

A Canada–Korea Pacific Defence-Industrial Corridor

*Submarine procurement, industrial offsets,
and the third rail of middle-power sovereignty.*

EDITOR	Jesse James
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EXECUTIVE SUMMARY

On 25 March 2026 the Republic of Korea submarine ROKS *Dosan Ahn Chang-ho* — lead vessel of the KSS-III Batch-I class, surface 3,000 tonnes / submerged ~3,750 tonnes, commissioned 2021 — departed Jinhae Naval Base on a 14,000-kilometre voyage. It became the first Korean submarine ever to cross the Pacific independently. After resupply at Guam in early April and arrival at Joint Base Pearl Harbor-Hickam on 2 May 2026, the boat is scheduled to arrive at Canadian Forces Base Esquimalt on **23 May 2026**, accompanied by the frigate ROKS *Daejeon*, with two Royal Canadian Navy submariners embarked since Hawaii. It will conduct

anti-submarine warfare exercises directly alongside RCN and Royal Canadian Air Force assets through 2 June, with extensive use of air-independent propulsion (AIP) demonstrating long-range blue-water capability. This is the most consequential operational demonstration of bilateral Korea–Canada defence integration in the post-CKFTA era. It is also the proximate news peg for the strategic argument this paper develops.

This document develops a design specification for a **Canada–Korea Pacific Defence-Industrial Corridor**: a bilateral architecture pairing the Canadian Patrol Submarine Project <https://www.canada.ca/en/department-national-defence/services/procurement/canadian-patrol-submarine-project.html> (CPSP) with the Hanwha-led industrial-offset structures, anchored to the institutional plumbing of the Canada–Korea Free Trade Agreement <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/korea-coree/index.aspx?lang=eng> (CKFTA), the 2022 Comprehensive Strategic Partnership (CSP), the October 2025 *Canada–ROK Security and Defence Cooperation Partnership* (SDCP), and the 25 February 2026 Foreign and Defence (2+2) Ministerial Joint Statement <https://www.canada.ca/en/global-affairs/news/2026/02/joint-statement-canada-republic-of-korea-foreign-and-defence-22-ministerial-meeting.html>. The corridor is the security complement to the financial architecture of NPSI Working Paper No. 1 (the Canada–Korea Pacific Infrastructure Facility) and the energy-and-compute architecture of NPSI Working Paper No. 2 (the Canada–United States Energy and Compute Compact). Together, the three papers describe a **complete three-rail Pacific architecture** for Canadian middle-power sovereignty.

The strategic logic is the logic that animates Working Papers No. 1 and No. 2: *counterparty-risk diversification* through structurally complementary architecture, additive to existing North American economic and security infrastructure, framed as *cooperative leverage* rather than retaliatory escalation. The CPSP — procurement of up to twelve advanced conventional submarines plus more than three decades of sustainment, with the programme envelope to be set by Canada's **Defence Investment Agency** under the Defence Industrial Strategy of 17 February 2026 — is the largest single-platform procurement in the modern history of the Royal Canadian Navy and the structural commitment device that converts bilateral diplomacy into bilateral capital. The DIA operates under CEO Doug Guzman, with

Secretary of State for Defence Procurement Stephen Fuhr providing political oversight. The bidding window closed 29 April 2026; final contractor selection is expected in **June 2026**.

Key design conclusions

1. **The KSS-III platform fits the Canadian operational requirement.** The Korean consortium of **Hanwha Ocean and HD Hyundai Heavy Industries** is offering a variant of the Dosan Ahn Chang-ho class — a diesel-electric submarine equipped with air-independent propulsion and demonstrated trans-Pacific operational range. It is one of two short-listed platforms for the CPSP, paired against Germany's ThyssenKrupp Marine Systems Type 212CD. The May 2026 voyage is the operational validation: the same boat that crossed the Pacific autonomously is the design lineage of the platform on offer.
2. **The industrial-offset architecture is the structural commitment device.** The published CPSP evaluation grid <https://www.ctvnews.ca/canada/article/south-korea-sweetens-submarine-bid-will-manufacture-armoured-vehicles-in-canada-if-chosen/> weights sustainment at 50 percent, platform at 20 percent, strategic and economic partnerships at 15 percent, and financial criteria at 15 percent. Hanwha's bid responds with: a USD 250 million / CAD 345 million structural arrangement with Algoma Steel for a Sault Ste. Marie beam mill; a 28 April 2026 MOU with the Automotive Parts Manufacturers' Association <https://apma.ca/> covering Canadian production of the K9 Thunder self-propelled howitzer, the Chunmoo Multiple Launch Rocket System, the K10 ammunition-resupply vehicle, the Redback infantry fighting vehicle, and automated ground vehicles; and existing Canadian-partner MOUs with CAE (Montreal), Gastops (Ottawa), and Curtiss-Wright INDAL (Mississauga). The procurement is not a defence transaction. It is industrial policy executed through a defence vehicle.
3. **The institutional plumbing is dense, recent, and accelerating.** The bilateral defence relationship has matured from "episodic engagement" to sustained strategic alignment through a precise sequence: Canada's Indo-Pacific Strategy (2022) https://www.international.gc.ca/world-monde/issues_developpement-enjeux_developpement/response_conflict-reponse_conflits/strategy_korea-strategie_coree.aspx?lang=eng and Korea's Global Pivotal State Strategy (2022); the 2022 CSP; the renewal of the Defence Materiel Cooperation MoU (December 2022); the 2024 CSP Action Plan; the inaugural 2+2 Foreign and Defence Ministerial (November 2024); the Canadian Commercial Corporation × DAPA Defence Industry and Procurement MoU (June 2024); the SDCP (October 2025) — Canada's first dedicated bilateral defence roadmap with an Indo-Pacific partner; and the 25 February 2026 second 2+2 Ministerial, which signed the Agreement on the Protection of Military and Defence Classified Information and initiated negotiations on a treaty-grade Defence Cooperation Agreement. The corridor is not a proposed architecture; it is a documented one.
4. **The corridor closes the AI-compute supply chain established in Working Paper No. 2.** Korean dominance of high-bandwidth memory production (SK Hynix ~53% / Samsung ~35% of global HBM as of Q3 2025) depends on a critical-minerals supply chain Canada is uniquely positioned to anchor. The 2023 MOU on Critical Mineral Supply Chains, Clean Energy Transition, and Energy Security; the January 2026 Canada–Korea Industrial Cooperation Committee MOU on co-mining

and co-production; and the FORGE plurilateral framework, chaired by Korea through mid-2026, sequence allied investment in upstream-to-midstream integration. The defence-industrial corridor and the AI-compute corridor are the same corridor.

5. **The procurement is timed, not contingent.** The May 23 ROK Navy demonstration is the operational signal. The April 29 bidding deadline closing under improved terms is the structural signal. The June 2026 contract decision is the binary moment. The bilateral institutional plumbing is the durable substrate. The decision window is not 2030. It is the next eight weeks.
6. **Federal continuity remains the precondition.** The corridor's bilateral framework, like Working Paper No. 1's and Working Paper No. 2's, assumes a unified Canadian counterparty. The structural mathematics of secession are forecast separately in NPSI Briefing Note No. 2, *Confederation Mathematics* (forthcoming). The 2025 empirical record indicates federal consolidation under external pressure; the corridor is designed to remain robust under stressed federal scenarios but does not pretend the precondition is automatic.
7. **The corridor uses Working Paper No. 1's architectural pattern verbatim.** Treaty-grade bilateral framework (the Defence Cooperation Agreement now under negotiation provides the legal scaffold). Several (not joint) liability where applicable. KPI-linked industrial-offset milestones. Indigenous co-ownership designed in through the FNMPC and CIB IEI templates established in WP1 §9. English-law governance for commercial layers; standard military-procurement governance for the platform layer. No new financial-engineering instrument is required. Every component is in liquid form today.

Bottom line. The corridor is the third rail of the Pacific architecture. It is the security commitment device that converts the financial architecture of WP1 and the energy-and-compute architecture of WP2 into a complete, structurally durable middle-power posture. Every component — the CPSP procurement vehicle, the Hanwha-HHI consortium bid, the Algoma Steel structural arrangement, the K9/Chunmoo/K10/Redback/AGV manufacturing MOUs, the CKFTA tariff foundation, the SDCP defence-cooperation roadmap, the 2+2 Ministerial framework, the FORGE plurilateral coordination, the Industrial Cooperation Committee — exists in operational form in 2026. The novelty is the bundling: the explicit framing of submarine procurement, industrial offset, critical-minerals integration, and AI-compute supply chain as a single coherent corridor anchored on Canadian middle-power sovereignty.

The binding constraint is not technical and it is not financial. It is the political durability of the CPSP procurement decision in June 2026, the federal-continuity precondition shared with WP1 and WP2, and the operational continuity of bilateral Korea-Canada defence cooperation through electoral cycles in both capitals. All three are addressable. None is automatic.

*The procurement decision is the commitment device. The submarine is the symbol.
The corridor is the architecture.*

– §1, EXECUTIVE SUMMARY

FIGURE A · THE THREE-RAIL PACIFIC ARCHITECTURE COMPLETE · FINANCIAL (WP1) +
ENERGY & COMPUTE (WP2) + DEFENCE-INDUSTRIAL (WP3)

1. THE CANADIAN PATROL SUBMARINE PROJECT AND THE STRATEGIC WINDOW

Canada's submarine capability rests on four Victoria-class boats — diesel-electric hulls purchased from the Royal Navy in 1998 and brought into Canadian service through the following decade. The class has spent more of its Canadian life in maintenance than any planner intended, and each further docking cycle buys less availability at greater cost. However the residual service life is counted, the arithmetic ends in the 2030s: a three-ocean navy with the world's longest coastline faces a submarine gap within the decade unless replacement hulls are ordered now.

The Canadian Patrol Submarine Project is the response — up to twelve conventionally powered submarines with air-independent propulsion, first delivery required no later than 2035. On 19 August 2025, Public Services and Procurement Canada confirmed the qualified-supplier field at two: Hanwha Ocean of Korea and ThyssenKrupp Marine Systems of Germany, narrowed from twenty-five responses to the request for information received between September 2024 and February 2025.

The programme envelope is deliberately unstated, and this paper keeps it that way. Trade press has circulated figures from CAD 12 billion to CAD 43 billion; none is official. The envelope will be set by the Defence Investment Agency under Canada's Defence Industrial Strategy of 17 February 2026. What matters for the architecture argued here is not the number but its shape: a multi-decade industrial programme whose offset structure is fixed at contract award and binds for the life of the class.

The window is narrow on both sides. The final-contractor decision is expected in June 2026; every quarter of slippage after it compresses an already demanding build schedule against the 2035 first-delivery requirement. And submarine construction is a seller's market: allied navies are recapitalising on the same calendar, and build capacity Canada does not reserve will be reserved by someone else.

That is the strategic window this paper addresses. The platform decision (\$2) matters less than what arrives attached to it: the offset architecture (\$4), the minerals-and-compute bridge (\$5), and the institutional corridor (\$6) that converts a submarine purchase into the third rail of the Pacific architecture assembled in Working Papers No. 1 and No. 2.

2. THE KSS-III PLATFORM

The CPSP shortlist contains two platforms: the Korean consortium of Hanwha Ocean and HD Hyundai Heavy Industries offering a variant of the Dosan Ahn Chang-ho class (KSS-III), and Germany's ThyssenKrupp Marine Systems offering the Type 212CD. Both are mature, NATO-compatible, conventionally powered submarines with air-independent propulsion. Both have export track records. The procurement decision turns less on platform specification than on offset architecture (\$4) and bilateral institutional fit (\$6).

This section addresses the platform specification, which carries 20 percent of the evaluation grid.

KSS-III Batch-I specifications

The *Dosan Ahn Chang-ho* is the lead vessel of the KSS-III Batch-I class — Korea's first domestically-designed and -built large diesel-electric submarine, commissioned in 2021. Subsequent boats in the class enter service through 2027.

- **Surface displacement:** 3,000 tonnes
- **Submerged displacement:** ~3,750 tonnes
- **Length:** ~83 metres
- **Beam:** ~9.6 metres
- **Propulsion:** Diesel-electric with air-independent propulsion using fuel-cell technology

- **Endurance:** Demonstrated trans-Pacific voyage (14,000 km) on a single deployment (2026)
- **Armament:** Six 533 mm torpedo tubes; six vertical-launch tubes capable of deploying submarine-launched ballistic missiles or land-attack cruise missiles
- **Crew:** ~50

The defining architectural choice in the Batch-I design is the integration of a vertical launch system into a conventionally-powered platform. The VLS provides a launch capability for SLBMs that has historically been reserved for nuclear-powered submarines. This is not a Canadian operational requirement — Canada has no SLBM intent — but it is a structural signal: the platform is designed for strategic-deterrent integration, and that engineering depth carries through into the ASW, sensor, and command-and-control architectures relevant to Canadian operational requirements.

The Type 212CD comparator

The ThyssenKrupp Type 212CD (Common Design) is the German–Norwegian successor to the Type 212A, with first delivery expected in the late 2020s. It is a smaller platform — approximately 2,500 tonnes — also AIP-equipped, designed for North Sea and Baltic operational profiles. It is highly capable in shallow-water and littoral operations and less well-suited to the open-ocean blue-water profile required by Canada's three-ocean coastline. The Type 212CD's principal export-customer base is European NATO members operating in similar littoral environments.

The comparison is not Korean-vs-German technical merit in absolute terms. It is platform fit against Canada's specific operational requirement, weighted against the 80 percent of the evaluation grid that addresses sustainment and offset architecture rather than platform specification.

The Canadian operational requirement

Canada's submarine operational requirement is structurally distinct from the requirements of every other CPSP-comparator export customer:

1. **Three-ocean coverage** — Atlantic, Pacific, and Arctic; the Arctic dimension is unique among NATO members
2. **Ice-encroached operations** — the Arctic operational profile requires hull strengthening, sensor configuration, and propulsion endurance that exceeds typical NATO submarine requirements

3. **Blue-water endurance** — distances between Canadian patrol zones and homeport operational bases are continental-scale, requiring AIP-at-scale and long-range deployment capability of the kind demonstrated by the *Dosan Ahn Chang-ho* on its trans-Pacific voyage
4. **NATO interoperability** — communications, sensor, weapons, and command-and-control integration with allied fleets, particularly U.S. Navy and Royal Navy
5. **30-year operational lifetime** — the procurement is for a platform that will operate to approximately 2065; design margins for upgrade, weapons-system refresh, and technology insertion matter as much as initial specification

Both shortlisted platforms can credibly meet these requirements with appropriate engineering adjustment. The KSS-III's demonstrated trans-Pacific endurance is the most directly relevant validation against the third criterion; the Type 212CD's NATO-native design heritage is the most directly relevant validation against the fourth.

What the May 2026 voyage validates

The *Dosan Ahn Chang-ho*'s 14,000-kilometre voyage validates three platform-level claims that the Hanwha–HHI consortium's CPSP submission rests on:

- AIP can be operated at scale for blue-water deployment (validated by extensive submerged operation across the Pacific transit)
- The platform can integrate with NATO-standard command-and-control without modification (RCN submariners embarked at Hawaii; ROKS *Daejeon* escort to Esquimalt operates under standard bilateral exercise protocols)
- Korean industrial capability can deliver and sustain a Pacific deployment of strategic-deterrent assets — the same industrial capability that would deliver and sustain the CPSP fleet

The procurement decision in June 2026 will weigh these validations against the offset architecture (\$4), the institutional plumbing (\$6), and the financial criteria. Platform fit is one of four criteria. The May 2026 voyage was the platform demonstrating itself.

3. THE MAY 23 DEMONSTRATION — TRANS-PACIFIC OPERATIONAL VALIDATION

On 25 March 2026 the ROKS *Dosan Ahn Chang-ho* departed Jinhae Naval Base on what would become the longest operational voyage in the history of the Republic of Korea Submarine Force. The boat is the lead vessel of the KSS-III Batch-I class — surface displacement 3,000 tonnes, submerged ~3,750 tonnes, commissioned 2021

— equipped with the first Korean-built vertical launch systems capable of deploying submarine-launched ballistic missiles. It is, in the language of the ROK Navy, a "core strategic deterrent asset."

The voyage

The 14,000-kilometre route is the longest deployment ever undertaken by a Korean submarine. It has unfolded in three operational phases:

- Departure from Jinhae and Pacific traverse to Guam, with logistics and resupply in early April
- Continuation to Joint Base Pearl Harbor-Hickam, arriving Saturday 2 May 2026 — the first time a Korean submarine has crossed the Pacific independently
- Final leg to Canadian Forces Base Esquimalt in Victoria, British Columbia, scheduled to arrive 23 May 2026, accompanied by the frigate ROKS *Daejeon*

Two Royal Canadian Navy submariners embarked at Hawaii. The Korean Navy specifically notes the boat made "extensive use of air-independent propulsion, allowing it to remain submerged for extended periods without surfacing." For a procurement evaluation that weights platform capability at 20 percent and sustainment at 50 percent, AIP-at-scale demonstration is structurally significant — it is precisely the operational profile required to patrol Canada's three-ocean coastline.

Esquimalt and beyond

At Esquimalt, the *Dosan Ahn Chang-ho* will conduct anti-submarine warfare exercises directly alongside Royal Canadian Navy and Royal Canadian Air Force assets through 2 June. This is not ceremonial visitation; it is integrated operational play between the platform on offer to the CPSP and the force structure that will operate the eventual successor fleet for the next four decades.

The exercises transition into the multinational RIMPAC <https://www.cpf.navy.mil/rimpac/> drills later in the summer of 2026 — placing the same Korean platform alongside U.S., Australian, and allied fleets in the largest international maritime exercise in the world. The Korean Navy frames the deployment as the institutional moment in which the ROK Submarine Force "transitions from a coastal defence force to a blue-water navy capable of operating across global oceans." The framing is correct. So is

the Canadian read of it: the force willing to send its strategic-deterrent lead vessel 14,000 kilometres across an ocean to participate in a procurement evaluation is not a marginal partner.

What the demonstration signals

A Korean defence-industry official, quoted in Asia Today/UPI reporting on 5 May 2026 <<https://www.upi.com/Defense-News/2026/05/05/dosan-pacific-crossing-canada-bid/>>, summarised the operational logic: *"Operating a submarine that has crossed the Pacific and conducting joint exercises alongside partner forces is itself a powerful demonstration."* The signal operates at three levels:

1. **Platform:** AIP-at-scale validation, demonstrated trans-Pacific endurance, operational interoperability with RCN and RCAF
2. **Bilateral:** the willingness to commit a flagship asset to a 14,000-kilometre demonstration of partnership intent
3. **Strategic:** the transition of the ROK Navy itself from regional to blue-water posture — the same posture Canada requires across its three-ocean coastline

The 23 May arrival at Esquimalt is the structural inverse of an operational demonstration. It is the demonstration of a structure.

FIGURE B · TRANS-PACIFIC VOYAGE OF ROKS DOSAN AHN CHANG-HO · 25 MARCH – 23 MAY 2026 · 14,000 KM

4. INDUSTRIAL OFFSET ARCHITECTURE — STEEL, VEHICLES, AND THE DOMESTIC MULTIPLIER

The CPSP is not a defence transaction. It is industrial policy executed through a defence vehicle. The published evaluation grid weights non-platform attributes at 80 percent: **50 percent sustainment, 15 percent strategic and economic partnerships, 15 percent financial criteria.** The platform itself accounts for 20 percent. In that context, the structural commitment device is the offset architecture, not the boat.

Doug Guzman, Chief Executive of the Defence Investment Agency, summarised the procurement posture before the House of Commons Defence Committee with characteristic precision: there is, he said, "conscious observation of what Canadian content is in there and in what form." Stephen Fuhr, Secretary of State for Defence Procurement, was blunter on 29 April 2026: *"(Hanwha and TKMS) have a 50 per cent chance of winning this and they know what the stakes are. The best economic value for Canada — so guess what — they're putting their best foot forward."*

The Algoma Steel structural arrangement

Hanwha's first domestic-multiplier commitment is a **USD 250 million / CAD 345 million structural arrangement with Algoma Steel** in Sault Ste. Marie for a new beam mill. The arrangement embeds Canadian metallurgical capacity directly into the submarine's supply chain. It is unmistakably Canadian heavy industry, integrated upstream of Korean naval shipbuilding — and it does not require the existence of CPSP itself to be commercially viable. The mill exists, on Canadian soil, regardless of whether the submarines do.

The arrangement is the structural inverse of "industrial offset" as conventionally understood. Conventional offsets buy domestic content as a political concession to the procuring nation. The Algoma Steel arrangement creates domestic content that has economic logic of its own — the beam mill serves construction, infrastructure, automotive, and naval-shipbuilding markets — and ties the lifetime of that capacity to the lifetime of the corridor.

The APMA armoured-vehicle MOU (28 April 2026)

The second domestic-multiplier commitment is structurally larger. On 28 April 2026, on the eve of the bid-improvement deadline, Hanwha announced a partnership with the Automotive Parts Manufacturers' Association of Canada [s://apma.ca/](http://apma.ca/) covering the manufacture in Canada of:

- The **K9 Thunder** self-propelled howitzer — already in service or on order with Finland, Norway, Poland, Türkiye, Estonia, Romania, Australia, Egypt, and Vietnam, and a separate Canadian Armed Forces interest in 250 vehicles
- The **Chunmoo** Multiple Launch Rocket System
- The **K10** Ammunition Resupply Vehicle
- The **Redback** Infantry Fighting Vehicle

- Automated ground vehicles

The MOU is "100 per cent fully contingent on us winning the subs," in the explicit framing of Hanwha sources. APMA president Flavio Volpe characterised the partnership as "a tremendous opportunity for Canada's automotive sector" and "delivering on the Prime Minister's challenge to Canada's automotive sector to help drive the country's unprecedented commitment to national defence." Son Jae-il, CEO of Hanwha Aerospace, framed the strategic logic: *"We believe that when Canada's industrial capability is combined with Hanwha's technology and manufacturing experience — we could accomplish a new model of cooperation that goes beyond procurements."*

The vehicles will be "fully produced in Canada, by Canadian workers, with 'Made In Canada' parts and materials." This is the structural shift the offset architecture turns on: it is not a Canadian-content quota inside a Korean platform. It is Korean technology transfer into a Canadian industrial base.

The Melbourne precedent

The case that Hanwha can execute on offshore industrial production at this scale is empirical, not theoretical. In 2024 Hanwha opened its Melbourne factory after Ford and Toyota shuttered their auto plants in the region. The factory took two years to build and now employs approximately 1,000 people. Glenn Copeland, CEO of Hanwha Canada, made the parallel explicit in February 2026 during a Canadian defence-executive visit to Hanwha's Changwon manufacturing complex: "We could bring the production line to Canada... We've got the supply chain base that you can mobilise and take advantage of. It's a function of when Canada wants to get started."

The Australian factory is the reference architecture. The Canadian iteration would scale it to the operational requirements of a NATO member with a three-ocean coastline and a 250-vehicle K9 line of interest already on the table.

The existing industrial network

The APMA and Algoma agreements are not the first Hanwha–Canada industrial integration. They are the most recent additions to an existing network of signed MOUs:

- **CAE** (Montreal) — design and simulation
- **Gastops** (Ottawa) — systems integration and condition-monitoring
- **Curtiss-Wright INDAL** (Mississauga) — through-life support and naval handling systems

These agreements pre-date the CPSP bid. They form the substrate of any Hanwha procurement win and would persist as bilateral defence-industry infrastructure even if a CPSP outcome went the other way.

What the offset architecture says

The CPSP evaluation grid is designed to make the offset architecture decisive. Both bidders — Hanwha-HHI and Germany's ThyssenKrupp Marine Systems — face the same evaluation criteria. The Canadian government has requested vehicle manufacturing in Canada as part of the proposal. ThyssenKrupp will respond with its own offset proposition. The bidders are competing on Canadian content as much as on submarine specification.

That structural design — that 80 percent of the procurement decision is made on non-platform criteria — is itself the corridor architecture in operational form. The submarine is the symbol. The offset architecture is the substance. The June 2026 decision selects a corridor, not just a boat.

FIGURE C · INDUSTRIAL OFFSET ARCHITECTURE · PROCUREMENT-AS-INDUSTRIAL-POLICY
UNDER THE 50/20/15/15 EVALUATION GRID

5. CRITICAL MINERALS, HELIUM, AND THE AI-COMPUTE BRIDGE

The defence-industrial corridor proposed in this paper and the AI-compute architecture proposed in NPSI Working Paper No. 2 are not parallel structures. They are the same corridor, viewed through two different operational lenses. The submarine procurement vehicle and the critical-minerals supply chain are linked by the same Korean industrial base — the same fab capacity, the same conglomerate ownership structure, the same upstream-resource dependency on Canadian feedstock.

What Korean industry actually consumes

Korea is the world's leading producer of high-bandwidth memory. As of Q3 2025, SK Hynix held approximately 53 percent of the global HBM market and Samsung approximately 35 percent (per Counterpoint Research <https://counterpointresearch.com/en/insights/global-dram-and-hbm-market-share>) — a combined ~88 percent share concentrated in a single jurisdictional and conglomerate ecosystem. HBM is the critical input to the AI processor stack; without it, the GPU and accelerator architecture that powers generative AI cannot scale. The same conglomerates dominate, in adjacent product categories, EV battery cathode-active material (LG Energy Solution, Hyundai), advanced semiconductor lithography (Samsung), and now naval shipbuilding (Hanwha Ocean, HD Hyundai Heavy Industries).

This concentration is a strategic asset for Korea. It is also a strategic vulnerability. The HBM stack runs on imported feedstock that Korea does not domestically produce at scale: copper (electrical conductor, semiconductor interconnect), nickel (battery cathode, semiconductor lithography), cobalt (battery cathode), lithium (battery cathode), rare earths (motors, magnets, chip manufacture), and uranium (Korean civil nuclear). Canada has all of these in significant quantities, in jurisdictions with stable counterparty status — Quebec, British Columbia, Ontario, Saskatchewan, the Northwest Territories — and Indigenous-equity precedent already established (FNMPC, CIB IEI, Athabasca Indigenous Investments, Coastal GasLink LP, Nisga'a-PRGT).

The institutional substrate (2023–2026)

Two bilateral institutional layers translate this complementarity into operational architecture:

- **2023 MOU on Critical Mineral Supply Chains, Clean Energy Transition, and Energy Security** — recognises minerals as essential to both clean technology and defence systems; sets the framework for joint reserve mapping, Korean investment in Canadian projects, and cooperation on midstream refining
- **January 2026 Canada–Korea Industrial Cooperation Committee MOU** — signed by Canadian Industry Minister Mélanie Joly and Korean Trade Minister Kim Jung-kwan, formalises "co-mining and co-production" as the operational mode; specifically targets future-mobility and supply-chain resilience

The Industrial Cooperation Committee's framing is structurally identical to the Defence Cooperation Agreement now under negotiation (§6): both are bilateral, co-operative, cross-cutting, and explicitly designed for medium-term institutional durability.

The FORGE plurilateral overlay

The bilateral architecture sits inside a plurilateral one. The Forum on Resource Geostrategic Engagement (FORGE) — chaired by Korea through mid-2026 — coordinates allied investment screening, export-control alignment, and capital-investment sequencing across the closed-loop semiconductor ecosystem. The U.S.-led "Pax Silica" framing pairs with the Canadian role: Canada is the premier low-geopolitical-risk extraction and midstream-processing hub feeding raw inputs into Korean fabrication facilities that produce the memory essential for global AI compute.

Recent operational evidence: Panasonic's offtake MOU with Frontier Lithium for a Thunder Bay refinery, driven by Canadian trade missions, demonstrates the closed-loop model is in execution rather than aspiration.

The helium chokepoint

The structural vulnerability binding the entire architecture is helium. Helium is essential to extreme-ultraviolet (EUV) lithography and wafer cooling — both required to fabricate HBM and advanced logic at current node geometries. A significant portion of global helium supply originates as a byproduct of LNG processing in Qatar, where the production lines transit the Strait of Hormuz to global markets.

Geopolitical disruptions affecting Hormuz transit — including the protracted Middle East tensions of 2025–26 — have intermittently constrained global helium supply, halting fabrication lines on multiple occasions. This is not a hypothetical risk. It is operational. It is also the structural reason a defence-industrial corridor is the same corridor as an AI-compute supply chain: both are vulnerable to the same chokepoint, both are insulated by the same diversification of upstream supply, and both benefit from the same expansion of Canadian critical-minerals processing capacity.

The submarine closes the loop

The CPSP procurement integrates with the critical-minerals corridor at three structural points:

1. **Steel supply chain** — the Algoma Steel beam-mill arrangement (\$4) embeds Canadian metallurgical capacity directly upstream of Korean naval shipbuilding, including future expansion of Korean fabrication facilities for advanced naval and aerospace platforms
2. **Materials science** — submarine pressure hulls, propulsion systems, and sonar arrays use specialised alloys whose feedstocks overlap substantially with semiconductor and battery supply chains; co-investment in midstream refining serves both
3. **Dual-use technology pipeline** — the SDCP (October 2025) explicitly commits both governments to "responsible military use of AI and autonomy" and "co-ordination on cyber threats and critical infrastructure protection"; the same technology base underwrites both the AI-compute and the defence-industrial rails

The corridor architecture proposed in this paper is the security-side expression of the same logic that animates the WP2 energy-and-compute architecture and the WP1 financial architecture. The three rails are not parallel. They are interlocked.

6. THE CKFTA INSTITUTIONAL FOUNDATION

The defence-industrial corridor proposed in this paper does not require new bilateral institutions to be invented. It requires the activation of a dense layer of existing ones — most of which were built precisely to support architecture of this kind, and many of which were signed within the last twelve months.

The trade-agreement substrate

The Canada–Korea Free Trade Agreement <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/korea-coree/index.aspx?lang=eng> entered into force on 1 January 2015 — Canada's first comprehensive FTA with an Asia-Pacific partner. As of 2026, 99 percent of Canadian exports to Korea are duty-free; full implementation in 2032 will reach 99.75 percent. The April 2026 Alberta–Korea agreement formalising the elimination of the 3-percent tariff on diluted bitumen — by recognising Canadian-origin bitumen as such under FTA rules — is the most recent operational expansion of that foundation.

The CSP layer (2022)

In September 2022, the bilateral relationship was upgraded to a **Comprehensive Strategic Partnership** across five pillars: security and defence, economic resilience, critical minerals, climate and energy security, and broader societal cooperation. The timing was strategically deliberate. The CSP coincided with Canada's Indo-Pacific Strategy <https://www.international.gc.ca/transparency-transparence/indo-pacific-indo-pacificue/index.aspx?lang=eng> (November 2022) and Korea's Global Pivotal State Strategy (December 2022), both of which converged on the same diagnosis: managing great-power competition requires reliable middle-power partners with shared values and interoperable institutional architecture.

The CSP produced immediate operational outputs:

- Renewal of the **Defence Materiel Cooperation MoU** (first signed 2009; renewed December 2022)
- Launch of the high-level economic security dialogue
- Commitments to deepen information-sharing and critical-minerals collaboration

The Action Plan and the materiel layer (2024)

The 2024 CSP Action Plan operationalised these ambitions. It prioritised classified-information sharing, defence research and development, and emerging-security domains (cyber, maritime, space). It also laid the groundwork for the inaugural **2+2 Foreign and Defence Ministerial Meeting**, held in November 2024.

Two parallel materiel-layer agreements followed:

- **June 2024:** the Canadian Commercial Corporation and the Republic of Korea's Defense Acquisition Program Administration (DAPA) signed an MOU on Defence Industry and Procurement Cooperation. The agreement promotes joint bids, government-to-government procurement familiarity, and co-production opportunities.
- **2023 MOU on Critical Mineral Supply Chains, Clean Energy Transition, and Energy Security:** linked upstream Canadian resource endowment to Korean midstream and downstream manufacturing capacity. This MOU is the substrate of the January 2026 Canada–Korea Industrial Cooperation Committee's "co-mining and co-production" framework cited in §5.

The SDCP — Canada's first Indo-Pacific defence roadmap (October 2025)

In October 2025 Canada and the Republic of Korea launched the **Security and Defence Cooperation Partnership (SDCP)** — Canada's first dedicated bilateral defence roadmap with an Indo-Pacific partner. The SDCP institutionalises:

- Annual 2+2 Foreign and Defence Ministerial Meetings
- Director-General-level policy talks
- Joint Materiel and Joint Defence R&D Committees
- Expanded Navy, Army, Air Force, Space, and Strategic Policy staff talks
- Personnel exchanges and joint exercises
- Interoperability and logistics frameworks
- Expanded intelligence-sharing and closer NATO coordination
- Defence-industry linkage expansion

The SDCP is not a treaty. It is a roadmap. Its institutional weight is its substrate: the 2+2 mechanism, previously reserved by Seoul predominantly for formal treaty allies, was extended to Canada. That extension signals a level of trust structurally distinct from typical bilateral partnerships.

The Second 2+2 Ministerial (25 February 2026)

On 25 February 2026, Minister of Foreign Affairs Anita Anand and Minister of National Defence David McGuinty hosted Korean counterparts Cho Hyun (MOFA) and Ahn Gyuback (MND) in Ottawa for the second 2+2 Foreign and Defence Ministerial. The **Joint Statement** <https://www.canada.ca/en/global-affairs/news/2026/02/joint-statement-canada-republic-of-korea-foreign-and-defence-22-ministerial-meeting.html> issued that day expanded the institutional architecture in three structurally significant ways:

1. **Signed:** the *Agreement on the Protection of Military and Defence Classified Information* — providing the legal scaffold for sharing classified material across both governments and across defence-industry partners
2. **Initiated:** negotiations on a *Defence Cooperation Agreement*, explicitly a "legal framework to improve interoperability, and to facilitate cooperative activities between both countries." This is the treaty-grade instrument that anchors all subsequent corridor architecture
3. **Issued:** the SDCP Action Plan, with concrete deliverables across cyber (inaugural Cyber Policy Consultations March 2026), Air Force Staff Talks (Terms of Reference 2026), and a Space Security Dialogue under negotiation

The Joint Statement also explicitly framed both countries as "middle powers confronting a more unpredictable global order" — diplomatic language that, in 2026, is functionally indistinguishable from the strategic-indispensability framing developed in NPSI Working Paper No. 1 §1 and Working Paper No. 2 §1. The two governments have already adopted the analytical posture this paper develops; the corridor is the operational expression of that posture.

Industry-layer integration

Hanwha's CPSP bid is not a standalone procurement proposition. It sits on top of an existing Hanwha–Canada industrial network: signed MOUs with CAE [<https://www.cae.com/>](https://www.cae.com/) (Montreal), Gastops [<https://gastops.com/>](https://gastops.com/) (Ottawa), and Curtiss-Wright INDAL [<https://www.cw-indal.com/>](https://www.cw-indal.com/) (Mississauga) for design, systems integration, and through-life support. The Algoma Steel structural arrangement and the APMA armoured-vehicle MOU (§4) extend this network into heavy industry and automotive manufacturing.

The K-Defense Strategy itself provides the macro context. Korea aims to become a top-four global defence exporter by 2027. Korea's record USD 17.3 billion in defence contracts in 2022 demonstrated execution capacity at speed. Poland accounts for 46 percent of Korean arms transfers between 2020 and 2024 (per the SIPRI arms-transfers database [<https://www.sipri.org/databases/armstransfers>](https://www.sipri.org/databases/armstransfers)), demonstrating Korean industry can serve a NATO member at scale through bilateral framework agreements. A CPSP win for the Hanwha–HHI consortium would be Korea's largest defence export to date and would cement Korean reputation as a supplier of NATO-compatible high-end platforms.

What the foundation does not require

The corridor architecture proposed in this paper does not require:

- A new bilateral treaty (the Defence Cooperation Agreement is already under negotiation)
- A new procurement framework (the CCC × DAPA MoU already provides one)
- A new classified-information protocol (signed 25 February 2026)
- A new critical-minerals architecture (the 2023 MOU and January 2026 Industrial Cooperation Committee already provide one)
- A new defence-industry linkage framework (the SDCP already provides one)

What it requires is the bundling of these existing institutional layers into a coherent corridor framing — and the political will to convert that bundling into a CPSP procurement decision in June 2026. The institutional plumbing is in place. The decision is the only remaining variable.

FIGURE D · CANADA-KOREA INSTITUTIONAL TIMELINE · CKFTA (2015) → DEFENCE COOPERATION AGREEMENT (UNDER NEGOTIATION)

7. STRESS SCENARIO ANALYSIS

The corridor must remain operational under stressed conditions across the political, geopolitical, industrial, and procurement dimensions. The relevant stressors and the corridor's behaviour under each:

Korean peninsula military event

Korea CDS spreads typically widen 50–150 bp on serious provocations. Corridor behaviour: KSS-III delivery schedules from Korean shipyards may face short-term disruption; Hanwha–APMA Canadian armoured-vehicle production continues unaffected (geographic insulation); Algoma Steel beam mill continues unaffected (Canadian operations); the SDCP and bilateral defence cooperation strengthen rather than weaken under stress. **Net effect:** short-term programmatic delay (3–6 months) on submarine delivery; Canadian industrial offset operations unaffected.

ThyssenKrupp Type 212CD wins the CPSP

The German bid wins. Corridor behaviour: the Hanwha–APMA armoured-vehicle MOU is "100 percent contingent" on the submarine win and does not proceed. The Algoma Steel beam mill is non-contingent and continues. Existing Hanwha MOUs with CAE, Gastrops, and Curtiss-Wright INDAL continue. The 2+2 Ministerial and SDCP institutional layers are unaffected. **Net effect:** significant industrial-offset opportunity foregone; bilateral institutional architecture retained; the corridor reduces in operational scope but persists in institutional substrate. The CPSP-loss scenario is the binding constraint of this paper, but it is not a zero outcome.

U.S. opposition to Canada–Korea defence deepening

A future U.S. administration may oppose deepened Korea–Canada defence integration. Corridor behaviour: the Defence Cooperation Agreement (under negotiation) is bilateral and treaty-grade; U.S. opposition cannot abrogate it. Existing CKFTA, CSP, SDCP, and 2+2 frameworks are bilateral and not subject to U.S. veto. Five Eyes intelligence and NATO-level cooperation continue independently. **Net effect:** residual political risk priced into the procurement decision; not eliminable through bilateral instruments alone, but contained within them.

Canadian electoral reversal

A future Canadian government may seek to unwind aspects of the corridor. Corridor behaviour: the CPSP procurement, once awarded, is contractually bound for the duration of the program (decades). The SDCP is a bilateral commitment with cancellation provisions but high political-cost cancellation pathways. Industrial offsets (Algoma, APMA) are commercial agreements with their own contractual durability. **Net effect:** reversal possible but expensive; corridor architecture survives most plausible electoral cycles intact.

Strait of Hormuz protraction

Already addressed in §5: the helium chokepoint affects Korean fab capacity. Corridor behaviour: incentivises faster Canadian processing-capacity build-out (advantageous to corridor); KSS-III delivery may face supply-chain delays on specific components. **Net effect:** net positive for corridor structural argument; net negative for short-term delivery schedules.

Korean labour shortage in fab capacity

Korea faces an acute demographic shortage threatening operational capacity at new multi-billion-dollar semiconductor fabs (Icheon, Cheongju, Pyeongtaek). Corridor behaviour: structural argument for moving more midstream processing to Canadian jurisdictions; reinforces co-mining and co-production framing. **Net effect:** a demand-side accelerant for corridor build-out.

Hanwha financial or governance event

A material adverse event affecting Hanwha Group corporate solvency or governance. Corridor behaviour: HD Hyundai Heavy Industries provides consortium-partner redundancy; the K-Defense Strategy ensures Korean state institutional support for major export contracts; Korea has demonstrated political willingness to support the bid through ministerial-level diplomacy (Industry Minister Kim Jung-kwan's January, March, and May 2026 Canada visits). **Net effect:** residual counterparty risk priced into procurement decision but not architecturally fatal.

Federal-continuity stress

Same load-bearing argument as WP2 §10 and §9 below. Provincial separatism introduces treaty-counterparty uncertainty; the bilateral Defence Cooperation Agreement assumes federal Crown counterparty. The structural mathematics are forecast in NPSI Briefing Note No. 2 (forthcoming).

Net assessment

The corridor's primary failure mode is the CPSP-loss scenario — Hanwha-HHI does not win the procurement. Even under that scenario, the bilateral institutional architecture (CKFTA, CSP, SDGP, 2+2, Defence Cooperation Agreement, Industrial Cooperation Committee, classified-information agreement) persists. The corridor reduces in operational scope but does not collapse. Most other stressors are short-term and addressable through standard procurement risk management.

8. INDIGENOUS ENGAGEMENT AND THE ESQUIMALT COASTAL COMPACT

Canadian Forces Base Esquimalt sits on the territory of the Songhees and Esquimalt First Nations. The 23 May 2026 arrival of the ROKS *Dosan Ahn Chang-ho* will be the most prominent foreign-naval event in the bilateral defence-cooperation calendar; it is also a host-nation moment that requires explicit Indigenous engagement.

The host-nation framework

The corridor's Indigenous-engagement architecture extends the Series I (Indigenous-CKPIF, WP1 §9) and Series II (Indigenous-Compact, WP2 §9) tranche structures into the defence-industrial context. Defence procurement has historically lagged civilian infrastructure on Indigenous-equity participation; the corridor is an opportunity to align defence procurement with the FNMPC, CIB IEI, and federal Indigenous Loan Guarantee Program templates already operational across natural-resource and infrastructure projects.

Esquimalt-specific engagement

Three engagement pathways for the Esquimalt operational integration:

1. **Sovereign acknowledgement** — formal Songhees and Esquimalt First Nations acknowledgement of Korean naval visit, recognising the host-nation territorial relationship; standard protocol for Canadian Armed Forces operations on Indigenous territories
2. **Industrial-offset Indigenous participation** — the Algoma Steel beam mill (Sault Ste. Marie) sits on Anishinaabe territory; the APMA armoured-vehicle MOU spans Ontario auto-manufacturing centres on traditional territories; Indigenous-equity participation in the Canadian operational arms of the corridor is structurally addressable
3. **Long-term sustainment Indigenous workforce development** — 30-year sustainment requires sustained Canadian workforce; FNMPC member nations have established trades-training infrastructure that aligns with the Major Projects Office workforce-mobilisation strategy

What the corridor adds to existing Indigenous-equity precedent

Indigenous defence-industrial participation is less developed than Indigenous natural-resource equity. The corridor is positioned to advance the precedent through defence-industrial supplier-diversity programmes integrated with FNMPC member-firm capabilities, infrastructure-equity participation in Esquimalt and other CFB facility upgrades, and sustainment-workforce participation under FNMPC trades-training frameworks. The corridor does not invent new Indigenous-engagement institutions. It extends operational ones into the defence-industrial domain.

9. THE FEDERAL-CONTINUITY PRECONDITION

The corridor's bilateral framework, like Working Paper No. 1's and Working Paper No. 2's, assumes a unified Canadian counterparty. The Defence Cooperation Agreement now under negotiation between Canada and the Republic of Korea will be signed by the federal Crown — not by any provincial government. The CPSP procurement is administered by the federal Defence Investment Agency. The sustainment commitments that underpin the 50-percent weighting of the evaluation grid require continuity of federal procurement authority over a 30-year operational horizon.

Provincial separatist mobilisation in 2025–26 — the Stay Free Alberta signature delivery of 4 May 2026 <https://www.cbc.ca/news/canada/edmonton/alberta-separatists-say-more-than-300k-have-signed-petition-9.7187218>>, the Parti Québécois polling lead ahead of the October 2026 provincial election — introduces volatility into that assumption. The structural mathematics of secession are forecast separately in NPSI Briefing Note No. 2, *Confederation Mathematics* (forthcoming). The empirical record of 2025 is unambiguous: external pressure consolidated the federation rather than fragmenting it. Bloc Québécois Quebec polling fell into the 23–25 percent range during the April 2025 federal campaign, well below its 2024 lead; Canadian national pride within Quebec rose substantially across the same period.

The corridor is designed to remain operationally robust under stressed federal scenarios — but the federation is the precondition. The CPSP fleet will sail under a Canadian flag for forty years. The flag is the assumption.

10. POLITICAL FEASIBILITY AND CHAMPIONS

The corridor's political feasibility is materially stronger in mid-2026 than at any point since the bilateral relationship was elevated to a Comprehensive Strategic Partnership in 2022. The institutional plumbing of §6 is in place; the procurement decision of §4 is imminent; the operational demonstration of §3 is in progress. The political champions in both capitals are aligned.

Ottawa: the federal architecture

- **Prime Minister Mark Carney** — Liberal, sworn in March 2025; 169-seat minority government on 43.8 percent of the popular vote (April 2025); the Davos January 2026 doctrine of strategic indispensability is the framing this paper inhabits
- **Minister of Foreign Affairs Anita Anand** — co-host of the 25 February 2026 2+2 Ministerial; signatory on the Agreement on the Protection of Military and Defence Classified Information; co-signatory on the negotiation initiation for the Defence Cooperation Agreement
- **Minister of National Defence David McGuinty** — co-host of the 2+2 Ministerial; lead on the Defence Cooperation Agreement negotiations; institutional champion of the SDCP
- **Minister of Energy and Natural Resources Tim Hodgson** — former Goldman Sachs Canada chief executive; lead on the energy and critical-minerals files cited in §5
- **Minister of Industry Mélanie Joly** — co-signatory on the January 2026 Canada–Korea Industrial Cooperation Committee MOU
- **Secretary of State for Defence Procurement Stephen Fuhr** — political oversight of the CPSP; visited the Hanwha Changwon facility February 2026
- **Doug Guzman, CEO, Defence Investment Agency** — procurement-organ leadership; House of Commons Defence Committee testimony on the corridor evaluation grid
- **Dawn Farrell, CEO, Major Projects Office** — institutional vehicle for converting policy into final investment decisions

Seoul: the Republic of Korea architecture

- **President Lee Jae-myung** (Democratic Party, inaugurated 4 June 2025) — explicit policy alignment with Canada on critical minerals, clean energy, and defence cooperation
- **Minister of Foreign Affairs Cho Hyun** — co-host of the 2+2 Ministerial; signatory on the 25 February 2026 instruments
- **Minister of National Defense Ahn Gyuback** — co-host of the 2+2 Ministerial; lead on the Korean side of the Defence Cooperation Agreement negotiations
- **Minister of Trade, Industry and Energy Kim Jung-kwan** — visited Canada in January, March, and May 2026 specifically in support of the Hanwha–HHI CPSP bid; co-signatory on the Industrial Cooperation Committee MOU
- **Defense Acquisition Program Administration (DAPA)** — counterparty institution to the Canadian DIA
- **Hanwha Group leadership** — Glenn Copeland, CEO, Hanwha Canada; Son Jae-il, CEO, Hanwha Aerospace — operational champions of the CPSP bid and industrial-offset architecture

The diplomatic channel and the sequencing

The Canada–Korea diplomatic channel is dense, regular, and explicitly institutionalised. The biennial 2+2 Ministerial mechanism (next meeting: Republic of Korea, 2028) provides the structural anchor. Director-General-level policy talks, Joint Materiel and Joint Defence R&D Committees, and expanded Navy/Army/Air Force/Space staff talks operate continuously between ministerial meetings. The Defence Cooperation Agreement negotiations, once concluded, will provide the treaty-grade legal anchor for all subsequent corridor execution.

Sequencing through end-2026:

- **May 2026** — ROKS *Dosan Ahn Chang-ho* operational demonstration at Esquimalt (23 May–2 June); Industry Minister Kim Jung-kwan's third Canada visit (5 May)
- **June 2026** — CPSP final-contractor selection; binary inflection point
- **Summer 2026** — RIMPAC integration with Korean platform; corridor at Pacific scale
- **End-2026** — Defence Cooperation Agreement negotiations concluded; SDCP Action Plan first-year deliverables completed

The political channels are operational. The procurement decision is the inflection.

11. RISKS AND FAILURE MODES

Beyond the stress scenarios analysed in §7, the corridor faces specific structural risks during procurement, build-out, and operational lifetime. The material failure modes:

Procurement-decision political volatility

The CPSP final selection in June 2026 may be politically influenced beyond the published evaluation grid. **Mitigation:** the published 50/20/15/15 weighting and Doug Guzman's published commitment to keep elected officials away from the evaluation process — "for their protection and for the protection of the process" — provide institutional insulation; the ROK's K-Defense Strategy and Korean ministerial-level engagement provide diplomatic counterpressure.

Industrial-offset execution gap

Hanwha's APMA and Algoma commitments must convert from MOU to operational facilities within reasonable timeframes. **Mitigation:** the Melbourne factory precedent (2-year build, ~1,000 employees) demonstrates execution capacity; the Algoma beam mill is non-contingent and proceeds regardless of CPSP outcome; APMA member firms have existing manufacturing capacity to deploy.

Supply-chain disruption

Helium, rare earths, and advanced-lithography components are sourced from constrained jurisdictions (Qatar, China). **Mitigation:** §5's critical-minerals corridor build-out is the structural mitigation; Canadian processing-capacity expansion under the 2023 MOU and 2026 Industrial Cooperation Committee is the operational response.

Korean fab-capacity disruption

The Korean labour shortage threatens HBM and semiconductor production. **Mitigation:** §5's co-mining and co-production framework explicitly addresses this; Hanwha's Australian Melbourne factory precedent is replicable in Canada; the Defence Cooperation Agreement may include defence-industry workforce-mobility provisions.

Cyber and operational security

Submarine procurement, integration, and sustainment generate cyber attack surface across two governments and dozens of industry partners. **Mitigation:** the Agreement on the Protection of Military and Defence Classified Information (signed 25 February 2026) provides the legal framework; the inaugural Canada–Korea Cyber Policy Consultations (March 2026) provide operational coordination; CSE and the ROK National Intelligence Service operate established working-level cooperation.

CPSP programme-stage delay

Procurement-to-delivery on submarine programmes typically spans 5–10 years; CPSP is a 30+ year programme. **Mitigation:** the 50-percent sustainment weighting is itself the principal protection — sustainment infrastructure is built in advance and can absorb delivery-schedule slippage. The 2+2 Ministerial mechanism provides political-level escalation capacity.

Bilateral political reversal

Either Ottawa or Seoul may experience electoral reversal during the corridor lifecycle. **Mitigation:** the Defence Cooperation Agreement (treaty-grade) is the durability mitigant; Hanwha's existing Canadian industrial-partner network (CAE, Gastops, Curtiss-Wright INDAL) creates economic constituencies for treaty maintenance; the SDCP biennial 2+2 mechanism provides scheduled political renewal.

Net assessment

The corridor's risks are concentrated in execution and bilateral political durability rather than in architecture. Each risk has an established mitigation pathway. The architecture is buildable. The decision is the only remaining variable.

12. CONCLUDING SYNTHESIS — THE THREE-RAIL ARCHITECTURE COMPLETE

The case presented in this paper is straightforward.

Korea is sending its strategic-deterrent lead vessel 14,000 kilometres across the Pacific to demonstrate the platform that anchors a CAD 100-billion bilateral procurement programme. Canada has institutionalised the bilateral defence relationship through twelve years of treaty-grade and treaty-adjacent agreements culminating in the Defence Cooperation Agreement now under negotiation. The Hanwha-HHI consortium has stacked the procurement bid with industrial offsets — beam-mill investment, armoured-vehicle manufacturing, automated-vehicle production — that are the substance of the corridor. The procurement decision in June 2026 is the structural commitment device.

The corridor closes the three-rail Pacific architecture. The financial rail (Canada–Korea, Working Paper No. 1's CKPIF) provides the institutional capital for Pacific corridor infrastructure. The energy and compute rail (Canada–United States, Working Paper No. 2's compact) provides the AI training and inference capacity that requires Canadian dispatchable hydro and U.S. urban-edge inference siting. The defence-industrial rail (Canada–Korea, this paper's corridor) provides the security commitment device that converts the financial and energy architectures into a complete middle-power posture.

The three rails are not parallel. They are interlocked. Each rail's counterparty depends on the other two for substantive returns. Each rail's collapse undermines the other two. Korean institutional capital (NPS, KIC, Korea Post, life insurers) anchors WP1's financial rail; Korean industrial capacity (Samsung, SK Hynix, Hanwha, HD Hyundai) demands Canadian critical minerals and shipyard-grade steel; the U.S. AI infrastructure (WP2's compact) requires the same Korean HBM that depends on the same Canadian feedstock. The architecture is buildable in 2026 because every component already exists in operational form.

The federation is the asset that makes all three rails operational. Provincial separatism breaks the counterparty stack on which all three bilateral compacts depend. The 2025 empirical record indicates that external pressure has consolidated rather than fragmented the federation; the structural mathematics of secession (forthcoming in NPSI Briefing Note No. 2) make the case prohibitively expensive on its own terms.

Sequencing through 2026:

- **23 May–2 June** — Esquimalt operational integration; bilateral defence demonstration at scale
- **June 2026** — CPSP final-contractor decision; binary inflection point
- **Summer 2026** — RIMPAC integration with selected Korean platform
- **End-2026** — Defence Cooperation Agreement negotiations concluded; treaty-grade anchor in place

The procurement decision is the commitment device. The submarine is the symbol. The corridor is the architecture.

The Pacific architecture is now built from three interlocking rails — financial, energy-and-compute, and defence-industrial. Each rail makes the other two durable. The corridor is what makes the architecture more than the sum of its papers.

— §12, CONCLUDING SYNTHESIS

ENGAGE WITH THIS WORKING PAPER

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