

A Framework for Understanding Australian Defence Procurement Outcomes with Japan and South Korea

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A FRAMEWORK FOR UNDERSTANDING AUSTRALIAN DEFENCE PROCUREMENT OUTCOMES WITH JAPAN AND SOUTH KOREA

Abstract

How can we explain the stronger defence procurement relationship between Australia and South Korea, relative to that of the seemingly stronger and more strategic relationship of Australia and Japan? This paper undertakes a bottom-up exploratory analysis of factors beyond state-to-state relationships that influence defence procurement agreements, including transaction costs, politics, defence equipment requirements, and economic considerations. Australia has a stronger defence procurement relationship with South Korea compared to Japan, despite the seemingly stronger strategic ties between Australia and Japan. Australia and Japan have been referred to as indispensable partners in regional affairs since 1995, confirmed by the Joint Declaration on Security Cooperation in 2007 and the elevation of their relationship to a Special Strategic Partnership in 2014. However, Australia and South Korea have become closer partners over the past two decades, culminating in the signing of the Comprehensive Strategic Partnership (CSP) agreement. The framework resulting from this study advances understandings of global defence dynamics, international relations, alliance networks, and potentially development policy.

Keywords: Australia, Japan, South Korea, defence procurement, submarines, self propelled artillery, East Asian security, Indo-Pacific security

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1. Introduction

South Korea and Australia have reinvigorated their relationship following a long period of neglect following the Korean War, awoken only in the face of growing challenges to the rules-based order.¹ Australia and South Korea have come together as close economic partners in the recent two decades, so much so that in a 2017 BBC survey Australia held the most positive view of South Korea in the world.² Relations reached their current apex with the formal signing of the Comprehensive Strategic Partnership agreement.³ Australia and Japan have an extensive history of economic cooperation. They commenced contemporary building of their security closeness in 2007 with the Joint Declaration on Security Cooperation and elevated their relationship in 2014 to a Special Strategic Partnership.⁴ Japan and Australia have described one another as indispensable partners in the region and a quasi-alliance.⁵ Both of these relationships first and foremost commenced with free and open trade, mutual alliances to the United States, and a commitment to liberal democratic norms. Only recently has Australia expanded its relationships with South Korea and Japan into the realm of military hardware procurement.

This paper constructs a framework for understanding procurement agreement outcomes. By identifying the impact of certain factors beyond state-to-state relationships it is possible to understand how defence procurement agreements are influenced. It constructs this

¹ Kotaro Ito, "Developing Relations Between South Korea and Australia: Seoul's Integration Into U.S. Ally Military Network," Sasakawa Peace Foundation, May 18, 2023, accessed April 8, 2024, https://www.spf.org/iina/en/articles/ito_03.html.

² Robin Miller, "Sharp Drop in World Views of US, UK: Global Poll - GlobeScan | Know Your World. Lead the Future.," GlobeScan | Know Your World. Lead the Future., July 4, 2017, accessed March 22, 2023, <https://globescan.com/2017/07/04/sharp-drop-in-world-views-of-us-uk-global-poll/>.

³ Australian Government Department of Foreign Affairs and Trade, "Australia-Republic of Korea Comprehensive Strategic Partnership," December 13, 2021, accessed December 28, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/republic-korea-south-korea/australia-republic-korea-comprehensive-strategic-partnership>.

⁴ Ministry of Foreign Affairs of Japan, "MOFA: Japan-Australia Joint Declaration on Security Cooperation," March 2007, accessed December 28, 2022, <https://www.mofa.go.jp/region/asia-paci/australia/joint0703.html>; PM Transcripts, "Japan-Australia Summit Meeting," April 2014, accessed December 28, 2022, <https://pmtranscripts.pmc.gov.au/release/transcript-23408>.

⁵ Tan Ming Hui, "Japan and Australia Ties Blossom," Lowy Institute, January 2022, accessed January 17, 2023, <https://www.lowyinstitute.org/the-interpreter/japan-australia-ties-blossom>.

framework through two cases: Australia-South Korea and Australia-Japan for self-propelled artillery and submarines respectively. The case studies of each procurement are formed through public reporting, government and business press statements, and think-tank analysis.

Military purchases from Asian suppliers are new to Australia. The purchase of Korean artillery is Australia's largest military procurement from an Asian nation.⁶ Conversely, Japan failed to secure the supplier agreement for Australia's next generation submarines.⁷ To understand this development we must ask: What factors influenced these military hardware procurement outcome differences?

The paper commences with a review of existing (major) literature on military hardware relations as a function of diplomacy. It then turns to a case study on Australia's purchase of South Korean self-propelled artillery, and a case study on Australia's rejection of Japanese Soryu-class submarines. It follows with the framework for analysis, identifying four core factors: political influences, transaction costs, economic considerations, and defence equipment requirements. It concludes with a set of policy recommendations and potential future research areas.

1.1 Military Hardware Procurement as Bilateral Diplomacy

Military procurement as part of bilateral security diplomacy has grown dramatically since 1990. Foremost amongst researchers on weapons cooperation agreements (WCA's) has been Brandon Kinne, who charted the proliferation of these agreements in the post-Cold War period.⁸ His work commenced a discussion on the efficacy of such agreements, the rise in weapons circulation, and importantly the impact of relationships on weapons

⁶ Andrew Greene and Stephen Dzedzic, "Historic Billion-Dollar Defence Contract with South Korea amid Rising Regional Tensions," ABC News, December 14, 2021, accessed January 17, 2023, <https://www.abc.net.au/news/2021-12-13/australia-and-south-korea-billion-dollar-defence-contract/100694638>.

⁷ Paul Colgan and Olivia Chang, "Tony Abbott Wrote Personally to Shinzo Abe after Australia Awarded Its \$50 Billion Submarine Deal to France," Business Insider, April 27, 2016, accessed December 29, 2022, <https://www.businessinsider.com/tony-abbott-wrote-personally-to-shinzo-abe-2016-4?international=true&r=US&IR=T>

⁸ Brandon J Kinne, "Agreeing to Arm: Bilateral Weapons Agreements and the Global Arms Trade," *Journal of Peace Research* 53, no. 3 (March 17, 2016): 359–77, <https://doi.org/10.1177/0022343316630037>.

cooperation.⁹ Kinne's analyses indicated that recognition of existing arms trade activity was at least partially determinant in partner selection.¹⁰ As such, an effective defence export policy with an established history of export will generate more successful future export initiatives. In his 2016 paper, Kinne did not consider defence industry structure or objectives as a determinant of arms trade choice. Instead, he left higher-order dependencies for future research: complex systems consisting of components that mutually affect one another through direct and/or indirect interactions.¹¹ Significant changes in transaction costs, political factors, defence equipment requirements, and economic considerations such as what is occurring between Australia, South Korea, and Japan are each higher-order dependencies.

1.2 Military Hardware Procurement in Australia

Military hardware procurement in Australia has been defined as the acquisition of defence materiel by the Australian Department of Defence (ADD) for the purpose of supporting the Australian Defence Force.¹² This is broadly in line with other states' uses of similar terms subject to jurisdictional differences.¹³ These purchases can range from low-cost, low-value goods and services all the way through to complex defence weaponry and arrangements. Specific military hardware procurement has been the focus of significant literature through case studies.¹⁴

⁹ Kinne, "Agreeing to Arm: Bilateral Weapons Agreements and the Global Arms Trade." 363-367

¹⁰ Kinne, "Agreeing to Arm: Bilateral Weapons Agreements and the Global Arms Trade." 375-376

¹¹ Kinne, "Agreeing to Arm: Bilateral Weapons Agreements and the Global Arms Trade." 376

¹² Bird & Bird and Elizabeth Reid, "Defence & Security Procurement 2020 Edition" (Bird & Bird, January 2020), 4-11, accessed January 17, 2023, <https://www.twobirds.com/-/media/pdfs/brochures/sectors/defence-security/bird--bird-branded-gtdt-defence-security-procurement-2020.pdf>.

¹³ David Fourie, "Ethics and Integrity in the Procurement of Goods and Services for the Military," *Public Integrity* 19, no. 5 (April 3, 2017): 472, <https://doi.org/10.1080/10999922.2016.1276790>; Eren Alper Yilmaz, "Turkish Foreign Policy in a Neorealist model: Bilateral Relations Since 2016," *Middle East Policy* 28, no. 3-4 (September 2021): 145-46, <https://doi.org/10.1111/mepo.12577>.

¹⁴ Herold and Mahoney, "Military Hardware Procurement: Some Comparative Observations on Soviet and American Policy Processes."; National Defense University and Shahnaz Punjani, *The Iron Triangle Manifested: U.S. Air Force Tanker Lease 2001-2005 (Case Study)* (National Defense University, 2015), https://permanent.fdlp.gov/gpo58141/icaf_casestudy-2.pdf; Cheryl Manafe, Yoedhi Swastanto, and Rodon Pedrason, "Indonesia and South Korea

Forward completed a review of the change in personnel procurement as Australia changed from conscription to all-volunteer forces.¹⁵ Fundamentally, he found that the economic argument for all-volunteer forces in Australia was strong. In particular, decreased military spending on conscription would empower higher wages for volunteers, and sufficient military manpower. The Australian Strategic Policy Institute (ASPI) conducted a thorough review of what was then designated Australia's 'Future Submarine' in 2014 and in particular concluded that the key lesson from the earlier Collins-class procurement was that the new design must be correct from the beginning.¹⁶ This was the result of extensive problems in the design of the Collins-class, cost overruns, and capability creep, and contractual agreement flaws. Petrelli undertook a robust investigation into the F-35 program including operational capacity, and modern military integration.¹⁷ He concluded broadly that evolving operational paradigms had significantly altered the prerequisites for adopting the F-35, resulting in a heightened level of necessity and urgency but at reduced exclusivity. Such investigations point to economic factors, transaction costs, and defence equipment requirements without explicitly attributing these as interlocked factors in defence procurement.

Submarines are undoubtedly some of the most advanced military platforms in existence, self-propelled artillery conversely are much simpler. However, the same considerations must factor into the decisions for procurement. Public evaluation of these programs is particularly difficult because they are obscured behind complex government legislation and exemptions to Freedom of Information.¹⁸ Dedicated persons, institutional resources, and insider

Defense Diplomacy: A Case Study of Procurement of Chang Bogo Class Vessels in 2010-2018," *Jurnal Pertahanan* 6, no. 2 (August 11, 2020): 162–73, <https://doi.org/10.33172/jp.v6i2.719>; Alexander Howlett, Andrea Riccardo Migone, and Michael Howlett, "The Politics of Military Procurement: The F-35 Purchasing Process in Canada and Australia Compared," *Defence Studies*, October 20, 2022, 1–21, <https://doi.org/10.1080/14702436.2022.2137494>.

¹⁵ Roy Forward, "Military Manpower Procurement in Australia," *Australian Institute of Policy and Science* 42, no. 4 (January 1, 1970): 55, <https://doi.org/10.2307/20634400>.

¹⁶ Australian Strategic Policy Institute, "The Submarine Choice," *Australian Strategic Policy Institute* (Australian Strategic Policy Institute, September 1, 2014), accessed June 21, 2023, <https://www.jstor.org/stable/resrep04207.5>.

¹⁷ Niccolò Petrelli, "Military Innovation and Defence Acquisition: Lessons from the F-35 Programme," *Istituto Affari Internazionali* 01 (January 2020): 1–20, <https://www.jstor.org/stable/resrep23659>.

¹⁸ Robert C. Herold and Shane E. Mahoney, "Military Hardware Procurement: Some Comparative Observations on Soviet and American Policy Processes," *Comparative Politics* 6,

information is often necessary.¹⁹ All procurement decisions are political. Thus, to understand procurement, a fulsome picture of politics, diplomacy, and practicality is required.

From the literature it is possible to discern that within the realm of defence equipment procurement there is conscientiousness on how and why states choose certain partners. Beyond raw cost-benefit analysis or state-to-state relations, consideration must be afforded to transaction costs, political factors, defence equipment requirements, and economic considerations. These factors culminate in influencing the decisions of political leaders.

2. Cases of Australian Defence Procurement with South Korea and Japan

2.1 Australia's Purchase of South Korean K9 Self-Propelled Artillery

The military relationship between Australia and South Korea has been strengthening, with recent agreements focusing on hardware procurement.²⁰ In December 2021, Australian Prime Minister Scott Morrison and Minister for Defence Industry Melissa Price announced a A\$1 billion defence contract with Hanwha Defence Corporation, a South Korean weapons manufacturer.²¹ The contract included the procurement of 30 AS9 'Huntsman' self-propelled artillery systems, 15 AS10 Armoured Ammunition Resupply vehicles, the construction of a specialist armoured Vehicle Centre of Excellence, and a counter fires radar.²² These vehicles would be built in Australia as part of the LAND 8116 project, initiated in May 2019.²³

no. 4 (July 1974): 571-573, <https://doi.org/10.2307/421338>; Bird & Bird and Reid, "Defence & Security Procurement 2020 Edition." 5-6

¹⁹ Herold and Mahoney, "Military Hardware Procurement: Some Comparative Observations on Soviet and American Policy Processes."

²⁰ Ito, "Developing Relations Between South Korea and Australia: Seoul's Integration Into U.S. Ally Military Network."

²¹ Australian Government Department of Defence, "\$1 Billion Defence Contract, Sovereign Defence Manufacturing Facility in Geelong Announced," Press release, December 13, 2021, <https://www.minister.defence.gov.au/media-releases/2021-12-13/1-billion-defence-contract-sovereign-defence-manufacturing-facility-geelong-announced>.

²² Andrew McLaughlin, "Hanwha Protected Mobile Fires Deal Signed," Australia Defence Business Review, December 13, 2021, accessed December 27, 2022, <https://adbr.com.au/hanwha-protected-mobile-fires-deal-signed/>.

²³ Australian Government Department of Defence, "\$1 Billion Defence Contract, Sovereign Defence Manufacturing Facility in Geelong Announced."

The LAND 8116 project aimed to replace the 105mm and 155mm artillery used by the Australian army in Afghanistan and Iraq.²⁴ The project was a revival of the LAND 17 Phase 2 program, which had been cancelled in 2012 by the Gillard Government.²⁵ The cancelled program consisted of five components, including an electronic control system, self-propelled howitzers, lightweight towed artillery platforms, equipment for reserve unit training, and course-correcting fuzes.²⁶

The cancellation of the self-propelled howitzer procurement left a gap in Australia's land forces capabilities. This was recognised in the 2016 Defence White Paper which instead sought to procure long-range rocket systems.²⁷ By 2020, there was a shift back towards self-propelled artillery, and the Australian government opted for procurement without an open tender process. The decision was made to sign a major defence contract with Hanwha, the largest Australian military procurement from an Asian supplier.

²⁴ Australian Government Department of Defence, "Request for Tender Release for Protected Mobile Fires," Press release, September 3, 2020, <https://www.minister.defence.gov.au/media-releases/2020-09-03/request-tender-release-protected-mobile-fires>.

²⁵ Australian Government Department of Defence, "2020 Defence Strategic Update," *Australian Government Department of Defence* (Australian Government Department of Defence, 2020), accessed December 27, 2022, <https://www.defence.gov.au/about/strategic-planning/2020-defence-strategic-update>; Australian Government Department of Defence, "Defence Portfolio Budget Statements 2011-2012," *Australian Government Department of Defence* (Australian Government Department of Defence, 2011), accessed December 27, 2022, <https://www.defence.gov.au/about/information-disclosures/budgets/budget-2011-12>; Katherine Ziesing, "Weapons: An End to Self-Propelled under Land 17 | ADM July 2012 - Australian Defence Magazine," *Australian Defence Magazine*, July 2012, accessed December 27, 2022, <https://www.australiandefence.com.au/news/weapons-an-end-to-self-propelled-under-land-17-adm-july-2012>; "Self-Propelled Howitzers Back on the Cards - Australian Defence Magazine," *Australian Defence Magazine*, May 14, 2019, accessed December 27, 2022, <https://www.australiandefence.com.au/defence/land/self-propelled-howitzers-back-on-the-cards>.

²⁶ Christopher Jay, "Calibre of Our Artillery Is Raised with Land 17," *Australian Financial Review*, September 18, 2008, accessed December 27, 2022, <https://www.afr.com/companies/manufacturing/calibre-of-our-artillery-is-raised-with-land-17-20080918-j8ykm>.

²⁷ Australian Government Department of Defence, "2016 Defence White Paper," *Australian Government Department of Defence* (Australian Government Department of Defence, 2016), accessed December 27, 2022, <https://www.defence.gov.au/about/strategic-planning/2016-defence-white-paper>, 98.

The change in approach can be attributed, firstly, to the review of the previous Government's, budget-based decision to not acquire self-propelled artillery and, secondly, though to deepening cooperation between Australia and South Korea in defence industry and procurement occurring at the time. Bilateral agreements and meetings between the two countries emphasised defence industry cooperation and policy challenges.²⁸ Significantly, Hanwha's presence in Australia through a subsidiary allowed for a rapid procurement process, which was officially confirmed in December 2021.

The timeline shows that Australia went through a procurement process for artillery pieces between 2012 and 2021. The initial procurement was cancelled for political and fiscal reasons, but it was later revived due to the recognised capability gap. The final procurement decision was driven by political, economic, and diplomatic considerations. The Australian defence industry backed by Hanwha and Ministerial political staff strategically used procurement to achieve their objectives.

2.2 Australia's Rejection of Japanese Soryu-class Submarines

The initial plan to replace Australia's Collins-class submarines, the Future Submarine Program (SEA-1000), was introduced in the 2009 Defence White Paper.²⁹ By 2014, Prime Minister Tony Abbott aimed to procure Japan's Soryu-class submarines.³⁰ However, major problems occurred due to manufacturing concerns in South Australia and political concessions forcing a competitive evaluation process (CEP) in 2015.³¹ By 2016, Australia ultimately turned away from Japan and chose a design from French company Direction des Constructions Navales (now Naval Group).³² The failed agreement with Japan for the Soryu-

²⁸ Australian Government Department of Foreign Affairs and Trade, "Australia-Republic of Korea Comprehensive Strategic Partnership," December 13, 2021, accessed December 28, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/republic-korea-south-korea/australia-republic-korea-comprehensive-strategic-partnership>.

²⁹ Australian Government Department of Defence, "Defence White Paper 2009: Defending Australia in the Asia-Pacific Century: Force 2030" (Australian Government Department of Defence, 2009), accessed December 28, 2022, <https://www.ssri-j.com/MediaReport/Document/AustraliaDefenceWhitePaper2009.pdf>, 70-71.

³⁰ Graeme Dobell, "Tony Abbott and a Japanese Sub," ASPI the Strategist, May 22, 2015, accessed April 8, 2024, <https://www.aspistrategist.org.au/tony-abbott-and-a-japanese-sub/>.

³¹ Graeme Dobell, "The Strange Submarine Saga," *Security Challenges* 16, no. 4 (2020): 117–32, <https://www.jstor.org/stable/10.2307/26976261>.

³² Anna Henderson, "Australian Submarines to Be Built in Adelaide after French Company DCNS Wins \$50b Contract," *ABC News*, May 14, 2019, accessed December 29, 2022,

class submarines was unexpected, as both countries had been initially confident in the suitability of the Japanese offering. This shock would be mirrored again, but with a different international partner, when Australia cancelled the French agreement for nuclear powered submarines in 2021.

The Labor Governments of Rudd and Gillard had initiated preparations for replacing the Collins-class submarines, emphasising the need for significant upgrades beyond the capabilities of the existing submarines. In particular there were growing concerns about the applicability of the Collins-class to future operational needs, and a growing litany of repair issues.³³ Prime Minister Abbott approached Japan's Prime Minister Abe about the Soryu-class submarines, considering them to be the closest alternative available, feasible for necessary modifications, and maintenance possible in Australia.³⁴ The Soryu was the largest diesel-battery powered submarine in the world and had extensive stealth capabilities. The deal progressed rapidly, with strong support from then Abbott-Abe teams. France and Germany also entered the bid, but Japan was the frontrunner.

Despite the advantages of the Japanese bid, including political alignment between Abe and Abbott, diplomatic friendship between Australia and Japan, and technical capabilities, Japan quickly fell behind during the CEP. Japan's delegation was criticised for not actively engaging in substantive discussions and failing to attend arms conferences.³⁵ The replacement of Prime Minister Abbott further complicated the situation. The Japanese team only realised they might not win the CEP after meeting with Minister Christopher Pyne.³⁶ The Japanese bid only regained momentum when Masaki Ishikawa, Assistant Commissioner from the

<https://www.abc.net.au/news/2016-04-26/pm-announces-france-has-won-submarine-contract/7357462>.

³³ Australian Government Department of Defence, "Defence White Paper 2013," *Australian Government Department of Defence* (Australian Government Department of Defence, 2013), accessed December 28, 2022, https://www.defence.gov.au/sites/default/files/2021-08/WP_2013_web.pdf, 82-82.

³⁴ Marcus Hellyer et al., "Submarines: Your Questions Answered: Chapter 3: The Future Submarine" (Australian Strategic Policy Institute, November 4, 2020), accessed December 28, 2022, <https://www.jstor.org/stable/resrep26897.7>, 31-32.

³⁵ Tim Cyril Altmeyer Kelly, "How France Sank Japan's \$40 Billion Australian Submarine Dream," *U.S.*, April 29, 2016, accessed December 28, 2022, <https://www.reuters.com/article/us-australia-submarines-japan-defence-in-idUSKCN0XQ1FC>.

³⁶ Dobell, "The Strange Submarine Saga."

Acquisition, Technology, and Logistics Agency of Japan, took the lead.³⁷ Ishikawa's statements demonstrated an understanding of the Australian political environment and the significance of shipbuilding in South Australia. The Japanese team made efforts to showcase the capabilities of the Soryu-class, including displaying one of the submarines in Sydney, but only after the CEP had officially finished.

In April 2016, Prime Minister Turnbull announced that French company DCNS (Naval Group) had won the contract to construct twelve submarines. The decision caused confusion and disappointment in Japan, prompting former Prime Minister Abbott to send a letter of commiseration to Prime Minister Abe. The reasons for the rejection are complex, and clearly misalignment between Japanese industry and the Japanese and Australian Governments contributed.

3. The Framework for Understanding Australian Defence Procurement Outcomes with Japan and South Korea

To understand the development of Australia’s military procurement outcomes with Japan and South Korea differences in identifiable factors must be present. The case studies demonstrate four core factors: politics, transaction costs, economic considerations, and defence equipment requirements. These factors operate beyond mere state-to-state relationships and weave themselves into a lattice of complex and overlapping decision making. Combined, they form an understanding of why Australia and South Korea could agree on a defence procurement, but Australia and Japan could not.

The framework is most simply visualised as a table with dominant factors on top and subservient factors beneath. These factors do not operate independently though and work together to influence the outcome of procurement agreements.

<p>Australian politics: the interactions of national and local governance to enact a dedicated policy or position for a specific outcome.</p>	<p>Transaction costs: the investment of non-monetary items when buying or selling a good or service, such as time, energy, or ease of business.</p>
<p>Economic/production: the financial and industrial development considerations of an agreement.</p>	<p>Defence equipment requirements: the materiel requirements of the defence portfolio to address gaps and considerations</p>

³⁷ Kelly, “How France Sank Japan’s \$40 Billion Australian Submarine Dream,”;

	within defence policy.
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3.1 Australian Politics

Politics encompasses two broad areas of confluence: local and national political engagement. Local politics are those that reflect all interactions occurring in the political realm beneath the Australian Federal level, such as the necessity for jobs creation in South Australia. National politics are those occurring at the Federal level between Australia, Japan, or South Korea. This includes national diplomacy, and the friendship between Prime Minister Tony Abbott and Prime Minister Abe Shinzo, or the Australia-South Korea CSP. Politics is constantly in flux, reacting to evolving circumstances, human engagement, and external stimuli, it requires consistent management. Undoubtedly, though, the impact of local politics rather than national politics on the procurement process was the most influential aspect on each deal.

3.1.1 South Korea

In 2012, between Australia and South Korea there was only one Memorandum of Understanding (MOU) in operation, the 2009 MOU on Development Cooperation.³⁸ This was very little to encourage an Australian purchase of South Korean material. Reportedly, the cancellation of the earlier acquisition program, Land 17, for self-propelled artillery (SPA) (specifically, howitzers) in 2012 saved the government A\$255 million.³⁹ It is important to consider what changed from 2015 to 2019 for the recognition of a mistake on failing to acquire self-propelled artillery in the Land 17 program. In 2014, Australia and South Korea finalised the ‘Vision statement for a secure, peaceful and prosperous future between the Republic of Korea and Australia.’ This document, unlike the then existing 2012 MOU, contained Item 20: “We will explore opportunities to deepen logistics collaboration and to develop defence science and technology and defence-industry and procurement

³⁸ Australian Government Department of Foreign Affairs and Trade, “Memorandum of Understanding (MOU) on Development Cooperation between Australia and the Republic of Korea 2009,” 2009, accessed December 27, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/memorandum-of-understanding-mou-on-development-cooperation-between-australia-and-the-republic-of-korea>.

³⁹ Ziesing, “Weapons: An End to Self-Propelled under Land 17 | ADM July 2012 - Australian Defence Magazine.”

cooperation”.⁴⁰ In 2015, Australia and South Korea concluded the ‘Blueprint for Defence and Security Cooperation between Australia and the Republic of Korea’ and therein we find a dedicated item for ‘Defence Industry Cooperation’.⁴¹ Then in the December 2019 2+2 meeting statement we see a totemic mention:

Minister Reynolds and Minister Jeong acknowledged the importance of a strong domestic defence industrial base and decided to explore opportunities to cooperate on mutual policy challenges to our defence industries.⁴²

Samsung Techwin, the winner of the Land 17 program, was acquired by Hanwha Corporation in 2014 making it a leading defence industry provider of South Korea.⁴³ In 2019, Hanwha established Hanwha Defence Australia in Victoria, Australia.⁴⁴ By having an Australian subsidiary with access to Australian manufacturing and employment, Hanwha no longer needed Raytheon Australia for defence contracts as Samsung did in 2012.⁴⁵ This was critical

⁴⁰ Australian Government Department of Foreign Affairs and Trade, “Vision Statement for a Secure, Peaceful and Prosperous Future between the Republic of Korea and Australia 2014,” 2014, accessed December 27, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/vision-statement-for-a-secure-peaceful-and-prosperous-future-between-the-republic-of-korea-and-australia>.

⁴¹ Australian Government Department of Foreign Affairs and Trade, “Blueprint for Defence and Security Cooperation between Australia and the Republic of Korea 2015,” 2015, accessed December 27, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/blueprint-for-defence-and-security-cooperation-between-australia-and-the-republic-of-korea>.

⁴² Australian Government Department of Foreign Affairs and Trade, “Joint Statement: Australia-Republic of Korea Foreign and Defence Ministers’ 2+2 Meeting 2019,” Australian Government Department of Defence, 2018, accessed December 27, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/joint-statement-republic-of-korea-australia-foreign-and-defence-ministers-2-2-meeting-2019>.

⁴³ “Hanwha Group to Acquire Samsung Techwin and Samsung General Chemicals,” *Hanwha.Com*, November 26, 2014, accessed December 27, 2022, https://www.hanwha.com/en/news_and_media/press_release/hanwha_group_to_acquire_samsung_techwin_and_samsung_general_chemicals.html.

⁴⁴ Hanwha Defence Australia, “Hanwha Defense Australia,” 2021, accessed December 27, 2022, <https://www.hanwhadefense-intl.com/Australia/main>

⁴⁵ Katherine Ziesing, “Australia: Self-Propelled Howitzers Possibly Reconsidered for Land 17 Phase 2 Programme,” *Analysis Focus Army Defence Military Industry Army*, May 21, 2019, accessed December 27, 2022, https://www.armyrecognition.com/analysis_focus_army_defence_military_industry_army/australia_self-propelled_howitzers_possibly_reconsidered_for_land_17_phase_2_programme.html.

to the LAND 8116 project as it unequivocally supported and encouraged further manufacturing jobs. These developments supported the growing political alignment for a procurement agreement between the countries.

It is then apparent how and why a non-competitive process was chosen when the need for self-propelled artillery was identified. Victoria represents the second largest supplier of defence related investment and jobs of any state in Australia.⁴⁶ Victoria defence and related industries provide over 25,000 jobs.⁴⁷ Hanwha Defence Australia's selection as the leading provider of LAND 8116 was in large part because the Armoured Vehicle Centre of Excellence in Avalon, Victoria includes the provision for some 300 additional Australian jobs.⁴⁸ It was also factored as a streamlining and site co-sharing location for additional defence providers to join Hanwha's global value chain. Manifestly, the allure for local politics was catered for in this decision. Thus, there was alignment between national level agreements and local interests to agree to the South Korean procurement agreement.

In September 2020, the Request for Tender for Australia's SPA was released first to Hanwha. In September 2021, this procurement agreement was then indirectly affirmed in the 2+2 Ministerial Joint Statement whereby the defence ministers confirmed the progress made on industry and material cooperation.⁴⁹ The procurement order was officially confirmed and signed in December 2021, forming a key deliverable alongside the signing of the new Australia-Republic of Korea Comprehensive Strategic Partnership.⁵⁰ Australia was thus set to

⁴⁶ "Defence Industry Added \$8.9 Billion to Australia's Economy," *Australian Bureau of Statistics*, September 30, 2022, accessed May 17, 2023, <https://www.abs.gov.au/media-centre/media-releases/defence-industry-added-89-billion-australias-economy>.

⁴⁷ Victoria State Government, "Victoria State Government: Defence Excellence," Defence Excellence, October 3, 2022, accessed May 17, 2023, <https://defence.vic.gov.au/about/sector-overview>.

⁴⁸ Australian Government Global Australia, "Hanwha Defense Starts Construction on New Armoured Vehicle Centre of Excellence in Victoria," *Global Australia*, April 8, 2022, accessed May 17, 2023, <https://www.globalaustralia.gov.au/news-and-resources/news-items/hanwha-defense-starts-construction-new-armoured-vehicle-centre-excellence-victoria>.

⁴⁹ Australian Government Department of Foreign Affairs and Trade, "Joint Statement: Australia-Republic of Korea Foreign and Defence Ministers' 2+2 Meeting 2021," September 2021, accessed December 28, 2022, <https://www.dfat.gov.au/geo/republic-of-korea/republic-korea-south-korea/joint-statement-australia-republic-korea-foreign-and-defence-ministers-22-meeting-2021>.

⁵⁰ Australian Government Department of Foreign Affairs and Trade, "Australia-Republic of Korea Comprehensive Strategic Partnership," December 13, 2021, accessed December 28,

purchase 30 AS9 'Huntsman' self-propelled artillery platforms and 15 AS10 Armoured Ammunition Resupply vehicles, and open a centre for further land based vehicle excellence.

South Korea harnessed the deal as part of new agreement announcements. The SPA and Centre of Excellence become part of new deeper relations; they are part of the tangible product of the CSP. The CSP in turn was built on the back of several agreements which included dedicated defence materiel as listed in the case study for South Korea.

3.1.2 Japan

Australian local politics in procurement agreements is characterised by the need to provide Australian jobs and develop local economies. Within South Australia, the defence industry represents 4 percent of the economy, nearly fifteen thousand jobs, and 6.4 percent of the state's exports.⁵¹ The Australian Submarine Corporation and the Osborne Naval Shipyard (ONS) are critical to this industry. Tony Abbott and Abe Shinzo's near agreement to buy Japanese Soryu was complicated by South Australian politicians fearing for the role of South Australian shipbuilding. It was these politicians who demanded a CEP process when Abbott's Prime Ministership was under threaten. Later, when Abbott was replaced entirely and Abe lost his direct connection to Australian national level politics, there was no attempt to sway new Prime Minister Turnbull.

Even if Abe had achieved the same level of friendship with Turnbull, the competitive process was already underway. The manifest failure, or refusal, of Japan to categorically assure South Australia that Soryu-class submarines would be built there, initially crippled the deal and then plagued the CEP bid. It is possible that the Japanese bid estimates for A\$20 billion was predicated on not building the Soryu-class in South Australia and that deviation from that would have increased the costs. Additionally, there was no change in the plans until the end of the CEP process when the new bid manager assured the process that some of the construction would take place in South Australia. This, however, was too little and too late in the CEP.

2022, <https://www.dfat.gov.au/geo/republic-of-korea/republic-korea-south-korea/australia-republic-korea-comprehensive-strategic-partnership>.

⁵¹ Rory McClaren and Jacob Kagi, "What Will next Week's AUKUS Talks Mean for South Australia's Shipbuilding Industry?," *ABC News*, March 10, 2023, accessed May 17, 2023, <https://www.abc.net.au/news/2023-03-11/aukus-defence-talks-explainer/102079030>.

The result of the Future Submarine CEP came in April 2016. Prime Minister Turnbull announced in Adelaide that Naval Group had been awarded the contract and would construct twelve submarines.⁵² Naturally, Japan wanted answers, and ousted Prime Minister Abbott wrote a personal letter of commiseration to Prime Minister Abe.⁵³ Had Mitsubishi and Kawasaki recognised the importance of South Australian ship building, perhaps the bid would have been different. While the personal friendship between Tony Abbott and Abe Shinzo was strong, agreements for the sale of billions of dollars of military hardware go beyond the personal. It was imperative that Japan sought to include a broader series of political stakeholders to ensure that the Australian national architecture was on board.

Politics must be considered in procurement agreement outcomes. National level politics are particularly important and awareness of the timing for large scale military procurement agreements is influenced by their attachment to national priorities. As such, in order to bolster agreement longevity and insulate from mid-agreement changes or cancellation, tying agreements to national outcomes appears ideal. Failure to account for localised political needs resulted in a critical deal breaker: Japan failed to ensure jobs in South Australia. South Korea however managed consideration for local jobs, and local economics greatly bolstered their success.

3.2 Australian Transaction Costs

Transaction costs represent the process by which a sale is acquired. Unlike production costs exclusively, decision-makers assess both transaction costs and production costs to formulate strategies for individual transactions.⁵⁴ Transaction costs encompass various expenses involved in a transaction, such as planning, decision-making, adapting plans, resolving conflicts, and post-sales activities.⁵⁵ This is particularly important for defence procurement because discrete factors such as defence export policy, government-industry alignment, and

⁵² Anna Henderson, "Australian Submarines to Be Built in Adelaide after French Company DCNS Wins \$50b Contract," *ABC News*, May 14, 2019, accessed December 29, 2022, <https://www.abc.net.au/news/2016-04-26/pm-announces-france-has-won-submarine-contract/7357462>.

⁵³ Paul Colgan and Olivia Chang, "Tony Abbott Wrote Personally to Shinzo Abe after Australia Awarded Its \$50 Billion Submarine Deal to France," *Business Insider*, April 27, 2016, accessed December 29, 2022, <https://www.businessinsider.com/tony-abbott-wrote-personally-to-shinzo-abe-2016-4?international=true&r=US&IR=T>.

⁵⁴ Suzanne Young, "Transaction Cost Economics," in *Springer EBooks*, 2013, 2547–52, https://doi.org/10.1007/978-3-642-28036-8_221.

⁵⁵ Young, "Transaction Cost Economics."

unit design are all interwoven together. Consequently, transaction costs play a pivotal role in procurement outcomes as one of the most influential factors.

A modern arms export policy is necessary for defence procurement. South Korea has a history of export policy involving both chemicals and industrial hardware. It has learned the lessons of the past and has begun to streamline its defence policies in pursuit of global arms export excellence. The Japanese policy at the time was under-developed. The mechanisms reducing transaction costs cannot be understated in each situation.

3.2.1 South Korea

South Korea has operated a mature defence export industry for nearly twenty years. The process has been highly successful and seen South Korea rise in the world's largest arms export industries from 31st in 2000 to 8th in 2021.⁵⁶ In the contemporary context, most relevant to the Hanwha agreement with Australia was the 2018 policy 'Defence Reform 2.0'. This policy implemented a process to expand the export market by lowering barriers for arms exports, thus making them more attractive to foreign purchasers.⁵⁷ Save for licensing through the Korea Strategic Trade Institute, there are limited prohibitions on arms export to friendly nations. The ability to pivot the K9 into the Australian variant AS9 "Aussie Thunder" in 2010 and then the AS9 "Huntsman" in 2021, reflects South Korean manufacturers' ability to respond to transaction costs. South Korea was making a hard push for arms exports and Australia was clearly part of the industry growth.

South Korea has some experience in Australian CEP as the successful tender for LAND 8116 was built on the cancelled LAND 17 program. Hanwha clearly harnessed that previous competitive process experience to present a comprehensive and dedicated offer for the renewed program. Companies such as Hanwha Defense, Korea Aerospace Industries and Hyundai Rotem are highly proficient at engaging international buyers and competitive processes. They are familiar with export laws, what material can be constructed in foreign

⁵⁶ Gabriel Dominguez, "South Korea Emerges as Major Defense Industry Player," *The Japan Times*, September 29, 2022, accessed May 17, 2023, <https://www.japantimes.co.jp/news/2022/09/28/asia-pacific/south-korea-defense-industry-thriving/>.

⁵⁷ Felix Chang, "The Rise of South Korea's Defense Industry and Its Impact on South Korean Foreign Relations," *Geopoliticus* (Foreign Policy Research Institute, April 2019), accessed March 9, 2023, <https://www.fpri.org/article/2019/04/the-rise-of-south-koreas-defense-industry-and-its-impact-on-south-korean-foreign-relations/>

countries, and what must be built inside South Korea. It is an industry that is engaged with the South Korean Ministry of Foreign Affairs and Ministry of Trade, Industry and Energy. This is an important transaction cost lubricant, as Australian Defence was confident in the tender.

Export policy is, as Kinne's work suggests, only half the equation for transaction costs; prior purchases are of critical importance. South Korea benefited from prior CEP achievement, in line with Kinne's research, as Australia had already made it evident they wanted to and were prepared to make purchases. This was enhanced as Australia made modification requests to the Land-17 design to which Hanwha was capable of responding. This ability to pivot was based on design changes that had taken place since 2014 to the K9, in particular, for Norway.⁵⁸ In combination, the ability to pivot to an upgraded model of an existing design, and the completion of an earlier CEP are clear demonstrations that South Korea benefited from reduced transaction costs with Australia.

3.2.2 Japan

Japan is not a pacifist nation, it was however, until relatively recently, isolationist, and this is demonstrated in its significant arms industry servicing its own domestic needs. Mitsubishi Heavy Industries is the industry titan, and in 2021, ranked 35th in the top 100 arms-producing companies in the world.⁵⁹ It is followed by Kawasaki Heavy Industries at 50th, and Fujitsu at 77th. Because of a domestic focus, transaction cost issues become clear. The export policy of Japan was not conducive to their international engagement: it was restricted to internal development and research or exclusively technology to the United States.⁶⁰ The delegation for the Japanese submarine deal comprised Mitsubishi Heavy Industries, Kawasaki Heavy Industry, and several Japanese Government Ministries, represented at senior official levels. The existing export policy caused issues for the Soryu-class delegation, and an inability to know how to engage with the CEP and the Australian government. Alternatively, public reporting, insider knowledge, and private discussions indicate that

⁵⁸ Soyeon Gil, "한화 '호주 자주포 사업'에 프랑스 사프란 가세 (French Saffron Added to Hanwha's 'Australian Self-Propelled Artillery Project')," *더구루 (the Guru)*, October 5, 2022, accessed June 21, 2023, <https://www.theguru.co.kr/news/article.html?no=43116>;

⁵⁹ Lucie Béraud-Sudreau et al., "The SIPRI Top 100 Arms Producing and Military Services Companies, 2021," *Stockholm International Peace Research Institute* (Stockholm International Peace Research Institute, December 2022), accessed May 17, 2023, https://www.sipri.org/sites/default/files/2022-12/fs_2212_top_100_2021.pdf.

⁶⁰ There is contention that Japanese companies produced the chemicals necessary for napalm and exported this to the United States, there was highly limited transfer of 1950's aircraft to Taiwan.

elements of the delegation simply did not want to sell the Soryu-class to Australia, an active opponent to the Japanese Government.⁶¹

The changes in Japanese arms export policy have been rapid in the past ten years following nearly four decades of manifest stagnation and isolation. From 1967 to 2014 Japan employed the ‘Three Principles on Arms Exports’ policy. It was a closed-door approach: arms exports were banned. The primary point of contention was the policy’s third principle whereby any nation that was likely to be involved in international conflict was prohibited from receiving Japanese arms.⁶² In 2014, Prime Minister Abe Shinzo changed this policy to the ‘Three Principles on Transfer of Defense Equipment and Technology’. There is no doubt that the Japanese government was serious about the potential Australian submarine deal.⁶³ This policy listed three tiers of exportability: prohibited transfers, limited transfer with strict examinations, and appropriately controlled transfer to third parties.⁶⁴ However, the change had limited lead-in time and Mitsubishi Heavy and Kawasaki Industries had very limited international competition experience. Equally so, Australia had no knowledge of what the policy actually allowed, nor any experience in aligning Australian needs with permitted exports. Australia was reliant on Japan providing clear exportability of the Soryu-class, and the willingness, and desirability, of Japanese industry to engage with attaining permits.

By late 2014, Australian Ambassador to Japan, Bruce Miller, believed the deal was going ahead, and Prime Minister Abe was reportedly highly enthused.⁶⁵ Abbott was conducting an extremely fast internal process on Australia’s largest military procurement ever and in a tremendously politicised issue, particularly for South Australia. In February 2015, the Prime

⁶¹ Matthew Carney, “Soryu Submarine Deal: Japanese Insiders Warn Sub Program Will Cost More, Hurt Australian Jobs,” *ABC News*, September 15, 2014, accessed April 8, 2024, <https://www.abc.net.au/news/2014-09-15/japanese-concerns-over-submarine-deal/5743022>.

⁶² The first pillar being prohibition on communist countries receiving arms, and the second pillar being those under UN arms export embargo.

⁶³ Mina Pollmann, “The Trouble With Japan’s Defense Exports,” *The Diplomat*, October 2, 2015, accessed December 28, 2022, <https://thediplomat.com/2015/10/the-truth-about-japans-defense-exports/>.

⁶⁴ “The Three Principles on Transfer of Defense Equipment and Technology,” Ministry of Foreign Affairs of Japan, 2014, accessed December 28, 2022, https://www.mofa.go.jp/fp/nsp/page1we_000083.html.

⁶⁵ Dodd, “Australia’s Next Submarine: Did We Get It Right?”

Minister was forced into political concessions and a CEP for the submarine program.⁶⁶ It would be overreach to say that the submarine talks between Australia and Japan caused the shift in policy, but a \$A20-50 billion deal is big business: it was to be Australia's single largest military procurement ever. Australia was prepared to engage with this new policy; however, the lack of engagement with Australian local politics by the Japanese delegation raised critical concerns about the high transaction costs.

The process is all important and by all accounts the Japanese bid was slow. The Japanese delegation was composed primarily of Mitsubishi Heavy Industries, Kawasaki Heavy Industries, and the Japanese Government. The first major event of the CEP was a conference on Future Submarine in March 2015. The Japanese delegation did not attend at all.⁶⁷ The follow up event was in August 2015, and Australian companies complained that Japan was not prepared to discuss substantive deals.⁶⁸ By late August, Australian Ministers were noting that Japan was falling behind despite the excellence of their submarine.⁶⁹ In September 2015, Tony Abbott was replaced and the leading champion for the Soryu inside the Australian Government was sent to the backbench. After the replacement of Tony Abbott, South Australian Senator and then Minister for Industry, Innovation and Science Christopher Pyne met with the Japanese delegation and stated of his meeting "...only after this meeting did the Japanese bidders believe they might not win [the CEP]."⁷⁰ Senator Pyne would go on in 2016 to be installed as the first Minister for Defence Industry.

Japan found its feet when Masaki Ishikawa, Assistant Commissioner for the Acquisition, Technology, and Logistics Agency of Japan, stepped in to lead the bid.⁷¹ At the October 2015 Pacific International Maritime Expo, Ishikawa was so confident that the Future Submarine

⁶⁶ Graeme Dobell, "The Strange Submarine Saga," *Security Challenges* 16, no. 4 (2020): 117–32, <https://www.jstor.org/stable/10.2307/26976261>.

⁶⁷ Tim Cyril Altmeyer Kelly, "How France Sank Japan's \$40 Billion Australian Submarine Dream," *U.S.*, April 29, 2016, accessed December 28, 2022, <https://www.reuters.com/article/us-australia-submarines-japan-defence-in-idUSKCN0XQ1FC>.

⁶⁸ *Ibid.*

⁶⁹ Mina Pollmann, "Interview: Australian Senator Nick Xenophon," *The Diplomat*, September 7, 2015, accessed December 28, 2022, <https://thediplomat.com/2015/09/interview-australian-senator-nick-xenophon/>.

⁷⁰ Dobell, "The Strange Submarine Saga."

⁷¹ Kelly, "How France Sank Japan's \$40 Billion Australian Submarine Dream,";

could be built in Australia he went on the public record.⁷² This is the first sign that the Japanese bidders really understood the Australian environment, and that ship building in South Australia was a vital political consideration for success. There were also assurances provided by Ishikawa that it was the intent that stealth features, improved batteries, new technology, and other capabilities of the Soryu-class would be made available.⁷³ The team additionally made sure to mention non-submarine potential developments including a battery plant, an MHI branch, and, in a truly last minute effort in March 2016, sent one of the Soryu-class to Sydney.⁷⁴ Noting that the Japanese Soryu was the only submarine capable of being displayed in this way, it is illuminating that the Japanese bid did not do this sooner. Clearly despite their large business size, Kawasaki and Mitsubishi had limited interest or capability in selling the submarine before the Japanese government took control.

It thus becomes possible how a business environment leads to increasing or reducing transaction costs, and factors into influencing procurement. Without a business environment that is conditioned for exports and prepared to engage the broader government architecture, it becomes very difficult to secure international procurement agreements. South Korea has been on a developmental process that necessitated a conducive business environment. Conversely, Japan developed an isolationist defence industry policy. Evidently two countries with not dissimilar security threats, economic development needs, and industrial capacities responded to export opportunities differently because of domestic approaches and failure to properly build transaction costs into policy, business acumen, and government diplomacy.

3.3 Australian Economic Considerations

Economic considerations play a crucial role in all military procurement decisions, as governments seek to balance their defence policy needs with fiscal policy. Cost-effectiveness and affordability in military acquisitions are significant decision factors. In turn aligning

⁷² Matt Siegel, "Japan Says Can Build Subs in Australia 'from Day One,'" *Reuters*, October 6, 2015, accessed December 28, 2022, <https://www.reuters.com/article/australia-japan-defence/japan-says-can-build-subs-in-australia-from-day-one-idUKL3N12611S20151006>

⁷³ Franz-Stefan Gady, "Japan to Offer Australia Its Top-Secret Submarine Technology," *The Diplomat*, October 7, 2015, accessed December 29, 2022, <https://thediplomat.com/2015/10/japan-to-offer-australia-its-top-secret-submarine-technology/>.

⁷⁴ Kelly, "How France Sank Japan's \$40 Billion Australian Submarine Dream."

complex cost-benefit analysis and cost controls to strategic objectives is likely to strengthen defence business cases.

South Korea manufactured the K-9 as an inexpensive option (comparatively) including in its variant forms. Japanese firms, despite significant expertise in manufacturing their submarines, did not address Australia's budget considerations on ex-post and ex-ante costs. There is an element of the unknown here, and the costs that come with any procurement of military hardware include not only the purchase amount but future upkeep, maintenance, and repair. The headline figure is not the only cost and any estimation on price must allow for reasonable flexibility.

A military has operational capacity to stretch or constrict a budget as required in line with political objectives and transaction service. Planning and flexibility regarding political and cost factors, apparent in the Korea-Australia deal but not in the Japan-Australia deal, can ensure that political objectives and military equipment needs are not unnecessarily defeated by cost consideration.

3.3.1 South Korea

Australia and South Korea had been in a bilateral trade expansion program since the 2012 MOU and were progressing towards the 2021 Comprehensive Economic Partnership. This was a deliberate and concerted effort on both sides to expand the breadth of Australia-South Korea trade relations. The 2012 Land-17 cancellation was a setback, delaying economic opportunities, and alignment for both countries; it was not though a critical failure. From the Australian perspective, it became imperative after the cancellation to find a cost-effective solution to the capability gap. South Korea pursued alternative avenues of economic recourse for their defence exports program. Australia could find no such alternative, but South Korea found a global market high in demand for their defence arms. Australia's pivot back was both an economic and political choice. Australia aligned with South Korean endeavours for economic expansion of their industry and expanded bilateral trade beyond traditional goods.

The pivot back to South Korea and Hanwha in 2019 was enhanced through Hanwha Defence Australia, and the ex-post and ex-ante costs were known quantities. In the interim years between 2012 and 2019, South Korea had gained immense experience exporting their K-9 artillery. Enhancing this choice was that the variant from the 2012 decision could be modified at a known cost, reducing across the board up-front, ex-post, and ex-ante costs. By

manufacturing in Australia, the costs of delivery were also mitigated as less shipping was required. Economically the process was highly streamlined.

The Comprehensive and Strategic Partnership between Australia and South Korea represents one of Prime Minister Scott Morrison's most important bilateral deals. It provided a robust platform on which the bilateral partners intended to progress their relationship in a changing environment. The three pillars: strategic and security; economic, innovation and technology; and people-to-people exchange, each underpin and enhance the economic positions of both countries. The A\$1 billion purchase of initial hardware and facilities supercharged these deeper relations.

3.3.2 Japan

In 2015, when Abbott and Abe commenced their discussions on the Soryu deal, there was no other "off-the-shelf" submarine in the world that suited Australia's needs. The exact cost proposed during these initial discussions is unknown, but if it was commensurate with the costs announced during the CEP, it is understandable why it was attractive. Japan and Australia were so confident in this agreement that Japan was prepared to produce the first two of twelve Soryu-class submarines for Australia by 2016, and another one each year thereafter, at a cost of between A\$20-50 billion.⁷⁵ However, the eventual French program chosen was longer in delivery timeframe, more expensive, and untested in the real world, with a minimum cost of A\$50 billion. Neither price tag included ex-post repair and maintenance, or ex-ante design challenges that were yet to be overcome. By the time the Naval contract was cancelled, the projected forward costs had already reached A\$90 billion. It is highly unlikely that the Japanese option would have reached these costs because it was already a designed submarine, with known repair procedures and components. It is evident that cost alone was subservient to other factors at that time.

Japan was aware of the economic considerations of Australia and provided a highly competitive lower estimate than the CEP competitors. However, Japan could not or would not commit to significant construction in Australia and thus ex-post and ex-ante costs may have increased significantly. Evidence from the Naval Group victory suggests that Australia was cognisant of significant ex-post and ex-ante cost potential and was attempting to mitigate either.

⁷⁵ Ibid.

Regarding the economics of trade and the government's economic position, Japan had never sought to utilise military hardware to expand relationships. Furthermore, Australia and Japan were already deeply engaged in their economic trade relationship.⁷⁶ There was little utility or interest in pushing for purchases of submarines to deepen the trade relationship. From the demand-side nation economic considerations must operate as secondary to politics and transaction costs, as the Soryu price was not strong enough to overcome political misfortune to Tony Abbot, and/or a Japanese delegation at odds with government policy.

3.4 Australian Defence Equipment Requirements

Defence procurements obviously must consider the evolving nature of warfare, security, and defence equipment requirements. Australian defence needs are changing due to geostrategic and geopolitical factors. Most pressing was a potential capability gap for land-based forces resulting from cancelled artillery options and the need for an immediate replacement for the ageing Collins-class submarine. It is evident that both Australia and the supplying nations were striving to address these needs, and both had the potential to fulfil these requirements effectively. However, needs fulfilment alone was not enough and defence equipment requirements interact at a lower level than politics and transaction costs.

3.4.1 South Korea

The cancelled LAND 17 program was specifically designed in response to Australian army operations in Afghanistan and Iraq. It sought to replace the 105mm and 155mm artillery via a five components package: an electronic control system, self-propelled howitzers, 155mm towed artillery, equipment for reserve unit training, and course-correcting fuses.⁷⁷

LAND 17's howitzers were the most expensive component, and it was under contest by two bidding bodies; a US-Korean joint bid by Raytheon & Samsung Techwin, in opposition to a

⁷⁶ Japan was Australia's third-largest trade partner behind China and the United States.

⁷⁷ Christopher Jay, "Calibre of Our Artillery Is Raised with Land 17," *Australian Financial Review*, September 18, 2008, accessed December 27, 2022, <https://www.afr.com/companies/manufacturing/calibre-of-our-artillery-is-raised-with-land-17-20080918-j8ykm>.

German bid from Krauss-Maffei Wegmann.⁷⁸ Raytheon and Samsung Techwin were largely considered the front-runners with an offer to provide AS-9 'Aussie Thunder' systems.⁷⁹

Reporting is conflicting, but by some accounts Raytheon and Samsung had been awarded the bid and were awaiting the completion of a second pass review.⁸⁰ While certain parts of the LAND 17 program were completed, the howitzers were delayed in early 2012 and then eventually cancelled the same year, disappearing from budget estimates and being replaced by additional towed 155mm artillery systems.⁸¹ It is arguable that defence equipment requirements were fluid and subject to change as the security environment, elections, and fiscal policy generated evolution in government defence policy.

In the Australian Defence Magazine, a Raytheon spokesperson is quoted as saying about the cancellation:⁸²

The Government's announcement not to proceed with the acquisition of self-propelled artillery ... has denied the Australian Army an important new heavy artillery capability which would have offered an unprecedented level of protection for Australian forces.

⁷⁸ Ibid.

⁷⁹ "Aussie Thunder' Will Deliver \$234 Million Boon for Australian Industry," *Raytheon Australia - News Release Archive*, November 3, 2008, accessed December 27, 2022, <https://raytheon.au.mediaroom.com/news-release-archive?item=53>.

⁸⁰ Ziesing, "Weapons: An End to Self-Propelled under Land 17 | ADM July 2012 - Australian Defence Magazine;" "Self-Propelled Howitzers Back on the Cards - Australian Defence Magazine."

⁸¹ Australian Parliament House, "Project Delays from 2009 to 2013 - Reasons for Delays : Senate Estimates Submission," *Australian Parliament House*, June 2, 2015, accessed December 27, 2022, https://www.aph.gov.au/~media/Committees/fact_ctte/estimates/bud_1516/abled_documents/002_Project_Delays.pdf; Australian Parliament House, "Minister for Defence and Minister for Defence Materiel – Joint Media Release – 19 New Howitzer Guns for the Army," Press release, October 2012, https://parlinfo.aph.gov.au/parlInfo/download/media/pressrel/2326644/upload_binary/2326644.pdf; Australian Government Department of Defence, "Defence Portfolio Additional Estimates Statements 2014-15," *The Australian Government Department of Defence* (Australian Government Department of Defence, 2011), accessed December 27, 2022, <https://www.defence.gov.au/about/information-disclosures/budgets/budget-2014-15>.

⁸² Ziesing, "Weapons: An End to Self-Propelled under Land 17 | ADM July 2012 - Australian Defence Magazine."

The capability gap in Australian land forces was officially recognised in the 2016 Defence White Paper. The government formally announced intended procurement of long-range rocket systems to support existing artillery capability.⁸³ This meant that by 2015-2016, the Abbott and Turnbull Governments had decided that the previous governments had made a mistake. Turnbull looked to support the existing towed artillery capability but by the time of the 2020 Defence Strategic Update under the Morrison Government, SPA was back on the Defence agenda.⁸⁴ With this change, the Australian government had taken over five years to reverse course back toward a program that had been cancelled seven years prior.

As demonstrated in successive Defence papers, alternating Australian governments recognised an artillery capability gap. The decision to choose South Korea's Australian variant for the K9 SPA was largely influenced by the fact that it could be upgraded from existing plans to meet modern standards; and address Australia's imminent capability gap and lessons learned from the Iraq War. The K9 SPA option was a high-quality international choice already employed by several countries, clearly capable of fulfilling Australia's land-based operational objectives.

The agreement with South Korea offers a demonstration of satisfying identified defence equipment requirements and setting the standard for future procurement. LAND 8116, comprises 30 Huntsmen vehicles and 15 resupply vehicles and the Centre for Excellence establishes a future proofing mechanism. This establishes future land vehicles as favourable if they are part of this architecture, and the Centre can respond to evolving land-based needs of Australian Defence. Korea in this mechanism establishes a pipeline of conformity to Australian needs, indeed by designing the pipeline themselves.

⁸³ Australian Government Department of Defence, "2016 Defence White Paper," *Australian Government Department of Defence* (Australian Government Department of Defence, 2016), accessed December 27, 2022, <https://www.defence.gov.au/about/strategic-planning/2016-defence-white-paper>, 98.

⁸⁴ Australian Government Department of Defence, "2020 Defence Strategic Update," *Australian Government Department of Defence* (Australian Government Department of Defence, 2020), accessed December 27, 2022, <https://www.defence.gov.au/about/strategic-planning/2020-defence-strategic-update>.

3.4.2 Japan

The Collins-class submarine, built in 1990 and commissioned in 1996, was approaching its 30-year service lifespan and required an urgent replacement. Concerns were raised by both the Defence sector and public reports of the viability and maintenance issues of the Collins. Despite initial hesitations from the Japanese industry, broadly Australia, but particularly the Department of Defence believed that the Soryu-class submarines were capable of meeting its requirements for stealth, operational range, and overall capabilities.

The 2009 Defence White Paper describes the Future Submarine program in depth.⁸⁵ It was to have enhanced capabilities including an extended range, increased endurance during patrols, expanded functionality, and was to be built in South Australia. In particular, it refers to the major design and construction program necessary because of the significant capability upgrades required beyond the Collins. In the 2013 Defence White Paper, the Future Submarine program was recommitted to. This included the assembly in South Australia, with buying off-the-shelf or nuclear submarines ruled out in favour of an 'evolved-Collins' option.⁸⁶

By September 2013, there was no process in place for Future Submarine and no significant program underway to select a replacement. According to Marcus Hellyer of ASPI, Abbott was acutely concerned about the potential for a capability gap and approached his friend Prime Minister Abe Shinzo about the Soryu-class.⁸⁷ By many accounts the Soryu, while not perfect, was the closest alternative available and from Australia's pre-eminent partner, necessary modifications were possible, maintenance in Australia was possible, and the Prime Ministers were very enthusiastic.⁸⁸ In mid-2014, mutual understandings on the potential became

⁸⁵ Australian Government Department of Defence, "Defence White Paper 2009: Defending Australia in the Asia-Pacific Century: Force 2030" (Australian Government Department of Defence, 2009), accessed December 28, 2022, <https://www.ssri-j.com/MediaReport/Document/AustraliaDefenceWhitePaper2009.pdf>, 70-71.

⁸⁶ Australian Government Department of Defence, "Defence White Paper 2013," *Australian Government Department of Defence* (Australian Government Department of Defence, 2013), accessed December 28, 2022, https://www.defence.gov.au/sites/default/files/2021-08/WP_2013_web.pdf, 82-82.

⁸⁷ Marcus Hellyer et al., "Submarines: Your Questions Answered: Chapter 3: The Future Submarine" (Australian Strategic Policy Institute, November 4, 2020), accessed December 28, 2022, <https://www.jstor.org/stable/resrep26897.7>, 31-32.

⁸⁸ Graeme Dobell, "Tony Abbott and a Japanese Sub," *The Strategist*, May 22, 2015, accessed December 28, 2022, <https://www.aspistrategist.org.au/tony-abbott-and-a-japanese-sub/>.

known to the public, but an off the shelf Soryu was simply not going to fill the design requirements.⁸⁹ According to the then Defence Minister David Johnston:

I still do not know what the potential costs of a new designed submarine or an evolved Collins submarine will be ...The Japanese design is the nearest design that comes to what our requirements are.⁹⁰

By February 2015, the CEP was underway, and it was no longer Japan alone; France under Naval Group and Germany under TKMS had entered the race. Without any doubt, Japan was the established frontrunner.⁹¹ The Japanese Soryu-class design had three competitive advantages over the competitors: it was cheaper, it was in operation already, and it could be made quickly.⁹² The only real perceived risk was that Australia concluded that China would be upset with a military procurement from Japan, and modifications were necessary. As it turned out, Japan was never selected, and neither came to pass.

The requirements of the replacement for the Collins class changed dramatically from 2009 to the 2016 final announcement as demonstrated in the parliamentary report detailing Australia's changing list of submarine requirements.⁹³ Australia would eventually cancel the Attack-class replacement and elect to procure nuclear-powered submarines through the Australia-United Kingdom-United States (AUKUS) partnership. Manifestly, defence equipment requirements drove Australia to pursue Japan initially, but the evolution of defence equipment requirements and interactions with other factors over time resulted in

⁸⁹ Parliament of Australia, "Future of Australia's naval shipbuilding industry Future submarines, Part 2, Chapter 5," December 1, 2023, accessed April 8, 2024, https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Naval_shipbuilding/Report%20part%202/c05.

⁹⁰ ABC News, "Government Struggling to Find Replacement Design for Collins Class Subs," *ABC News*, April 9, 2014, accessed December 28, 2022, <https://www.abc.net.au/news/2014-04-09/defence-minister-david-johnston-collins-submarines-replacement/5377266>; Dodd, "Australia's Next Submarine: Did We Get It Right?"

⁹¹ Murray McLean, "Will Australia Buy Japanese Submarines?," *The Interpreter*, February 22, 2015, accessed December 29, 2022, <https://www.lowyinstitute.org/the-interpreter/will-australia-buy-japanese-submarines>.

⁹² Hellyer et al., "Submarines: Your Questions Answered: Chapter 3: The Future Submarine," 32; Dodd, "Australia's Next Submarine: Did We Get It Right?"

⁹³ Parliament of Australia, "Future of Australia's Naval Shipbuilding Industry Future Submarines, Part 2, Chapter 5."

dramatic changes. This problem of unsettled requirements initially carried over beyond the scope of the Japan case and into the subsequent Attack-class submarine deal cancellation.

Defence procurement does not happen in a bubble; there is always a new challenge or a new issue appearing on the horizon. By understanding current, and future needs, procurement can be tailored. Entering into agreements without long term needs factored leaves procurement vulnerable to cancellation. Defence equipment requirements will always dominate the immediate concerns and gaps of the Department of Defence; however, they are fluid and reactionary to evolving circumstances. If a counterfactual scenario is employed, for example if Tony Abbot had not been replaced, or if the Japanese delegation had been more engaged with the bidding process, evidence suggests that Australia would have agreed to procure evolved Soryu-class submarines. While important to initiation of procurement agreements, defence requirements are subject to changes from demand side factors such as politics or transaction costs.

4. Conclusion

The timeline is clear, between 2012 and 2021 Australia embarked on a procurement process for artillery and a replacement for the Collins-class submarine. Both procurement paths suffered from a complex interconnected environment of higher-order factors; politics, transaction costs, economic considerations, and defence equipment requirements. Politics will always dominate procurement by virtue of political objectives overriding all other decision-making processes. Transaction costs may direct procurement parties along the paths of least resistance during decision making, which can override economic concerns and defence equipment requirements. Economic considerations will be subservient to broader objectives as military budgets are subject to political manoeuvring. Defence equipment requirements operate on the lowest level as they are constantly in flux, unable to assert priority over the other three factors. In the pursuit of artillery and submarines, Australia made choices along these four factors, which impacted the outcome.

This helps to understand the stronger defence procurement relationship between Australia and South Korea, relative to that of the seemingly stronger and more strategic relationship of Australia and Japan. These factors operating both at-and-beneath the state-to-state relationship level formed a recipe to impact outcomes. South Korea may well have seen its contract diminished if not for the desire by Australia to more closely align politically, or if it was unable to provide a dedicated piece of Australian-made equipment. Changes in politics or smoother transaction costs between the Australian government and Japanese industrial

agents for the submarine procurement may have dramatically changed the outcome. Evidently Kinne's research holds true: existing procurement decisions are partially determinant in partner selection. Yet, that alone is not sufficient to explain the entirety of the outcome. Fundamentally, it is imperative that procurement partners understand that demand-side nation construction enhances procurement success. The framework contributes to this growing field of research and enables ongoing investigations in military hardware procurement.

4.1 Policy Implications and Future Research

While this study provides valuable insights into Australian Defence procurement outcomes, there remains large avenues for future research to explore and immediate policy implications. Firstly, the formulation of a framework to assist with future Australian Defence reviews. As for future research, it may focus on the application of this framework to nations beyond Australia to gain a more comprehensive understanding of the factors impacting procurement beyond state-to-state relations. Additionally, exploring the impact of the supply side nation on procurement would illuminate the accuracy or applicability of the framework more generally. Moreover, future studies might consider examining alternative procurement arrangements from Australia such as the AUKUS submarines, or F-35 fighter jets to validate the findings. By addressing these research gaps, future studies have the potential to deepen the applicability and public understanding of defence procurement.

4.1.1 Contribution to establishing ongoing reviews into major Australian defence procurement outcomes

Regular and ongoing review of Australian military procurement is crucial as has been demonstrated with the Australian Defence Strategic Review. Notably the Defence Strategic Review was the first done since the Cold War. The framework provides a mechanism for contributing to future reviews and tacitly advocates for establishing ongoing reviews. Political involvement necessitates close examination to ensure alignment with strategic interests, along with identifying vested interests in procurement outcomes. Continual scrutiny of transaction costs allows for the identification of cost-saving measures, improved efficiency, transparency and partners genuinely capable of selling to Australia. Economic considerations demand sustainable procurement within budgets. Requiring ongoing assessment could assist prevention of contract mismanagement. Ongoing review addresses evolving equipment requirements by identifying capability gaps and incorporating innovative solutions, preventing the circular feature of identify-decide-contract-cancel. By maintaining a

forward leaning and proactive approach to procurement evaluation, Australia can enhance its national security, optimise resource allocation, and ensure the efficient operation of its military procurement.

4.1.2 Application of the framework to analyse other nations' procurement outcomes

This paper considered only Australian procurement with South Korea and Japan. The primary future research potential is to apply this framework to other countries' procurement, thereby expanding its scope and applicability. This would enhance the accuracy of the framework and the understanding of the component factors across diverse national contexts. Depending on the research perspective or nation selected, the framework may assist in deriving insights into procurement processes for other nations, contributing to a broader understanding of network relations, bilateral defence diplomacy, and development studies related to export policy. The ongoing application and refinement of this framework holds significant potential for advancing research in military procurement and related areas, fostering a deeper understanding of global defence dynamics.

4.1.3 Evaluate Australian procurement decisions from supply side nations

The future research potential for applying the framework from a supply-side nation perspective is substantial. Expanding the application of this framework beyond Australian demand-side perspectives may reveal insights into the procurement processes of other nations. By applying the framework to supply-side national contexts, researchers can identify further and refine existing factors. This expansion would enhance the network relations, bilateral defence diplomacy, and development studies applicability of this framework. Conducting a comparative analysis across defence procurement with other supply side nations such as the United Kingdom and United States may enable researchers to identify similarities, differences, and best practices in supply-side procurement strategies.

By providing valuable insights into Australian Defence procurement outcomes the potential for future research alongside specific policy implications becomes evident. The framework's applicability for future Defence reviews carries significant policy implications, while applying it to other nations' procurement expands its scope. Ongoing review of politics, transaction costs, economic considerations, and equipment requirements is crucial for efficient procurement. Evaluating Australian procurement from supply-side nations and studying alliance networks contributes to the framework's applicability or required refinement.

Future research in these areas should deepen knowledge of defence procurement and improve its efficiency.