not mean a reduced desire to support the Defence Force and the government outlines a long term and sustainable approach to funding, they should logically be supportive. Likewise many in the Asia-Pacific will appreciate a more

⁹⁰ O'Malley, 'Abbott criticises Australian Defence Cuts in US'.

considered approach from Australia rather than what could look superficially like an arbitrary defence build-up. As was seen with the release of the 2009 White Paper, promises of significant new spending without a clear rational and carefully justified case can cause diplomatic headaches for Australia and tension in the region.⁹¹

Australia's security in the coming century will depend on a range of factors, of which the amount it spends on its defence force is just one small part. To ensure that spending is at the right level, on the right equipment and enjoys sustainable public support, defence spending needs to be re-oriented away from sound-bite-policy ideas like using a proportion of GDP. Instead the government should return to providing the Department of Defence with budget certainty based on sound strategic assessments. The 2015 Defence White Paper provides an ideal opportunity for the Abbott Government to quietly drop the policy of spending two per cent of Australia's GDP on defence and establish a more coherent approach. This may well require higher defence spending, but such assessments cannot and should not be made simply based on what proportion of GDP is spent.

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⁹¹ Czeslaw Tubilewicz, 'The 2009 Defence White Paper and the Rudd Government's Response to China's Rise', *Australian Journal of Political Science*, vol. 45, no. 1 (2010), pp. 149-57.

Maritime Security Issues in an Arc of Instability and Opportunity

Sam Bateman and Quentin Hanich

The Pacific Arc of islands and archipelagos to the north and east of Australia has been characterised both as an ‘arc of instability’ and as an ‘arc of opportunity’. It is the region from or through which a threat to Australia could most easily be posed, as well as an area providing opportunities for Australia to work on common interests with the ultimate objective of a more secure and stable region. Maritime issues are prominent among these common interests. This article identifies these issues and their relevance to Australia’s maritime strategy. It suggests measures Australia might take to exploit the opportunities these interests provide.

The Pacific Arc

A special issue of *Security Challenges* in 2012 focused on Australia’s interests in the so-called Pacific Arc—the arc of islands and archipelagos lying to the north and east of Australia. The overall conclusion from this collection of articles was that, in order for the arc to become a source of security for Australia, rather than a threat, Australia should take a more cooperative and long-term developmental approach and start seeing the region not as an “arc of instability”, but instead as an “arc of opportunity”.¹

There were good articles in this special issue, but some ‘sea-blindness’ was evident in the issue overall. The collection did not fully capture the realities of Australia’s geographical circumstances—the fact that Australia is an island, highly dependent on seaborne trade most of which passes through the Pacific Arc, and with a huge area of maritime jurisdiction and extensive maritime interests that we share with our neighbours. These interests provide a host of opportunities for Australia’s engagement in the arc that will enhance the security of both Australia and the countries within the arc.

Paul Dibb in his contribution to the special issue stressed the importance of geography, acknowledging the maxim of the most powerful Secretary of the Department of Defence, Sir Arthur Tange, that: “The map of one’s own country is the most fundamental of all defence documentation”.² However, nowhere in the issue is the maritime nature of the “arc of opportunity” or the extent of our common maritime interests with our neighbours properly acknowledged. Joanne Wallis in her introduction referred briefly to the

¹ Joanne Wallis, ‘The Pacific: from “Arc of Instability” to “Arc of Responsibility” and then to “Arc of Opportunity”’, *Security Challenges*, vol. 8, no. 4 (Summer 2012), p. 12.

² Paul Dibb, ‘The Importance of the Inner Arc to Australian Defence Policy and Planning’, *Security Challenges*, vol. 8, no. 4 (Summer 2012), p.14

problems of over fishing and sea level rise,³ and Ron May had a brief reference to illegal fishing and the Pacific Patrol Boat Program (PPBP).⁴

Defining the Arc

The archipelagic arc to the north and east of Australia was initially referred to by Paul Dibb in 1999 as the “arc of instability” meaning the region “stretch[ing] from the Indonesian archipelago, East Timor and Papua New Guinea (PNG) in the north, to the Solomon Islands, Vanuatu, Fiji, New Caledonia and New Zealand in the east”, a definition Dibb utilised in his contribution to the special issue of *Security Challenges*.⁵ Most commentators in the special issue narrowed their view of the geographic scope of the arc. Graeme Dobell focused on states to which he saw Australia as having a sense of special responsibility: Timor-Leste, PNG, Bougainville, Nauru, the Solomon Islands and Vanuatu.⁶ He specifically excluded Fiji, from which Australia has distanced itself since the 2006 coup.

Other contributors focused on the geographic and cultural area of Melanesia, usually taken to include: West Papua, PNG, the Solomon Islands, Vanuatu, Fiji, New Caledonia and sometimes, Timor-Leste. In accordance with the majority view, the Introduction to the special issue treated the “arc” as the Melanesian region.⁷ However, to treat the Pacific Arc as comprising just the Melanesian region is essentially taking a narrow political and cultural view of Australia’s surrounding region.

This article prefers a broader geo-strategic view that includes Indonesia with its dominating strategic presence stretching across the top of Australia from Christmas Island and Java to the Torres Strait. Australian territory lies within 200 nautical miles of Indonesian territory, particularly between Christmas Island and Java, between Ashmore Island and Roti, and across the Torres Strait. The maritime boundary between Australia and Indonesia is one of the longest maritime boundaries in the world, and Indonesia is our key strategic partner in the Pacific Arc. The broader view provides a true appreciation of the strategic significance of the arc and its implications for Australia’s maritime strategy.

A recent report from the Australian Strategic Policy Institute (ASPI) argued that Australia’s first strategic priority for regional defence engagement should be with our nearest neighbours, specifically those in the archipelagic arc stretching from Indonesia through Timor-Leste and PNG to Solomon Islands

³ Wallis, ‘The Pacific: from “Arc of Instability”’, p. 11.

⁴ Ronald May, ‘Papua New Guinea: Issues of External and Internal Security’, *Security Challenges*, vol. 8, no. 4 (Summer 2012), p. 50.

⁵ Wallis, ‘The Pacific: from “Arc of Instability”’, p. 2.

⁶ Graeme Dobell, ‘From “Arc of Instability” to “Arc of Responsibility”’, *Security Challenges*, vol. 8, no. 4 (Summer 2012), p. 34.

⁷ Wallis, ‘The Pacific: from “Arc of Instability”’, p. 4.

and Vanuatu and the French territory of New Caledonia.⁸ This priority accords with pronouncements in recent Defence White Papers. The 2009 Defence White Paper identified Australia's most important strategic interest as the security, stability and cohesion of the immediate neighbourhood comprising Indonesia, Papua New Guinea, East Timor, New Zealand and the South Pacific island states.⁹ Similarly, the 2013 Defence White Paper identified the security, stability and cohesion of our immediate neighbourhood, which we share with PNG, Timor-Leste and South Pacific states, as our second key strategic interest after the fundamental priority of a secure Australia.¹⁰ The White Paper's third key strategic interest is the stability of the Indo-Pacific, particularly Southeast Asia and the maritime environment.¹¹

Australia's Maritime Strategy

There are two fundamental dimensions to Australia's strategic thinking about the Pacific Arc. Both point to the basic importance of Australia adopting a maritime strategy for ensuring its own security and the stability of its surrounding regions.

The first dimension is the one well recognised in Australia's defence planning that the Pacific Arc is the area from or through which a military threat to Australia could most easily be posed.¹² The sea-air gap (or sometimes, the air-sea gap) has a long history in Australia's defence planning lexicon although it has not always been well accepted on a joint service basis. The Air Force often talks of the air-sea gap to emphasise the fundamental importance of air power in controlling the gap while the Army has often viewed it as a strategic concept that relegates land forces to a mopping-up role for any enemy forces that might have been successful in crossing the gap.

A surprisingly recent development in Australia's strategic thinking is that the geo-strategic reality of the sea-air gap requires Australia to adopt a fundamentally maritime strategy.¹³ Justin Jones has tracked the maturing in the evolution of maritime strategic thinking in Australia's defence policy over recent times, claiming that 2012-13 might come to be seen as a watershed

⁸ Sam Bateman, Anthony Bergin and Hayley Channer, *Terms of Engagement—Australia's Regional Defence Diplomacy* (Canberra: Australian Strategic Policy Institute, July 2013), p. 67.

⁹ Australian Government, *Defending Australia in the Asia-Pacific Century: Force 2030*, Defence White Paper (Canberra: Department of Defence, 2009), paragraph 5.7, p. 42.

¹⁰ Australian Government, *Defence White Paper 2013* (Canberra: Department of Defence, 2013), paragraph 3.13.

¹¹ Australian Government, *Defence White Paper 2013*, paragraph 3.15.

¹² Paul Dibb, *Review of Australia's Defence Capabilities: Report for the Minister of Defence* (Canberra: Australian Government Publishing Service, 1986).

¹³ Australian Government, *Defending Australia in the Asia-Pacific Century*, paragraph 8.7, p. 59.

period for maritime strategic thinking in Australian defence policy.¹⁴ His reasons for saying this include the frequent references to maritime strategy in the 2013 Defence White Paper, as well as the indications that the concept of maritime strategy has become joint rather than merely a naval concept. The Chief of Army's 2012 Land Warfare Conference was titled 'Potent Land Forces in a Maritime Strategy.' Similarly, the Chief of Air Force's 2013 Symposium explored a theme of 'Air Power in a National Maritime Strategy'.¹⁵

There is a downside, however, to a focus on the sea-air gap—it supports the tendency for Australia to seek security *against* rather than *with* its neighbours. Australians often regard the surrounding oceans and seas as a moat separating them from their neighbours. This is in contrast with Indonesia in particular. For Indonesians, the sea has a special, if ambiguous, place in perceptions of Indonesian identity.¹⁶ Concepts of *wawasan nusantara* and *tanah air*, linking the islands of the Indonesian archipelago together rather than separating them, are principles of nation-building for Indonesia. For Indonesians, the seas unite whereas for Australians the seas appear to divide. Pacific islanders can have a similar view of the uniting role of the oceans.

These insular attitudes reflect an image of Australia as an insecure nation that lacks appreciation of its own geo-strategic environment. The late Frank Broeze, an eminent maritime historian, captured this outlook when he observed:

Images and perception of national identity have revolved largely around inward-looking and often racist concepts of 'continental' Australia in which the sea was seen as a fence shutting out unwanted intrusions from the surrounding region. It is part of an 'other' world, in which Australia held no stake.¹⁷

The second dimension to thinking about the Pacific Arc is to regard it more positively as an area of shared interests, particularly ones of a maritime nature, that provide a host of opportunities for working together for the common good of regional security. This positive view helps unite Australia

¹⁴ Justin Jones, 'A Maritime School of Strategic Thought for Australia', *The Interpreter*, Lowy Institute, 23 October 2013, <<http://www.lowyinterpreter.org/post/2013/10/23/A-maritime-school-of-strategic-thought-for-Australia.aspx>> [Accessed 27 October 2013].

¹⁵ Chief of Air Force's 2013 Symposium, Royal Australian Air Force, 25 February 2013, <<http://www.airforce.gov.au/News/Chief-of-Air-Force-Symposium/?RAAF-V6XVbPdS8fWFYbePdytluYgZUNpTNoA+>> [Accessed 25 November 2013].

¹⁶ Robert Cribb and Michele Ford, 'Indonesia as an Archipelago: Managing Islands, Managing the Seas', in Robert Cribb and Michele Ford (eds), *Indonesia Beyond the Water's Edge: Managing an Archipelagic State* (Singapore: Institute of Southeast Asian Studies (ISEAS), 2009), p. 11.

¹⁷ Frank Broeze, *An Island Nation—A History of Australia and the Sea* (St Leonards: Allen & Unwin, 1998), p. 1.

with its neighbours in building a stable region and assists in overcoming the inward-looking view mentioned by Frank Broeze.

Security in the Pacific Arc makes a vital contribution to Australia's security and the protection of Australia's maritime approaches. This dimension is captured well in the articles in the special issue of *Security Challenges* when it concludes that Australia should see the Pacific Arc as an "arc of opportunity"; It suggests "adopting a developmental, rather than security, framework",¹⁸ including consideration of the environmental concerns of the region. The environmental concerns of the region are mostly maritime in nature, including over-fishing, marine pollution, destruction of marine habitats, sea level rise and maritime natural hazards (cyclones and tsunamis).

It is both an opportunity and an obligation of Australia to assist countries in the Pacific Arc with dealing with these threats—as well as more generally assisting regional countries with managing their large maritime zones and exploiting their resources. This was recognised in *Australia's Oceans Policy* that stressed the positive role that maritime issues should play in Australia's regional relations noting that:

Oceans affairs are rightly a central part of our broader political and strategic relations in the regions in which our neighbours have extensive maritime interests, including exclusive economic zones. They also have an urgent need to build their capacity to manage these areas.¹⁹

In his maiden speech in the Senate in March 2012, the previous Foreign Minister, Senator Bob Carr spoke of the importance of the oceans to Australia and its island neighbours. He pointed out that Australia is an island state with the third-largest marine jurisdiction in the world, observing that:

We have a great issue here. With our partners, the small island states of the South Pacific, there is a lot involved in it. I understand that those small island states are eager to have us make a commitment to the blue economy.²⁰

Unfortunately the expectations that Australia might elevate ocean and maritime issues in our regional relations were not realised in subsequent actions of government.

¹⁸ Wallis, 'The Pacific: from "Arc of Instability"', p. 12.

¹⁹ Commonwealth of Australia, *Australia's Oceans Policy*, Vol. 2 (Canberra: Environment Australia, 1998), p. 39.

²⁰ Senator the Hon Bob Carr, Australian Minister for Foreign Affairs, *First Speech*, 21 March 2012, <http://www.foreignminister.gov.au/speeches/2012/bc_sp_120321.html> [Accessed 27 May 2012].

Maritime Issues

Most countries in the Pacific Arc have large exclusive economic zones (EEZs). Table 1 shows how the island and archipelagic countries in the Pacific Arc have gained large areas of maritime jurisdiction, particularly with the regimes of the archipelagic State and the EEZ introduced by the 1982 United Nations Convention on the Law of the Sea (UNCLOS) (Australia is included in Table 1 to provide a comparison).

Table 1: Countries in and adjacent to the Pacific Arc—Land Area and Size of EEZ

Country	Land Area (sq km)	Size of EEZ (sq km)	Approx Ratio (Land/Water)
Australia	7,690,000	10,710,000	1 : 1.4
Cook Islands	240	1,989,000	1 : 8,300
FSM	701	2,900,000	1 : 4,150
Fiji	18,272	1,338,000	1 : 73
Indonesia	1,904,569	5,409,981	1 : 3
Kiribati	684	3,540,000	1 : 5,175
Marshall Islands	181	2,131,000	1 : 11,735
Nauru	21	320,000	1 : 15,238
Niue	258	390,000	1 : 1,512
Palau	508	629,000	1 : 1,238
Papua New Guinea	162,243	3,120,000	1 : 19
Philippines	300,000	1,891,247	1 : 6
Samoa	2,935	131,000	1 : 45
Solomon Islands	28,530	1,340,000	1 : 47
Timor-Leste	14,874	101,259	1 : 7
Tonga	699	720,000	1 : 1,030
Tuvalu	26	725,000	1 : 27,885
Vanuatu	11,880	680,000	1 : 57

Notes: 1. Size of EEZ includes territorial sea, archipelagic waters and continental shelves where appropriate. 2. Figure for Australia exclude the EEZ and its adjacent EEZ.

Sources: Hanns J. Buchholz, *Law of the Sea Zones in the Pacific Ocean* (Singapore: Institute of Southeast Asian Studies, 1987) and CIA World Fact Book.

The archipelagic State regime in UNCLOS allows countries that are constituted wholly by one or more archipelagos and possibly including other islands, to draw straight baselines joining the outermost points of the outermost islands and drying reefs of the archipelago provided that such baselines include the main islands and certain other criteria relating to the ratio of land to water and the length of these baselines are met.²¹

Most of the countries in the Pacific Arc, specifically Indonesia, PNG, the Solomon Islands and Vanuatu, qualify as archipelagic States and partly as a

²¹ These criteria are set out in UNCLOS Article 47.

consequence have gained large areas of maritime jurisdiction. PNG is one of the largest archipelagic states in the Pacific region. Its EEZ of 3.1 million km² is the second largest in the arc after that of Indonesia. The Philippines is the other large archipelagic State in Southeast Asia and could well be regarded as part of the Pacific Arc in view of its maritime interests shared with other countries in the arc. Of interest, New Caledonia, if independent, would also qualify as an archipelagic state but cannot at present because it is part of France and France is not constituted wholly by archipelagos and islands.

Large EEZs and the maritime sector are a major source of income for countries in the Pacific Arc. Ocean resources are the mainstay of most island economies. While illegal, unregulated and unreported (IUU) fishing is considered the major maritime security threat, other threats arise from transnational crime, illegal people movement, climate change and sea level rise, marine pollution, and the degradation of marine habitats. A comprehensive view of security in the Pacific Arc requires consideration of all these threats. Assisting countries in the arc with managing their large maritime zones and with meeting these threats presents a major opportunity for Australia the fulfilment of which would benefit both countries in the arc and Australia itself.

STRATEGIC INTERESTS

Maritime issues in the Pacific Arc have extensive strategic, economic and environmental dimensions that are common interests of both Australia and countries in the arc. A key component of Australia's military strategy is shaping the regional strategic environment in order to minimise threats to Australian and regional interests. As Joanne Wallis noted in the special issues of *Security Challenges*:

Although Australian defence planners have focused on the Pacific Arc as the region from or through which a military threat to Australia could most easily be posed, a more stable region, with stronger states, could equally provide Australia with a security screen.²²

The security of shipping passing through the Pacific Arc is a particularly vital strategic interest for Australia. About 62 per cent of Australia's merchandise trade (73 per cent of exports and 52 per cent of imports) by value passes to or through the Pacific Arc.²³ This trade passes either from the north-west of Australia through the Indonesian archipelago or from the east coast to the east of PNG. Australia thus has a major interest in the freedom of navigation through the Pacific Arc as guaranteed by the archipelagic sea lanes passage

²² Wallis, 'The Pacific: from "Arc of Instability"', p. 12.

²³ Trade with the ASEAN countries, China, Japan, Republic of Korea, Hong Kong and PNG. Figures are based on data in Australian Bureau of Statistics, *International Trade in Goods and Services- August 2013*, publication 5368.0, <[http://www.ausstats.abs.gov.au/ausstats/meisubs.nsf/0/2E7E69A2898BC922CA257BF70011982A/\\$File/53680_aug%202013.pdf](http://www.ausstats.abs.gov.au/ausstats/meisubs.nsf/0/2E7E69A2898BC922CA257BF70011982A/$File/53680_aug%202013.pdf)> [Accessed 25 November 2013], Table 14.

regime in UNCLOS.²⁴ Australia played a prominent role at the International Maritime Organization in negotiations regarding Indonesia's implementation of this regime,²⁵ but no other archipelagic country in the arc has so far sought to implement the regime.

The *Defence White Paper 2013* notes that "the stability and security of Indonesia ... is of singular importance and is our most important relationship in the region".²⁶ Ministerial exchanges and defence cooperation and interoperability gathered pace over recent years²⁷ before being suspended most recently as a consequence of tensions over Australian spying and border protection arrangements.

Regular maritime exercises have taken place between the Australian and Indonesian navies, as well as coordinated patrols in the Timor Sea, but the vast majority of expenditure on Australia's defence cooperation with Indonesia has been on personnel training, counter-terrorism, disaster relief and peacekeeping cooperation. These are important activities but there are also important opportunities to deepen Australia's assistance with maritime security in the Indonesian archipelago. These include support for the development of BAKORKAMLA, Indonesia's coast guard agency; the establishment of Indonesia's National Maritime Information Centre; and for improving Indonesia's defence procurement processes as the Indonesian Navy expands and modernises.²⁸ These opportunities have, however, been jeopardised by recent tensions between the two countries.

FISHERIES

Fisheries are a key maritime issue in the Pacific Arc. The arc includes some of the world's richest and most productive tuna fishing grounds. The Western and Central Pacific tuna fisheries reported a record value of approximately US\$7.2 billion for 2012, of which approximately US\$5.3 billion was caught within the waters of Indonesia, the Philippines and the Pacific islands.²⁹ These tuna fisheries are the only significant renewable resource for the majority of the Pacific island countries (PICs) and provide vitally important employment, livelihoods and food security. In addition, revenue from tuna fishing licences can contribute up to half of gross domestic product and are significant components of national economies for Federated States

²⁴ UNCLOS Article 53.

²⁵ Robin Warner, 'Implementing the Archipelagic Regime in the International Maritime Organization', in Donald Rothwell and Sam Bateman (eds), *Navigational Rights and Freedoms and the New Law of the Sea* (The Hague: Martinus Nijhoff Publishers, 2000), pp. 170-1.

²⁶ Australian Government, *Defence White Paper 2013*, paragraph 3.17

²⁷ Bateman, Bergin and Channer, *Terms of Engagement*, p. 25.

²⁸ Benjamin Schreer, *Moving Beyond Ambitions? Indonesia's Military Modernisation* (Canberra: Australian Strategic Policy Institute, November 2013), especially pp. 18-22.

²⁹ Pacific Islands Forum Fisheries Agency, 'Value of WCPO Tuna Fisheries' (Excel Database) Honiara, Pacific Islands Forum Fisheries Agency, 2013.

of Micronesia, Kiribati, Marshall Islands, Nauru, Solomon Islands, Tokelau, and Tuvalu.³⁰

Poor compliance with licence conditions by fishing vessels has been a major problem in the region for decades. In 2009, the Pacific Islands Forum Fisheries Agency (FFA) commissioned a series of analytical studies which found that the majority of illegal fishing in the Pacific islands region was associated with licensed vessels, and identified misreporting of catch as a key compliance concern. Misreporting is a form of criminal fraud where licensed vessels intentionally understate catches for financial gain (similar to tax evasion). This effectively steals scarce revenue from developing coastal States and undermines the effectiveness of fisheries management.³¹

Australia provides significant support for fisheries management, development and enforcement programmes, primarily through funding to the regional fisheries organisations: the FFA, and the Secretariat of the Pacific Community's (SPC) Division of Fisheries, Aquaculture and Marine Ecosystems (FAME).

ENVIRONMENTAL THREATS

Australia has a major interest in the preservation and protection of the marine environment of the ocean and the conservation of its living resources. However, those objectives can be achieved only with cooperation between neighbouring littoral and island countries. Australia is a key player or supporter of regional arrangements for protecting and preserving the marine environment.

The prevention and mitigation of maritime natural hazards (tsunamis and cyclones), including disaster relief and humanitarian assistance, is an important common interest of Australia and its neighbours. The introduction into service of the two Landing Helicopter Dock (LHD) ships being built for the Royal Australian Navy (RAN) will provide Australia with an excellent capability for providing this assistance.

The protection and preservation of the marine and coastal environments is of vital importance to countries in the Pacific Arc. Marine environmental threats include ship-sourced marine pollution and activities that might cause damage to coral reefs in the region. Climate change and sea level rise are issues of great concern, particularly for the countries that include inhabited low-lying atolls. As with fisheries, Australia largely works through or supports regional organisations on marine environmental issues. The

³⁰ Quentin Hanich, Feleti Teo and Martin Tsamenyi, 'A Collective Approach to Pacific Islands Fisheries Management: Moving Beyond Regional Agreements', *Marine Policy*, vol. 34, no. 1 (2010), pp. 85-91.

³¹ Duncan Soutar, Quentin Hanich, Mark Korsten, Tim Jones and Jack McCaffrie, *Safeguarding the Stocks: A report on analytical projects to support the development of a regional MCS strategy for Pacific oceanic fisheries* (Honiara: Pacific Islands Forum Fisheries Agency, 2009).

Pacific Regional Environment Programme (SPREP) and the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) are major organisations in the arc. The Arafura and Timor Sea Experts Forum (ATSEF) brings together Australia, Indonesia and Timor-Leste to work on fisheries issues and ecosystem based management of these seas.

The strategic priorities of the Secretariat of SPREP all have a significant maritime dimension—Climate Change, Biodiversity and Ecosystem Management and Waste Management and Pollution Control.

The CTI-CFF is a key arrangement for managing and conserving marine and fishery resources in the Pacific Arc. A recent study estimated that reef fishes in the Coral Triangle are worth \$3 billion, comprising 30 per cent of the total value of commercial fisheries in the region, based on datasets gathered from the Food and Agriculture Organization.³² CTI-CFF is a multilateral partnership of six countries (Malaysia, Indonesia, the Philippines, Timor-Leste, PNG, and the Solomon Islands) formed in to address the threats facing the coastal and marine resources of one of the most biologically diverse and ecologically rich regions on earth. CTI-CFF is managed through a Secretariat based in Jakarta, Indonesia. Australia gives high priority to supporting the CTI-CFF in recognition of its significant biodiversity values, the reliance of the region on coastal and marine ecosystems for livelihoods and food security, and the connectivity between Australian and neighboring marine ecosystems

TRANSNATIONAL CRIME

Transnational crime is a major issue for countries in the Pacific Arc. Criminal activities with a maritime dimension include smuggling arms, drugs and people; illegal logging; IUU fishing; sea robbery; and illegal wildlife exports. These activities are facilitated by weak border security due to the wide maritime areas and lack of resources, the volume of maritime traffic in the region, corruption in both the public and private sectors, and poor coordination between agencies.

Transnational crime in the arc has consequences for Australia because the arc provides an avenue for the illegal entry of people, drugs and other contraband into Australia, especially in the north-west and across Torres Strait. This avenue may be a somewhat easier route for criminal activity than direct entry from South or East Asia. The Australian Federal Police (AFP) plays a leading role in countering transnational crime in the arc with officers posted to all independent countries in the arc.

³² Coral Triangle Knowledge Network, 'Value of Coral Triangle Reefs' Fisheries Estimated at US \$3 Billion', Coral Triangle Initiative, 11 October 2013, <<http://www.coraltriangleinitiative.org/news/value-coral-triangle-reefs%E2%80%99-fisheries-estimated-us-3-billion>> [Accessed 1 September 2013].

Some of the many foreign fishing vessels active in the arc may be involved in smuggling or other illegal activity at sea. A study by the United Nations Office on Drugs and Crime has found that fishing vessels are often involved in criminal activities, including the smuggling of migrants, illicit traffic in drugs, and illicit traffic in weapons.³³

Security Focus

The maritime nature of the Pacific Arc and the extent of maritime interests in the arc suggest that there should be a clear maritime focus in our security engagement with these countries. This should be part of a “whole of government” maritime strategy, but there is little evidence of this at present. The low priority accorded the Pacific Maritime Security Project (PMSP) is the most striking example of Australia’s failure to follow through on the strategic opportunities within the arc (see below).

The lack of maritime focus is most apparent at a country level in PNG and Timor-Leste, where despite statements that maritime security is a priority for engagement, our actual defence engagement has been mainly focused on land forces. The naval elements of the defence forces of these countries have suffered as a result, and both have major problems. This may be attributed at least in part to the heavy preponderance of Army personnel serving in attaché and adviser positions in those countries along with the inability, or unwillingness, of the Navy to provide suitable personnel.

PACIFIC MARITIME SECURITY PROJECT³⁴

The inaction and delays with the PMSP provide a powerful indicator of the low priority accorded by Australia to maritime issues in the region despite their obvious importance. This project is intended to provide a maritime security capability to replace the twenty-two Pacific Patrol Boats (PPBs) Australia gifted to twelve PICs in the 1980s and 1990s under the PPBP. Seven of these were to countries in the Pacific Arc—four to PNG, two to the Solomon Islands and one to Vanuatu. Looking to the future, Timor-Leste’s participation should be factored into the PMSP. A significant side benefit of the PPBP that should be retained with the PMSP is the access and strategic presence provided by the positioning of Australian maritime surveillance and technical advisers in each of the PPB recipient countries.

Australia’s support for maritime security in the PICs following the PPBP has been a vexed issue. The nature of the PMSP is still being studied despite

³³ United Nations Office on Drugs and Crime (UNODC), *Transnational Organized Crime in the Fishing Industry—Focus on: Trafficking in Persons, Smuggling of Weapons, Illicit Drug Trafficking* (Vienna: UNODC, 2011), p. 2.

³⁴ This section is largely based on Sam Bateman and Anthony Bergin, ‘Staying the Course: Australia and Maritime Security in the South Pacific’, *Strategic Insights 52* (Canberra: Australian Strategic Policy Institute, May 2011); updated by relevant sections of Bateman, Bergin and Channer, *Terms of Engagement*.

many years of consideration. Defence is due to report a final assessment of options to government in 2013. This leaves a short lead time for Australia to gain the recipient countries' acceptance of the preferred option, start the acquisition process, develop any new infrastructure required and commence the training of personnel before the earlier PPBs become unusable.

The PMSP has been the subject of some 'buck-passing' between agencies. Responsibility for the project was at one stage passed to the Australian Customs and Border Protection Service (ACBPS) before being transferred back to Defence in February 2012. Defence leadership for the project is important, as the Defence organisation has the overall strategic perspective. Maritime security will always be an important component of Australia's security cooperation in the Pacific Arc. The Department of Defence has a central role in our multilateral and bilateral security engagements in the region both with countries in the arc and with France, the United States and New Zealand.

The *Defence White Paper 2013* makes a strong commitment to the PMSP noting that:

The centrepiece of the Program will be the gifting of a fleet of vessels to replace the existing Pacific Patrol Boats, which need replacing over the period 2018–2028. This fleet of vessels is planned to be provided across all states that currently have Pacific Patrol Boats (including Fiji upon a return to democracy). The Program will also propose to enhance practical cooperation across the South Pacific including through strengthening governance structures that support maritime security and the provision of aerial surveillance, advisory support and support to regional coordination centres.³⁵

At the South Pacific Defence Ministers' Meeting in May 2013, Australia's then Defence Minister noted that options for the PMSP range from a straightforward patrol boat replacement program through to a coordinated surveillance and response arrangement, including the development of a regional multilateral development assistance agency modelled on the FFA.³⁶ Consultations are planned with regional states, key regional institutions and partner nations to inform and refine options for the PMSP.³⁷ Unfortunately, this could be seen as an admission of a lack of progress with the PMSP,

³⁵ Australian Government, *Defence White Paper 2013*, paragraph 6.58.

³⁶ 'Minister for Defence and Parliamentary Secretary for Defence—Defence Minister Smith attends inaugural South Pacific Defence Ministers' Meeting in Tonga, *Media Release*, 2 May 2013, <<http://www.minister.defence.gov.au/2013/05/02/minister-for-defence-and-parliamentary-secretary-for-defence-defence-minister-smith-attends-inaugural-south-pacific-defence-ministers-meeting-in-tonga-2/>> [Accessed 15 May 2013].

³⁷ South Pacific Defence Ministers' Meeting Joint Communiqué, Inaugural South Pacific Defence Ministers' Meeting (SPDMM) in Nuku'alofa in the Kingdom of Tonga, 2 May 2013, <<http://www.minister.defence.gov.au/files/2013/05/South-Pacific-Defence-Ministers-Meeting-Joint-Communique2.pdf>> [Accessed 15 May 2013].

since the project was originally announced at the 2009 Pacific Islands Forum Leaders Meeting.

RELATED ISSUES

The former Minister for Defence also noted other key activities that Australia would soon implement to help support regional maritime security. These included a regional aerial surveillance trial and measures to strengthen the capacity of the FFA's Regional Fisheries Surveillance Centre with the provision of new equipment and software and support for the attachment of regional personnel (from police, defence or other relevant agencies).

Although the PPBP provided Pacific island States with some national law enforcement infrastructure, the sheer size of the Pacific island EEZs required a cooperative approach. In response, the Pacific Islands region adopted a treaty framework in 1993 that enabled member states to cooperate in surveillance and enforcement and share surveillance assets. The Niue Treaty on Co-operation in Fisheries Surveillance and Law Enforcement in the South Pacific Region is an umbrella arrangement that supports the development of subsidiary agreements to implement surveillance and enforcement cooperation at the bi-lateral or sub-regional level. There are now a number of subsidiary agreements, and an increasing number of regular multilateral fisheries surveillance operations that include Niue Treaty members and non-members providing support (such as aerial surveillance).

In 2010, Australia hosted a meeting of Pacific island justice and fisheries Ministers which agreed to begin the development of a new multi-lateral subsidiary agreement to the Niue Treaty. This new agreement would support the implementation of the FFA Monitoring, Control and Surveillance (MCS) Strategy and allow for the sharing of fisheries information, cross vesting of fisheries enforcement powers, and the use of fisheries information for other law enforcement purposes. In 2012, the Agreement on Strengthening Implementation of the Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the Pacific Region (the Niue Treaty Subsidiary Agreement)³⁸ was concluded and is now open for signature by FFA members. This comprehensive agreement will enter into force following ratification by four FFA members and will likely become a critical component of the PMSP, providing the cooperative and surveillance framework for maritime security operations in the Pacific islands region.

³⁸ Agreement on Strengthening Implementation of the Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the Pacific Region (the Niue Treaty Subsidiary Agreement), 2 November 2012, Honiara, Solomon Islands, <http://www.ffa.int/system/files/Multilateral%20NTSA_Agreement%20on%20Strengthening%20Implementation%20of%20the%20Niue%20Treaty.pdf> [Accessed 22 November 2013].

TIMOR-LESTE

Maritime issues offer fertile ground for fostering good relations between Australia and Timor-Leste.³⁹ Common interests in the maritime domain include security, resource development and marine environmental protection. At present the Naval Component of the Falintil-Timor-Leste Defence Force (Falintil Forças de Defesa de Timor-Leste, or F-FDTL) is in a poor state. Its base at Port Hera has many problems including flooding damage and unsatisfactory berthing arrangements for its vessels. Its five vessels are old and difficult to maintain. The ability of the F-FDTL to patrol in the Timor Sea, where a high level of IUU fishing occurs, is severely hampered by its current vessels' lack of range and sea-keeping capability. Australia's maritime security assistance has been relatively limited—Australia has offered more, including aerial surveillance, but many offers have been rejected on the ground of suspicion that Australia's assistance had ulterior motives.

Australia did not appoint a naval adviser to Dili until early 2010, and then only at the rank of lieutenant commander. The senior defence attache positions in Dili have been mainly filled by the Army and occasionally Air Force. There is little direct contact between the F-FDTL and Northern Command (NORCOM) in Darwin on maritime security issues, although liaison between NORCOM and Indonesian Defence headquarters in eastern Indonesia is becoming routine, particularly on coordinated naval operations. There are relatively few RAN ship visits to Timor-Leste, while both the United States and France are reported to visit more frequently.

At the regional level, regular maritime security meetings between Australia, Indonesia and Timor-Leste would be beneficial to enhance good order in the Timor Sea. Australia might also offer to sponsor a maritime capability study to investigate the force development requirements of the F-FDTL Navy component.

PAPUA NEW GUINEA

By virtue of geography, PNG is an important factor in Australia's security. Maritime security is a key concern of both countries and should figure prominently in our defence engagement priorities, but in recent years this has not been the case.⁴⁰ The Maritime Element of the Papua New Guinea Defence Force (PNGDF) has four of the earlier PPBs, two LCHs (Landing Craft, Heavy), the Patrol Boat Base at Lombrum on Manus Island, the Landing Craft Base in Port Moresby, and some smaller units attached to the

³⁹ This section is largely based on Sam Bateman and Anthony Bergin, 'The maritime interests of Timor-Leste', in 'A Reliable Partner: Strengthening Australia-Timor-Leste Relations', *Special Report Issue 39* (Canberra: Australian Strategic Policy Institute, April 2011), pp. 44-64.

⁴⁰ This section is largely based on Bateman, Bergin and Channer, *Terms of Engagement*, Chapter 4.

Land Element. It currently suffers from several major problems, including a lack of resources and skilled personnel, and low morale.

The Lombrum base is very remote. Re-supply and travel are difficult and the supervision of technical standards in particular is not easy. It seems to have little priority for infrastructure maintenance and is rarely visited by advisers. This remoteness seems to be a contributing factor to the Maritime Element receiving relatively little attention in the PNGDF despite the priority attached to maritime security. The Maritime Element has generally been neglected by senior levels of the PNGDF despite the presence of senior Maritime Element officers in HQPNGDF.

Australia must take some responsibility for the problems in the PNGDF Maritime Element. The redundancy programme funded by Australia in the early 2000s to reduce the size of the PNGDF led to the loss of many of the more skilled personnel from the Maritime Element. Relatively few RAN personnel have been employed in PNG in recent years, and they have mostly been at lower ranks. Australian advisers to the Maritime Element are not involved in the day-to-day operations and maintenance of the vessels as with PPBs in the other PICs. Rather they serve in line positions in HQPNGDF and the National Surveillance Coordination Centre (NSCC).

Because of reservations about the size and capabilities of the PPBs, PNG was initially reluctant to join the PPB project. To some extent, those reservations continue—there is a widespread opinion that the country needs larger and more capable vessels. With the improved national economic outlook, the PNG Government has plans to increase the size of the PNGDF and has already approved in principle the purchase of new patrol vessels, aircraft and firearms. From an Australian perspective and for ease of training and support, it is important that PNG participates in the PMSP. However, the PNGDF now has a project looking at the acquisition of inshore patrol vessels, offshore patrol vessels and a multipurpose vessel for troop-carrying and logistic support. In view of delays with the PMSP, it would now appear likely that the PNGDF will go its own way with the acquisition of new vessels.

As a key element of Australia's maritime strategy, the RAN should attach greater importance to supporting the PNGDF Maritime Element. A master plan for the development of this element might be funded under the Defence Cooperation Program (DCP), including a 'get well' program for its existing vessels, training, personnel issues and longer term basing and force structure requirements. The planned increase of mentoring teams in PNG should include a naval mentoring team based in Port Moresby but able to visit the Lombrum base regularly.

Australia's Administrative Arrangements

There is a vexed issue with whether the administrative arrangements in Canberra are well tuned to exploiting the maritime opportunities in the Pacific Arc. There is much more security activity at sea and there are more regional forums dealing with some aspect of maritime security. There are more challenges and opportunities for Australia, but Australia is not necessarily well organised to meet them. Australia's regional maritime security engagement requires tighter coordination, more systematic identification of priorities, and clearer policy direction.

Regular reference is made to a 'whole of government' approach to managing activities involving a range of government agencies, but often this can lead to a 'hole in government' with 'buck-passing' between agencies and important initiatives not being pursued because no one agency feels that it has the prime responsibility. This situation is particularly apparent with maritime security engagement and with the provision of assistance to regional countries pursuing their maritime interests.

MARITIME SECURITY ENGAGEMENT

Maritime security has become more civilianised over the past decade or so. Many non-military agencies are now involved in providing some dimension of maritime security, including cooperation with neighbouring countries. Civil law enforcement has become an important element of maritime security. This was the major consideration leading to the temporary transfer of responsibility for the PMSP from Defence to the ACBPS.

Until the introduction of the military-led Operation Sovereign Borders to deal with people smuggling, Australia appeared to be moving towards a civil model for maritime enforcement. In Australia, the civil agencies involved with maritime security, broadly defined, include the ACBPS, the AFP, Office of Transport Security, Australian Fisheries Management Authority and the Australian Maritime Safety Authority. These agencies undertake their regional maritime security responsibilities primarily at a tactical and operational level while strategic and foreign policy oversight remains with the Department of Foreign Affairs and Trade (DFAT) and the Department of Defence.

The Abbott Government has made several changes to the national arrangements for maritime security and border protection, notably the transfer of the ACBPS from the Attorney-General to the Immigration portfolio and the establishment of Operation Sovereign Borders. This re-organisation, placing the entire emphasis on people smuggling as the basis for border protection and regional engagement will not be helpful for broader maritime security engagement in the Pacific Arc. Centralised coordination of regional engagement is required that covers all forms of transnational crime at sea, including illegal fishing and drug trafficking.

DEVELOPMENT ASSISTANCE

The Australian Government released a comprehensive international aid policy framework in May 2012 to guide the growth of Australia's aid budget over the next four years.⁴¹ It identified five core strategic goals: saving lives, promoting opportunities for all, sustainable economic development, effective governance and humanitarian and disaster relief.

Despite the major maritime aspects of these goals for countries in our region with large EEZs, the aid policy framework makes no specific reference to oceans or maritime issues. AusAid's website lists twenty issue areas that it focuses its work on, but there is no specific reference to ocean development.⁴² Despite this lack of profile, Australia does work closely with regional countries to support the management, development and protection of their maritime interests. AusAID, for example, has a range of program activities underway in the area of oceans management and governance. AusAID has a fisheries program in the Pacific, guided by its 2007 Pacific Fisheries Framework that outlines AusAID's key objectives in the sector.

In 2012, the Australian Prime Minister announced \$25 million to support the implementation of the Pacific Islands Oceanscape Framework, including significant funding to the regional agencies FFA and the Secretariat of the Pacific Community to support fisheries management and surveillance cooperation. The Oceanscape Framework was initiated at the Pacific Islands Forum Leaders Meeting in 2009 and envisions "A secure future for Pacific Island Countries and Territories based on sustainable development, management and conservation of our Ocean" with a focus on integrated ocean management.⁴³ Although in early days, it is envisaged that Oceanscape will strengthen coordination between the regional agencies and provide greater synergies in ocean management and conservation.

In 2009 and 2010, AusAID supported the development of an FFA Regional Monitoring, Control and Surveillance (MCS) Strategy. The Strategy was informed by five analytical studies that: identified key risks; assessed the MCS capacity and implementation by FFA members; studied MCS data issues; examined MCS cooperation between FFA members (and non-members); and examined the application of aircraft, ships and other assets for MCS.⁴⁴ The analytical studies identified a need to improve coordination

⁴¹ Commonwealth of Australia, *Helping the World's Poor through Effective Aid: Australia's Comprehensive Aid Policy Framework to 2015–16* (Canberra: AusAID, May 2012), <<http://aid.dfat.gov.au/about/Documents/capf.pdf>> [Accessed 1 September 2012].

⁴² Sam Bateman and Anthony Bergin, 'Making Waves: Australian Ocean Development Assistance', *Policy Analysis 107*, Canberra: Australian Strategic Policy Institute, 18 September 2012.

⁴³ Pacific Islands Forum Secretariat, 'Field Chronicles: The Pacific Oceanscape', <<http://www.forumsec.org/pages.cfm/strategic-partnerships-coordination/pacific-oceanscape/>> [Accessed 22 November 2013].

⁴⁴ Soutar et al., *Safeguarding the Stocks*.

and cooperation both within and between FFA Members, and more broadly with other maritime security partners; France and the United States. The FFA member States subsequently developed the Pacific MCS Strategy and adopted the Strategy in May 2010. The MCS Strategy aims to support fisheries management frameworks at the national, sub-regional and regional levels through a number of coordination, planning, integration, and capacity building activities.⁴⁵

While the Abbott Government has closed AusAID, the Australian Aid Program continues to be implemented through DFAT. No formal announcements have yet been made regarding the structure and composition of the Australian Aid Program, but expectations are that it will prioritise strategic interests and bilateral relationships. While the aid budget has been reduced, it is still significant and would likely support development programs in the Pacific Arc given its strategic significance to Australia.

Conclusion

While Australia has been proactive in fisheries monitoring, control and surveillance, other aspects of Pacific maritime security have suffered from inaction and delays as is evident with the PMSP, and the lack of priority accorded to assisting the maritime security forces in PNG and Timor-Leste. Despite some significant successes in fisheries Australia has generally given insufficient attention to maritime security issues in the Pacific Arc. Our first priority for security engagement should be with our nearest neighbours—those in the archipelagic arc from Indonesia, Timor-Leste and PNG to Solomon Islands and Vanuatu. As a subset of this priority, high priority should be given to implementing the PMSP as the cornerstone of our security engagement in the region, including with the inclusion of Timor-Leste in the project. The opportunities for maritime security cooperation with Indonesia, Australia's major regional neighbour, should also be more fully exploited.

As well as measures for the direct defence of Australia and its national interests, Australia's maritime strategy must comprehend the importance of defence engagement in the Pacific Arc on maritime security interests. This means working with countries in the arc to manage and develop their maritime interests and to develop their maritime security capabilities. Unfortunately this requirement has not been well recognised in the past. The RAN itself has failed to attach the necessary importance to this type of naval diplomacy.

To facilitate Australia's security engagement with the Pacific Arc, a trilateral forum might be established between Australia, Indonesia and Timor-Leste to

⁴⁵ Pacific Islands Forum Fisheries Agency, 'Regional Monitoring, Control and Surveillance Strategy 2010-2015', Honiara, Solomon Islands, May 2010, <http://www.ffa.int/system/files/RMCSS%20adopted%20FFC%2074%20in%202010_0.pdf> [Accessed 22 November 2013].

discuss security issues of common interest in the Timor Sea. Similarly, an Australia-led Coral Sea Maritime Security forum could be established to bring together Australia, PNG, Solomon Islands, Vanuatu and the French authorities in New Caledonia to discuss maritime security cooperation and information sharing in the Coral Sea region.

The reasons for Australia's inaction with regard to developing key maritime strategic opportunities in the Pacific Arc range from some lack of appreciation of the geo-strategic significance of the arc through to bureaucratic 'muddling through' in Canberra that has led to a 'hole' in Australia's approach to maritime security. These problems must be addressed if Australia is to have a true maritime strategy.

An Office of Ocean Affairs in DFAT, similar to the US Government's Office of Ocean and Polar Affairs, located in the US State Department,⁴⁶ might be established to provide a focus for interdepartmental coordination, and to advance the maritime aspects of Australia's foreign and security policy objectives, as well as the overseas assistance program. This office would help elevate ocean and maritime issues in our regional relations, particularly with the Pacific Arc.

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⁴⁶ US Department of State, *Ocean and Polar Affairs*, <<http://www.state.gov/e/oes/ocns/opa/>> [Accessed 20 November 2013].

About the Kokoda Foundation

The Kokoda Foundation has been established as an independent, not-for-profit think tank to research and foster innovative thinking on Australia's future security challenges. The foundation's priorities are:

- To conduct quality research on security issues commissioned by public and private sector organisations.
- To foster innovative thinking on Australia's future security challenges.
- To publish quality papers (The Kokoda Papers) on issues relevant to Australia's security challenges.
- To develop Security Challenges as the leading refereed journal in the field.
- To encourage and, where appropriate, mentor a new generation of advanced strategic thinkers.
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