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Canada's Defence Challenges in the Indo-Pacific: A View from Down Under

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Table of Contents

About the Policy Insights Forum I
Acknowledgments I
Research Integrity I
Disclaimer I
Copyright I
Limited Print and Electronic Distribution Rights I
About the PIF Papers II
À propos des Études IP II

Executive Summary III

Introduction: The Nature of the Challenge 4

The Utility of Closer Collaboration 5

Shared Legacy 6

Proposed Measures: Engagement and Capabilities 7
Defence Attaché Presence 7
Southeast Asian and Pacific Engagement 7
Further Engagement with INDO-PACOM 7
Participation in Regional Multilateral Exercises 8
Collaboration with Amphibious Capability Development 8
Shared Education and Training Exchanges 8
Developments Relating to the Arctic and Antarctic 8
Indigenous Exchanges 9
Enhancing Cyber Security Collaboration & Responding to Foreign Interference 9

Enhancing Engagement 9
Major Acquisitions 9

Nuclear Propulsion Submarines (SSNs): Doing the Un-doable or Must-doable? 10

Conclusion 12

For Further Reading 13

Endnotes 14

About John Blaxland 15

Executive Summary

This article examines Canada's defence challenges in the Indo-Pacific viewed through an Australian lens, principally for a Canadian audience (and for Australians ignorant of the significance of Canada as an Indo-Pacific partner). It reflects on a striking range of commonalities, including on regional security and stability. With the world facing heightened great power contestation, looming environmental catastrophe, a spectrum of governance challenges, and all accelerated by the fourth industrial revolution, the urgency for close coordination of their finite resources is great. But to be taken more seriously, Canada has to demonstrate that it is genuine about its plans for increased Indo-Pacific engagement. Canada's Indo-Pacific Strategy is a good start.

To help make this come to fruition, cooperation is called for with Australia and other regional security partners on environmental, governance and military preparedness issues across six domains (sea, land, air, space, cyber and cognitive). This is necessary to enhance their mutual defence capabilities and their shared and overlapping interests, including beyond national defence. Tough choices on capability acquisitions can be easier to make by working closely with traditional security partners. Having realised the obsolescence of diesel-electric propulsion submarines for long-distance operations (due to persistent surveillance satellites aided by AI), Australia, along with its UK and US partners, has committed to procure and develop nuclear propulsion submarines. Now that Australia is taking this path, Canada should revisit its late Cold War decision and do likewise.

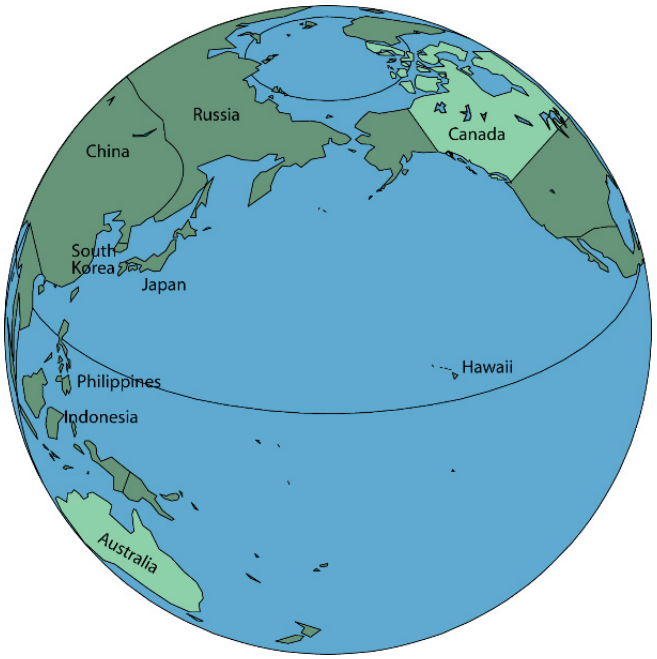
Introduction: The Nature of the Challenge

This paper considers defence assets and the defence posture Canada likely will need in the 2020s to achieve its policy objectives in the Indo-Pacific, largely through comparison with the circumstances of its Strategic Cousins, Down Under, in Australia. It is written by an Australian who has been a student of Canadian defence and security affairs for over two decades, but who has spent his career principally in Australia, writing mostly about international security affairs from an Australian perspective. For a long time I have been struck by the parallel experiences and challenges of Canada and Australia. This paper draws on recent scholarship and writing on Australian security affairs in order to shed some light, from a different perspective, on some of the challenges and opportunities that Canada faces as it looks to implement its Indo-Pacific strategy.

In seeking to understand Australia's predicament and options, I undertook a Geostrategic SWOT Analysis for Australia. This was an attempt to apply the business model of examining internal strengths and weaknesses and external opportunities and threats, but in a geostrategic context. A distillation of the findings from that study pointed to a series of overlapping challenges that are beyond the remit of any one academic discipline, government agency, nation, or institution to fully address. Canada's Indo-Pacific Strategy covers similar themes (on economic opportunity, strategic challenges and sustainable development), but the SWOT Analysis approaches the Indo-Pacific from a different angle and finds four overarching themes which should inform defence policy choices.

The first is great-power contestation. This is not just between China and the United States, but increasingly others. Russia's border with Canada stretches not just across the Arctic but the northern reaches of the Indo-Pacific as well. Elsewhere, tension and great power contestation are manifesting in clashes in the South China Sea, the East China Sea, the Korean Peninsula, the Himalayan mountains, at home, online, and in fractured social settings, and yet again amongst the strategic waterways of the Middle East. Great power contestation on its own presents significant and intractable challenges. But there's more in the mix than just that.

"Australia and Canada have an enduring interest in making a positive contribution to security and stability in the Indo-Pacific. That interest is heightened as tensions in the region flare."



The second theme is looming environmental catastrophe. This is particularly acute for many Pacific Island states and similar low-lying communities. But it isn't just about the prospect of sea level rise. Extreme weather events, including floods, fires, ice storms, hurricanes, pandemics and more, are becoming normal and presenting a greater tempo and scale of challenges that requires innovative collaboration to address. Fire and emergency services from Canada and Australia are finding themselves on prolonged tours in each others' countries, fighting extreme weather events. This generates growing and unsustainable demands for the support of the armed forces. It has also generated calls for revisiting the notion of some incentivised but voluntary scheme for national and community service.

The third theme is a spectrum of governance challenges. These include people smuggling, drug smuggling, terrorism, societal crises, surges in preventable deaths, the breakdown in law and order, insurgencies, revolutions and more. Australian and Canadian defence, intelligence, security and police agencies cooperate closely on these matters but they are stretched and yet there is much more to be done. Indeed, these traditional security-related institutions are not adequately resourced or equipped to manage the overlapping and growing range of problems.

These three challenges are being accelerated by the fourth industrial revolution, with artificial intelligence, quantum computing, autonomous systems, 3-D printing, the proliferation of easily accessible and highly lethal weapons systems and more. Along the way, society has morphed from being web-enabled to web-dependent and, in turn, web-vulnerable, with almost all of us hooked to our devices and the dopamine rushes that prove so lucrative for the companies trading on our distractions and predilections. The scale of cyber intrusions and attacks from state and non-state actors has grown commensurately. State actors feature prominently in the mix, notably China, Russia, North Korea and Iran. In addition, civil society is struggling with fake news and algorithm-generated echo chambers, fomenting civil unrest. Recruiters for the armed forces, the police and emergency services struggle to get the required number of enlistees who, for a variety of reasons, are staying away from service, leaving these important institutions desperately short-staffed. Canada and Australia already work closely on this, particularly in the security-intelligence, policing and cyber domains, but need to step up the investment in collaboration.

The Utility of Closer Collaboration

Australia and Canada have an enduring interest in making a positive contribution to security and stability in the Indo-Pacific. That interest is heightened as tensions in the region flare. Despite Mercator projection distortions, they are equidistant from the strategic hotspots of Northeast Asia. Vancouver is closer to Beijing than is Australia's northern capital Darwin. They are both close allies of the United States and supporters of the so-called rules-based global order (RBGO), most visibly through their support of the United Nations and its related international institutions. Both benefit enormously from this order, more honoured in the breach, it seems, nowadays. Some decry the term. I see the RBGO like the Holy Roman Empire of old: not holy, not Roman and hardly an empire; yet it existed and functioned for many years. I contend that the RBGO remains intrinsically significant for Middle Powers like Australia and Canada – that count on the rules to maintain stability, trust, credit, trade, and prosperity. They also have similarly sized and structured, boutique armed forces, employing comparable and compatible equipment and protocols and repeatedly finding themselves on many of the same operational deployments.

Like Australia, Canada has a distinctive military legacy in the Indo-Pacific, although for many years that has been obscured by trans-Atlantic security ties. Both have an enduring obligation, through the United Nations, to the defence of South Korea. With Northeast Asian trade dominant, Canada's economic centre of gravity has been shifting westward toward the 'Far East', not that far across from Canada's west coast. Yet notwithstanding its 2022 paper, Canada's Indo-Pacific Strategy, the Canadian government has shown little real interest in 'pivoting' to the Pacific in this way. Strategy, without money allocated to bring it into being, is just talk. So, Canada's renewed focus, if it proves to be a genuine and sustained one, is of intrinsic interest to Australia. Both Canada and Australia have limited industrial capacity and ability to launch and sustain major capital works, such as ship or submarine building as well as defensive and offensive cyber capabilities. Efficiencies could arise through enhanced collaboration.

Shared Legacy

As Australia and Canada contemplate the implications, it is worth reflecting on their shared experiences in the Indo-Pacific. Their combatants are commemorated at Commonwealth war graves in Myanmar (formely Burma), Korea, Hong Kong, Singapore and elsewhere. Canadians lost a whole brigade in the defence of Hong Kong in December 1941, while Australians lost a division of two brigades further south in the defence of Singapore. The concurrent losses occurred with little forethought about improving bilateral collaboration. Canadian forces later stormed ashore at Kiska Island in the Aleutians and contemplated sending one or two combat divisions to fight in the Pacific alongside the Australians, had the Pacific War extended into 1946. As the war progressed, both were left with little voice in the direction of grand strategy. In the end, the Canadians sent a special wireless battalion to Darwin. But this was a secret organization, so few knew about this Canadian contribution to Australia's defence, even though the bonds established then in the realm of signals intelligence endure to this day – now publicly identified as the 'five eyes' arrangements.

Afterwards, Canada contributed a brigade-sized land force plus naval and air elements during the Korean War, fighting alongside Australians and together inflicting a setback on the enemy at the Battle of Kapyong in 1951. During the Vietnam War, Canada was the principal Western country sending monitors to Vietnam to work with the International Commission for Supervision and Control, largely as a favour to the United States — and in a manner that faintly echoed Australia's contribution alongside the Americans. Later, Canadians and Australians bumped into each other on UN peacekeeping missions around the globe, in Namibia, Somalia, Cambodia, Rwanda, the Balkans and beyond. In 1999, Canada sent an infantry company (Van Doos) with air and sea logistic support to participate in the International Force East Timor (INTERFET). Canada and Australia contributed forces to the invasion of Afghanistan in 2001 and for the mission that followed. As a NATO member, Canada advocated on Australia's behalf for greater access and influence within the organization. The two navies have worked alongside in the Persian Gulf, Indian Ocean and the Pacific for decades. These events usually happened at short notice, with little time to coordinate policy or plans, but they demonstrate the congruence in the two countries' strategic outlooks for more than a century.

In Australia, few have seen Canada as a serious player in the region in recent years. Yet there is a wide network of low-profile collaboration including through intelligence, police and other security links and such working-level arrangements as the collaborative standardization program between the armies of America, Britain, Canada, Australia, and New Zealand (ABCANZ). Officers on both sides need to have a clearer understanding of the utility of collaboration.

Proposed Measures: Engagement and Capabilities

The following measures should be explored by defence policy-makers to capitalise on each other's strengths, commonalities and interests in a way that will also enhance their ability to engage with the great powers. There are two broad areas that Canada should focus on: bolstering regional engagement and finding mutual capability enhancements and efficiencies.

There are several ways to bolster Canada's engagement with the Indo-Pacific:

Defence Attaché Presence:

For Association of Southeast Asian Nations (ASEAN) countries and member states of the Pacific Islands Forum (PIF), appearances sometimes matter more than substance; form precedes function. To burnish its credentials regionally and to position itself to make a clear and more compelling contribution, Canada should increase its representational defence presence across Southeast Asia and the Pacific. Increasing the number of attachés, preferably with language training, would help Canada gain greater access to officials and provide a better understanding of local circumstances. This will prove most effective if it is done in consultation with US, Australian and even UK counterparts operating in the region. Deconfliction and complementarity of effort would make such a contribution widely welcomed.

Southeast Asian and Pacific Engagement:

Canada must work hard to gain access to ASEAN-related working groups to demonstrate its genuine commitment to regional engagement. Further collaborative projects with countries like Indonesia, Thailand, Vietnam, the Philippines, PIF states and others, would likely reap considerable benefits for Canada and the region. Such engagement would also make it easier for Australia to partner with Canada, or at least coordinate and maximise the utility of complementary engagement in related regional security activities where great power contestation, looming environmental catastrophe and governance challenges loom large. In considering ways to do this, close examination of Australia's Defence Cooperation Program may be of use. This program has seen scholarships, exercises and development activities funded and supported across southeast Asia and the Pacific since at least 1963. Gaining a network of trusted friends and colleagues takes time and effort to build, but is fundamentally important for Canada's Indo-Pacific strategy to prove more than just words.

Further Engagement with INDO-PACOM:

Like Australia, Canada has chosen to work closely with the US Indo-Pacific Command (INDO-PACOM), collaborating on a range of activities and exercises. But there is scope for an even greater focus on the INDO-PACOM domain for Ottawa policymakers, paralleling its equivalent arrangements in NATO. Hawaii is far closer to Canada than it is to Australia. Canada should further increase its participation in US and Australian-organised military training exercises as well. Here again, close consultation with Australia and other 'like-mindeds', would be useful.

Participation in Regional Multilateral Exercises:

One useful way to boost its regional profile is to increase participation in regional multilateral exercises. Exercise Cobra Gold is a bilateral exercise arranged between the United States and Thailand. It has become more of a multilateral activity in recent years and presents one example of the kind of activity with which Canada could be more involved. Bolstering collaboration on peacekeeping and humanitarian assistance and disaster relief-related components of the exercise would be worth targeting as well. In Southeast Asia, for instance, these kinds of activities involve high-profile events, offering the potential for commensurate reward for the effort involved.

Collaboration with Amphibious Capability Development:

With Australia's amphibious capability maturing, a tri-service Indo-Pacific Endeavour activity has seen Australian regional engagement bolstered, becoming increasingly multinational. This has seen the Australian Defence Force use its amphibious ships as the pivotal platforms for engaging in humanitarian assistance and disaster relief activities as well as a range of other exercises, and collaborative activities in and around the home ports of regional partners. Canada could consider participating more actively alongside, or launching its own Indo-Pacific Endeavour-like activity, preferably coordinated with allies to deconflict and best capitalise on complementary capabilities. A range of activities could be undertaken that would amplify the goals and objectives of Canada's Indo-Pacific strategy.

Similarly, there are a number of ways that Canada could search for mutual capability enhancements and efficiencies:

Shared Education and Training Exchanges:

Additional efficiencies and savings can be made by sharing undergraduate officer education and training. Canadian officer cadets could be invited again to study at the ADF Academy and Australian cadets could be similarly invited to study for a term at the Royal Military College of Canada. This has been tried before, and participants have benefitted considerably from the experience. The alternate hemispheric seasons make coordination difficult but not impossible, and the utility of such an arrangement is greater now than ever. For mid and late-career military courses, such as staff college and defence college, exchanges remain in place, having proven to be beneficial. There's merit in a similar arrangement for career-entry level exchanges as well. That way a cohort of experienced and networked colleagues and partners likely will energise Canada's Indo-Pacific strategy in a range of unforeseen ways.

Developments Relating to the Arctic and Antarctic:

Global climate change is leading to a heightened strategic competition over not just the Arctic but the Antarctic as well. Canada has a wealth of experience in managing its Arctic territorial responsibilities. But the parallels with what's happening in and around Antarctica are uncanny. It is not just about climate change, but governance and great power contestation as well. Canada has a lot of knowledge and experience which it can share with Australia. They should collaborate closely to further develop their ability to operate in and around the Southern Ocean and Arctic waters. Australia could certainly do with the help and gain from the expertise.

Indigenous Exchanges:

Similarly, there are more lessons to be learned in Australia from the Canadian Rangers and its Junior Rangers program. These indigenous units that operate in Canada's far north have strong parallels with Australia's counterpart regional force surveillance units, with many lessons to exchange and learn from. Such exchanges already exist but are patchy and sporadic. They could be expanded significantly.

Enhancing Cyber Security Collaboration & Responding to Foreign Interference:

Canada is a world leader in IT and cyber security, and cyber security challenges have become mainstream. Australia is getting stronger in this domain as well. No longer is the information security responsibility a second-tier corporate function. Across society as well, our societies have become addicted to personal devices – providing us with unimagined convenience, coupled with unprecedented risk and vulnerability to interference, manipulation, and disruption. Canada and Australia are two of the most multicultural countries in the world. As great power contestation heats up, wars proliferate and governance challenges surge, imaginative and carefully thought-through responses are called for to avoid heightened societal divisions and differences that are ripe to be exploited by malevolent state and non-state actors. Canada, like Australia, benefits from its robust cyber security architecture which emerged from their secretive signals intelligence domains. So, they are well placed to work collaboratively to develop cyber defence measures and strategies for countering foreign interference and responding to the threats posed to their vibrant but fragile societies.
To maintain honed forces and cutting-edge capabilities, maximum use will need to be made of simulation, networked IT facilities and online training resources. Australia and Canada should look toward further developing shared online training programs where commonalities exist across the armed services and more. Such shared arrangements can readily build on existing high levels of compatibility.

Enhancing Engagement

Whatever collaborative work is undertaken between Australia and Canada will always pale in comparison with the bilateral undertakings each has with the United States, notwithstanding the domestic political upheavals in that country. To date, Canada and Australia have relied primarily on US-led multilateral arrangements to provide the venue for engagement. But with the United States distracted by its own protracted domestic political manoeuvrings, there appears to be considerable utility in Canada and Australia expanding their own bilateral arrangements. There are also many areas where both Canada and Australia could contribute alongside the US to enhance regional security and stability in a way that could also help bolster Canada-Australia ties. These include three elements: (1) bolstering its collaborations as part of the integrated intelligence, surveillance and reconnaissance network for the western Pacific; (2) enhancing cooperation on undersea warfare; and (3) increased cooperation and interoperability on precision munitions to allow for common stockpiling (experience in the Korean War and the war in Ukraine is instructive on this point).

Major Acquisitions:

There is also scope for closer collaboration on major acquisition projects. With Canada having decided to proceed with the acquisition of the P8 Poseidon, the F-35 Joint Strike Fighter, and developing its own Type 26 derivative warships, let alone ongoing parallel requirement for land combat systems, close collaboration, including personnel and information exchanges, should feature prominently. This applies also to other such future acquisition decisions. There is much to be gained from close and more substantial exchanges. The challenges of one are eerily familiar with the other of these New World Commonwealth federations and are highly likely to benefit from pooling ideas, resources and opportunities.

Nuclear Propulsion Submarines (SSNs): Doing the Un-doable or Must-doable?

Canada is, no doubt, also reflecting on its future submarine options. Countries with enormous coastlines like Australia and Canada have long seen submarines as a key capability for defending national interests. When it comes to the technology itself, it has been well understood that nuclear propulsion submarines provide stealth and endurance. But, like Australia, Canada long faced evidently insurmountable challenges in having such a program endorsed, resourced and brought into service. Canada's consideration of nuclear propulsion submarines goes back to the 1950s and peaked in the mid-1980s, before being shelved. Retired Vice Admiral Mark Norman is quoted as having declared in 2023 that "I don't believe we have the stomach to actually commit to this type of capability."

The Australian precedent is instructive. What once was considered inconceivable has become not only imaginable but endorsed and legislated by the US Congress. Australia is contributing to resourcing the US production line, even though its contribution, technologically, is limited by the absence of a civil nuclear power industry. The precedent also suggests Canada should get serious about its submarine replacement program. It already has a civil nuclear industry, unlike Australia, which has a lot it can potentially share. In fact, Canada has the potential to make a significant contribution to the development and acquisition of nuclear propulsion submarines, alongside allies.

Critics may dismiss this as a non-starter for political reasons, but there is a compelling rationale for SSNs which has not been well articulated so far, to which politicians must pay close attention. The Australian government's message on the rationale for SSNs has been clouded in view of the numerous other challenges associated with the scheme. This appears to have been partly the case to avoid the trap of sounding like the previous government, which was accused of speaking loudly and carrying a small stick.
The government in Canberra has also avoided focusing on how vulnerable the current fleet of diesel-electric propulsion submarines is. That is an understandable protective reaction to an important capability. But there has been a dawning realisation that, no matter how well maintained and updated they are, such submarines are no longer viable. That is not because of something intrinsic with the Collins themselves. Rather, it is because of persistent and almost saturation satellite coverage, coupled with the prevalence of drones and artificial intelligence which has made the wake of the submarine funnels detectable from above. This is a game-changer. Persistent AI-enhanced satellite surveillance (much of it operating from Chinese facilities believed to have been established in the Australian Antarctic Territory) makes conventional submarines too easy to find. When they raise their snorkel to recharge the batteries, the wake is detectable. With stealth, the only real advantage of submarines over surface warships, the utility of submarines sinks quickly. This leaves nuclear propulsion as the only viable path for countries with vast ocean distances to transit even to cover their own EEZs. In Australia, for instance, a transit from any of the capital cities across to the submarine base in Western Australia can not be undertaken without exposure to such detection. In wartime that presents a catastrophic risk which can only be surmounted by remaining underwater for the duration.

Others have suggested avoiding SSNs and simply purchase dozens of conventional subs. But these would be as vulnerable to detection as the existing fleet and it would be devilishly difficult to find sufficient crew to operate them. The two countries have similar requirements and challenges in terms of economies of scale and recruitment. Neither country can afford to go it alone.

Through the tri-nation AUKUS scheme, Australia has plunged into an arrangement with the United Kingdom and the United States. My ANU colleague, Dr Darren Lim, has compellingly argued that the AUKUS nuclear propulsion submarines can be understood in terms of its ability to deter would-be adversaries, reassure neighbours (of Australian capability and resolve), bind allies closer (through trusted collaboration), build momentum towards

defence preparedness, and bolster Australia's international credibility. With respect to primacy versus the maintenance of stable order, Australia is pursuing the middle ground of strong deterrence to maintain the status quo. AUKUS, he says, is the only model that's politically feasible, for domestic politics and international security.

What this means is that things have to change. The benefits of a nuclear submarine fleet are considerable. An Australian submarine fleet would need to defend shipping lanes around the Indo-Pacific. SSNs can travel at much faster speeds (about 20 knots on average) compared to conventional submarines (6.5 knots) and stay on station for significantly longer periods of time. The main constraint is not water or air, but sufficient food for the crew. This means that an Australian fleet of six to eight SSNs would give about three times the effective deployable time that can be achieved from the current fleet of Six Collins Class submarines due to the far faster deployment time, the longer loiter time and the enduring ability to remain undetected, without needing to surface to recharge batteries or suck in fresh air.

Critics suggest Air Independent Propulsion (AIP) is a viable and economical alternative. They are definitely better than conventional diesel-electric submarines, but they still move slowly and eventually still need to surface to recharge. AIP submarines indeed are useful for countries with small maritime zones. Their utility for larger countries like Canada and Australia is questionable.

Others suggest underwater drones are the answer. But drones face significant command and control constraints, thanks largely to the attenuation of signals underwater, making communication with them far more challenging. The CAF, like the ADF, also has strict ethical constraints on drones, requiring a human in the loop. We talk about autonomous air, sea and land vehicles, but we usually are referring to systems that are more accurately described as semi-autonomous. There is an important distinction to be made between fully autonomous drones and semi-autonomous ones with a human in the loop. Over long ranges, drones are not expected to provide robust capability solutions to replace the crewed submarine.

Another ANU colleague, Professor Roger Bradbury, and his colleagues have predicted that the seas will be transparent by 2050, suggesting that investment in submarines is moot. Yet the PLA-Navy continues to build its fleet of submarines at a breakneck pace, as do many other countries that are eager to stay in the game. Besides, the development and emergence of iterative measures and countermeasures would suggest that the progression is not likely to lead to a straight trajectory towards transparency. I wager the efficacy of the submarine will endure.

Perhaps the biggest apparent disincentive to contemplate SSNs is the exorbitant cost. Yet even here it is important to disentangle the rhetoric from the reality. Reports suggest the cost of the AUKUS submarine project over thirty years will amount to AUD$268–$368 billion (CAD$238–327). That is a breathtaking figure. But when compared with the cumulative expenditure expected for health, education, and disability insurance in Australia — a figure of about AUD$9 trillion — the figure appears more reasonable. And it is not an either/or equation. Australia has the resources to continue to fund these important national requirements and still acquire the new submarines. Defence expenditure is estimated at AUD$1.5–$1.65 trillion over the same period. On balance, the cost-benefit analysis is difficult to get right, particularly when the price of freedom is hard to calculate. But to rule it out based on a figure amortised over thirty years is to misread the challenge and the need.

Critics further claim the challenge for which SSNs are expected to be useful is expected to peak in the coming decade, years before the next generation AUKUS SSNs will be built. Yet the interim arrangements, that see US and UK nuclear propulsion submarines as part of a rotational force in Australia, and, increasingly, part of a transition force of SSNs for the Australians, are already starting to have the desired effect. The first Virgina Class submarine visited Australia in the second half of 2023 and that is the start of what is to be the new normal. The deterrent effect is already kicking in.

While expanding that arrangement to include Canada would be fraught, it is not that difficult to contemplate, and there are few viable alternatives for Canada to consider if it is to acquire replacement submarines. For a long time SSNs have been seen as "undo-able" in both Australia and Canada. Australia may have done Canada a favour by making clear the pathway towards SSNs, demonstrating that the 'un-do-able' is in fact 'do-able.' Given the changed technological and other dynamics at play, Canada doesn't have good alternative paths to consider. For continent-spanning nations with massive oceans and EEZs to traverse (like Australia and Canada), diesel electrics no longer are fit for purpose. So, as far as SSNs are concerned, it is not only do-able, it is necessary and becoming increasingly urgent.

Conclusion

If Canada is serious about engaging in Indo-Pacific security, it needs to expand its capability (that is, have more platforms and force elements available) to participate more actively, mindful of the spectrum of challenges encountered — including great-power contestation, looming environmental catastrophe and a spectrum of governance challenges, all accelerated by the fourth industrial revolution. A number of low-cost steps could be taken by Canada to bolster regional security and stability, in turn facilitating increased trade and prosperity.

Cyber security initiatives and countering foreign interference loom large. Canada should boost its military and diplomatic engagement. It should be more serious about developing and maintaining capabilities that may be employed in the region, including surface warships and even nuclear propulsion submarines, working closely with Australia and other regional security partners. With a demonstration of such resolve, considerable benefit may accrue from Australia and Canada working alongside to further shared interests in regional security and stability, maintaining the rules-based order while also encouraging China's continued peaceful rise.

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