International Cooperation to Expand the Industrial Base and Enable Burden Sharing

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See additional contributions credits acknowledging speakers, panelists, and workshop participants.

EXECUTIVE SUMMARY

The U.S. Department of War's 2025 Acquisition Transformation Strategy frames Allies and Partners not as recipients of U.S. capability but as integrated partners in capitalization, acquisition, production, and sustainment. It explicitly aims to deliver surge capacity to them, unifies arms transfer and security cooperation to enable burden-sharing, and expands the framing of the industrial base to include Allied suppliers, thereby strengthening global interoperability and joint capability delivery. The Promoting American Military Sales Task Force (colloquially referred to as "The Task Force"), co-led by Under Secretaries at the Departments of State, War, and Commerce, provides the governing framework.

MITRE convened government, industry, and research leaders at Beyond Barriers: Acquisition on a War Footing in April 2026 to translate this strategic direction into specific, actionable recommendations. This paper synthesizes the findings of that forum and an embedded workshop focused on improving how Allies and Partners collectively aggregate demand and link global supply chains.

The forum identified eight cross-cutting imperatives for allied and partner integration:

- Govern allied integration through a Coordinated Orders and Munitions Partner Allied Capacity Taskforce (COMPACT), a proposed Allies and Partners organizing architecture aligned to ATTF that aggregates demand, coordinates sub-tier suppliers, standardizes C2 systems, and links Indo-Pacific partners to NATO mechanisms.
- Rebuild the industrial base through public–private collaboration that prioritizes scale, sustainability, and standardized production over bespoke approaches. Apply lessons from Freedom's Forge and successful allied models (Italy, Japan, South Korea).
- Treat innovation, industrial mobilization, and quality as mutually reinforcing pillars of long-term security and competitiveness.
- Streamline International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR), and technology security processes through annual control list updates, targeted country-based exemptions, and increased interagency automation to accelerate Foreign Military Sales (FMS) and Direct Commercial Sales (DCS), co-development, and trusted exports.
- Leverage the Foreign Procurement Group, AUKUS, and other partnership structures to drive interoperability, affordability, and shared industrial capacity.
- Redefine the value of defense exports and programs in terms of readiness, sustainment, and interoperability rather than contract size or delivery dates alone. Test, validate, integrate, and scale capabilities faster across allied forces using mission engineering and open, federated ecosystems that connect legacy and new systems.
- The U.S. should better define its requests to each Ally and Partner in defense and dual-use capability investments for greater synchronization and prioritization of effort.
- Direct the Munitions Acceleration Council to assign lead agencies for each of its 14 munitions, manage cross-cutting metrics, update its list semi-annually, and create a hub-and-spoke process that integrates Allied and Partner scaling options.

These imperatives were applied specifically to the IAMD and C-UAS supply chain because they are the most urgent and impactful defense-industrial challenge

facing alliances today. Unfavorable cost ratios, rapidly depleting magazine depths, and chronically low production rates make this the critical near-term test case for allied industrial integration. Prioritized actions are organized around the following four lines of effort:

1. Aggregate foreign demand, coordinate multilateral procurement options, and develop marketplace ecosystems to calibrate demand signals with strengthening supply chains.
2. Strengthen industrial base capacity and supply chain resilience.
3. Optimize production, sustainment, protection of Intellectual Property, and interoperability standards.
4. Shift DSCA/FMS to a wartime footing and modernize processes.

The 27 recommendations that follow address supply chain scale, interoperability, resilience, cost, and delivery speed for U.S. and allied warfighters—with direct applicability to broader industrial base growth beyond IAMD and C-UAS. While these recommendations are developed for the U.S. Department of War to execute in conjunction with the Departments of State and Commerce, successful implementation will depend on consultation, collaboration, aligned commitment, and swift action in tandem with Allies and Partners.

THE PROBLEM FRAMING: IAMD, C-UAS AND BEYOND

Recommendations were initially reviewed through the lens of IAMD and C-UAS supply chain and demand challenges, but workshop participants frequently shifted to considerations for applications across a broader range of systems and capabilities that the U.S., Allies, and Partners are seeking to acquire faster, in larger numbers, and at lower costs. Thus, it is instructive to understand specific problems that drove the group to these outcomes even though recommendations should be considered for wider acquisition and sustainment systemic changes and opportunities:

- **Demand fragmentation at the global level.** Allied nations procure similar interceptors and air defense systems through dozens of independent national programs operating on different budget calendars, appropriation rules, and threat assessment cycles. A Japan SM-3 request and a NATO European request compete for the same Raytheon production slot in the same fiscal year with no coordination. Unlike 155mm, which has broad multi-nation demand and a simpler production base, IAMD systems require a multi-layer architecture (long/medium/short/C-UAS). Each layer has its own industrial base, suppliers, procurement timelines, and usually a single supplier of "all up rounds" (AUR).
- **Industrial concentration at both the prime and sub-tier levels.** The IAMD interceptor industrial base is more concentrated than almost any other category of defense production. Solid Rocket Motors (SRMs) are manufactured primarily by two companies in the U.S. (Northrop Grumman and L3Harris); a single HTPB-45M binder supplier exited the market in 2025 with no qualified replacement; and Boeing delivered over 500 PAC-3 seekers in 2024, a record, yet this number was still not enough to avoid delivery delays to Japan.
- **Regulatory and political friction that compounds industrial fragility.** ITAR restrictions on the most sensitive IAMD components, the antiquated FMS IT enterprise (described by participants as "1990s MS-DOS-based capabilities"), and the structural mismatch between FMS, designed to build partner capacity and not to sustain wartime expenditure, all amplify production bottlenecks. Other challenges include late demand signals from government to industry and low order numbers contributing to a reduction in the industrial base.
- **Adversarial supply chain dependency, particularly with the People's Republic of China (PRC).** In the C-UAS domain, the U.S. and Allies face a structural dependency on PRC supply chains for drone components and critical minerals, including rare earth elements. China restricted exports on seven rare earth elements in April 2025, directly affecting precision guidance, electric motors, radars, and seeker components. As of late 2025, most Blue UAS-certified drones still contained Chinese-sourced motors.

Line of Effort 1:

Aggregate Allied Demand, Coordinate Multilateral Procurement Options, and Develop Marketplace Ecosystems to Calibrate Demand Signals with Strengthening Supply Chains.

The workshop identified that the Department of War is already building "an integrated sight picture of aggregated U.S. and foreign demand," but the question of how that picture is built, who has access, and how it is shared with Allies, Partners, and industry requires multiple steps to break out of the traditional model. Notably, applying AI tools will significantly speed progress.

Recommendations

1. **Balance efforts on supply and demand by using existing political and operational forums to aggregate demand signals across Allies and theaters.**

   To aggregate demand effectively, the U.S. Government should direct existing forums, including the NATO Defense Planning Process, the Indo-Pacific Quad security dialogue, the Australia-Japan-U.S. Trilateral Defense Ministers' Meeting, and bilateral Security Consultative Committees, to produce harmonized, system-family-level demand projections for IAMD and C-UAS on an annual cycle. These projections should feed directly into the Department of War's emerging integrated demand picture and be shared with industry primes and sub-tiers at the appropriate classification level.

   The SM-3 Block IIA co-production program demonstrates the enabling power of a predictable, multi-year demand signal: combined U.S.-Japan demand certainty over a decade-long horizon unlocked prime and sub-tier capital investment that would have been commercially unjustifiable against a single-nation order stream. The NATO Sea Sparrow Program Office provides a second template: by centralizing procurement across 11 member nations (plus Japan as a licensed producer), the office generates sufficient aggregate demand to sustain distributed co-production, co-sustainment, and documented work-share arrangements through three successive missile system upgrades. Institutionalize these models across additional capability areas by developing 'international marketplace ecosystems' that make allied demand visible, aggregable, and actionable for industry planners.

2. **Better use current authorities to allow nations to pool or transfer funds for collaborative investment from development and testing through production, procurement, and fielding, enhancing interoperability.**

   Existing U.S. and allied legal authorities, including Section 333 of Title 10, Foreign Military Financing (FMF), the Coalition Solidarity Fund, and NATO's Multinational Multi-Role Tanker Transport Fleet (MMF) model, provide partial but underutilized frameworks for pooled investment. The U.S. Government should work with Congress and allied finance ministers to expand and streamline these mechanisms so that participating nations can pool appropriated funds for shared investment from development and testing through production, procurement, and fielding.

   Key reforms should include: authorizing multi-year pooled procurement accounts that survive individual national budget cycles; enabling allied partners to contribute funds directly to U.S. production contracts as co-investors rather than as downstream purchasers; and creating a standardized cost-sharing formula based on each nation's threat exposure, GDP, and existing inventory levels. The European Peace Facility's reimbursement model for Ukraine support, while imperfect, demonstrates that allied pooling mechanisms can be operationalized quickly when political will is present. A similar construct for IAMD and C-UAS co-investment would significantly expand the production capital available to prime and sub-tier contractors/suppliers without requiring each nation to sustain independent procurement pipelines.

3. **Leverage the U.S. Under Secretaries' Promoting American Military Sales Task Force to identify priority capability areas and stand-up the Coordinated Orders and Munitions Partner Allied Capacity Taskforce (COMPACT) as a global corollary to the Task Force as a voluntary, modular multilateral governance architecture linked to existing structures.**

   COMPACT should be established within existing institutional frameworks, to include NATO DIPB, ESSI, NSPA, PIPIR, and AUKUS, rather than as a new standalone organization. Defense enterprises should participate to promote coordination. COMPACT would be the organizing architecture that aggregates demand, coordinates sub-tiers, standardizes C2, and links Indo-Pacific partners to NATO mechanisms. Critically, it is designed to complement, not replace, these existing bodies. None of those existing bodies simultaneously addresses Indo-Pacific inclusion, SRM/energetics visibility, sub-tier engagement, C-UAS/DEW coordination, IBCS/C2 standardization, and multi-year demand signaling, whereas COMPACT would.

   Depending on how it fits into existing structures, COMPACT's membership could be structured in tiers, with Tier 1 founding members committing to demand disclosure, budget authority transparency, and co-production participation. Workshop participants noted that the current political environment, with unprecedented appetite for structural change and allied defense budgets at historic highs, makes this the optimal moment to act.

4. **Use initial funding (including options such as Defense Production Act (DPA) and Defense Exportability Features programs) to launch COMPACT, establish a permanent program office (hub) and coalition leads (spokes), and deliver initial multinational coordinated orders within six months as a proof of concept.**

   The single most consistent theme in the workshop was institutional: every good idea in this space eventually collides with the question of which program office will host it, fund it, and staff it. Participants noted that program offices are incentivized to optimize their lead service's requirements, not to pursue multinational industrial base collaboration. The ATS commitment to allied and partner engagement must be backed by a clear organizational home with dedicated resources. The Munitions Acceleration Council, DSCA reform efforts, and OUSW(A&S) acquisition transformation strategy work should be explicitly connected to this function.

5. **Require COMPACT to initiate a multinational demand signal protocol within existing allied structures (NATO Defense Production Action Plan, etc.).**

   This protocol should encourage each participating nation to submit an initial multi-year procurement forecast by interceptor and sensor system family, to be reviewed and updated annually. The SM-3 Block IIA co-production program, which demonstrated that combined U.S.-Japan demand certainty over a decade-long horizon enables prime and sub-tier capital investment, should serve as the institutional template. As this arrangement evolves, it is showing the potential to provide excess capacity to expand production beyond the long-term forecasts of the U.S. and Japan. The PAC-3 7-year framework, which added 1,400 interceptors per year by adding a predictable, multi-year demand signal, provides further evidence.

6. **Leverage the NATO Sea Sparrow Program Office centralized procurement model for additional IAMD system families, and further identify and leverage other existing user groups as deliberate demand aggregation platforms.**

   The NATO Sea Sparrow Program Office centralizes all procuring for member nations, with the U.S. Program Manager contracting on behalf of all participating nations. This model (multinational distributed co-production, co-sustainment, multi-year procurement, and documented work-share arrangements) already exists and has been refined through three missile system upgrades. COMPACT should formalize and extend this model to additional system families rather than building parallel structures from scratch, similar to the International User Groups that exist for Standard Missile, RAM, P-3, P-8, and MH-60R for the Department of the Navy.

Multinational user communities already operate multi-year procurement frameworks, have handled obsolescence issues, and have established MOUs that could serve as reference documents. The NATO Sea Sparrow Program Office, with 10-plus members and distributed co-production across multiple upgrades, represents a proven multinational co-production model that predates and complements the Coordinated Orders and Munitions Partner Allied Capacity Taskforce (COMPACT).

7. **Work with NATO to declassify aggregated (not nation-specific) capability demand numbers, to include interceptor demand, for disclosure to industry.**

   NATO Headquarters is already working toward issuing an unclassified list of aggregated demand figures to send a production signal to the industrial base. Beyond aggregated demand, however, countries would need to provide funding forecasts and profiles to industry and government that would allow for effective long-term planning. Nations may be concerned about revealing exact procurement quantities, but an aggregated, family-level demand disclosure at a classified level can be shared with prime contractors and qualified sub-tier firms without compromising national security. The NSPA is already framing groups of 12–14 nations whose combined buying represents sufficient scale to drive investment.

8. **Identify and empower "capability coalitions" and lead nations (Ukraine Defense Contact Group and Capability Coalitions models), including NATO–Ukraine joint ventures that integrate Ukraine-tested technologies and findings into NATO test and evaluation systems.**

   Ukraine's experience in the Russia-Ukraine war has produced the most operationally validated C-UAS dataset in the world: 100,000 interceptor drones produced domestically in 2025 at $1,000–$2,000 per unit, with frontline units receiving 1,500 per day at peak in January 2026. Ukrainian industry has tested and discarded more C-UAS approaches in 18 months than Western programs have evaluated in a decade. Rather than treating Ukraine as a recipient of allied technology transfer, the U.S. and NATO should recognize Ukraine as a capability coalition lead that is a generator of tested, operationally validated solutions that can be integrated into allied test and evaluation pipelines.

   Specifically, the U.S. Government should work through NATO–Ukraine joint ventures for C-UAS and short-range air defense, including joint testing protocols at NATO ranges, data-sharing agreements for electronic warfare performance data, and integration pathways for Ukrainian-developed counter-drone technologies into the Blue UAS certification framework. Lead nations for other capability coalitions—Germany for tank and artillery, Norway for maritime strike, Australia for long-range fires in the Indo-Pacific—should be considered and similarly empowered through dedicated budget lines, designated program executive offices, and clear authority to enter binding co-production commitments on behalf of coalition members.

Line of Effort 2:

Strengthen Industrial Base Capacity and Supply Chain Resilience

The sub-tier vulnerability in the IAMD supply chain is the single most acute constraint and the most feasible near-term win available to policymakers. It was rated by multiple workshop participants as the area where investment would produce the greatest near-term return.

Recommendations

9. **Leverage and connect international models to incentivize companies to expand their capacity and resilience.**

   The industrial base will not expand capacity in capability areas that lack reliable demand signals and profitable margin structures (estimated at a minimum of 10%). Current acquisition policy produces the opposite conditions: fixed-price contracts with no surge provisions, no contractual incentive for primes to qualify secondary suppliers

(doing so only increases cost without capturing additional revenue), and a workforce development gap as skilled trades in solid rocket motor production and precision seeker manufacturing cannot be replaced on short timelines.

Incentive structures should include: multi-year contracts with price escalation clauses tied to verified capacity investment milestones; tax credits or DPA Title III grants for companies that qualify second-source suppliers for single-source critical components; a 'strategic industrial reserve' program that compensates dual-use manufacturers for maintaining defense-relevant production lines at a warm-base minimum; and workforce investment partnerships with community colleges and vocational programs in communities where existing prime and sub-tier facilities are located. The Italian, Japanese, and South Korean shipbuilding enabler models, which combine long-term government off-take commitments with workforce apprenticeship programs and capital investment incentives, provide proven templates for sustaining a skilled industrial workforce in high-complexity, low-volume defense production areas.

10. **Structure multi-nation cost-sharing to qualify additional suppliers for single-source component providers and/or mandate or incentivize second-source supply arrangements in defense prime contracts, including foreign sources of supply for critical sub-components.** *Example: pursue a second U.S. domestic supplier of ammonium perchlorate and to re-qualify an HTPB-45M binder alternative.*

    Currently, there is no contractual incentive for prime contractors to identify secondary suppliers because doing so increases cost. The only model identified in the workshop involved an Australian contractor that could retain savings from qualifying a secondary supplier, but only until the next contract cycle reset the price. Contracts should include provisions that incentivize primes to develop and maintain qualified secondary and tertiary suppliers, especially for components where single-source risk is known.

    AMPAC remains the sole U.S. producer of ammonium perchlorate; a single adverse event would simultaneously halt THAAD, PAC-3, SM-3, SM-6, and GMLRS production. U.S. investments to date, including a $1B L3Harris SRM investment in January 2026, $32.7M in DPA Title III funding in December 2025, $33.5M in DPA SRM funding in September 2025, and $250M in reconciliation funds for the SRM base, are necessary but insufficient for the allied sub-tier problem. Multi-government off-take commitments are required to justify the capital investment that no single buyer can support alone.

11. **Use Defense Production Act (DPA) Title III and the Development Finance Corporation (DFC) to invest in critical minerals processing capacity overseas.**

    China has dominated the mineral processing market, allowing it to restrict exports on seven rare earth elements in April 2025 that are used in precision guidance, electric motors, and seeker components. The Pentagon should continue its investment to expand domestic production while directing the DFC to fund processing and refining capacity in allied nations for key elements such as gallium nitrate, rare earth dopants, and specialty optical materials. The bottleneck is not the raw element but the processing and refining capacity.

12. **Structure warm-base surge capacity contracts and consider incentives for dual-use companies. For NASAMS, IRIS-T SLM, and PAC-3, consider pre-negotiated surge activation terms and allied allocation rules.**

    Warm-base contracts must flow financing to sub-tier suppliers, not just to prime contractors. Workshop participants repeatedly cited examples of primes receiving warm-base funds that never flowed downstream to tier-2 chemical suppliers, seeker manufacturers, or SRM propellant producers. Contract structures must require documented sub-tier funding flows with verification mechanisms. Expand use of warm-base contracts, especially with dual-use firms in the U.S. and Allied nations, replicating successful shipbuilding and enabler models (e.g., Italy, Japan, Korea).

The lesson from the January 2026 PAC-3 7-year framework (scaling from 600 to 2,000 interceptors/year) and the THAAD ramp (96 to 400/year over seven years) is that each year of delay in capacity investment costs approximately 1,400 PAC-3 MSEs and 300 THAAD interceptors. A warm-base contract maintains a production line at a floor quantity with a premium payment from multiple nations, pre-negotiated surge activation conditions triggered by stockpile thresholds rather than ad hoc negotiations, and allocation rules established in peacetime.

13. **Conduct a direct, structured adversarial supply chain dependency assessment for C-UAS and DEW supply chains.**

    Workshop participants noted that specialty optical materials, rare earth dopants for fiber laser gain media, and precision photonic components all carry significant PRC exposure in DEW supply chains, yet no systematic allied assessment exists. A MITRE-led battery supply chain vulnerability analysis was cited as a model for the type of risk-mapping analysis needed. This should be expanded across all major IAMD and C-UAS sub-tier components.

14. **Launch a Solid Rocket Motor (SRM) and Energetics Consortium with Japan, South Korea, Norway/Nammo, and Germany as initial members.**

    The consortium's first deliverable should be a comprehensive sub-tier SRM risk map covering all SRM-dependent interceptor programs across Tier 1 and 2 Allies—quantities by motor type over five years. This maps directly to a workshop whiteboard recommendation to develop 'risk maps' and 'sub-tier commercial engagement' as independent priority actions.

15. **Conduct regular global market scans and continue to accelerate funding of novel entrants and non-traditional defense companies for C-UAS innovation through existing vehicles including OTAs, SBIRs, and the Exportability Features Program.**

    The Defense Production Act Title I and III authorities, the Exportability Features Program, and the SBIR structure each provide mechanisms to draw non-traditional companies into C-UAS production. Ukraine's demonstrated capacity of 100,000 interceptor drones produced in 2025 at $1,000–$2,000 each, with front line units receiving 1,500 per day in January 2026 represents both a model for low-cost mass production and a potential allied supply source through a formal Tier 2 Partnership Agreement.

Line of Effort 3:

Optimize Production, Sustainment, Intellectual Property, and Interoperability Standards

Scaling allied production capacity is necessary but insufficient if systems cannot operate together, be sustained across borders, or be co-produced by partners who lack access to the underlying technical data. Workshop participants identified that the most durable constraint on allied IAMD and C-UAS integration is not budget or political will. Rather, it is the combination of proprietary lock-in, mismatched interface standards, and IP ownership structures that prevent allied manufacturers from contributing meaningfully to shared production lines. Interoperability must be designed in, not retrofitted; and co-production requires government-owned data rights that can be licensed to vetted partners faster than current ITAR-adjacent processes allow.

Recommendations

16. **Match production (aggregated demand) signals with sustainment, maintenance, and storage needs, using data analytics and AI where appropriate.**

    Demand aggregation for production is necessary but not sufficient: allied systems require sustained maintenance, calibrated storage environments, and predictable sustainment supply chains that are as vulnerable to disruption as production supply chains. A PAC-3 interceptor that is produced but inadequately stored, maintained, or supplied with replacement seekers provides no operational value. The Department of War should require that COMPACT's multinational demand signal protocol cover the full lifecycle—not only production

quantities but also maintenance intervals, storage footprints, and sustainment sub-tier requirements—so that allied logistics commands can plan against a common demand baseline.

Data analytics and AI-assisted tools should be deployed to continuously monitor sustainment pipelines alongside production pipelines. MITRE supply chain risk modeling capabilities, demonstrated in the battery supply chain vulnerability analysis cited by workshop participants, provide a model for the type of continuous, AI-assisted monitoring function that could identify sustainment chokepoints before they degrade readiness. Australia's role as the designated co-sustainment hub for allied IAMD systems in the Indo-Pacific (Rec. 22) makes it a natural host for the regional sustainment analytics node, while the NATO Support and Procurement Agency (NSPA) performs the equivalent function for European systems.

17. **Use international forums to establish Modular Open Systems Approach (MOSA) standards and agreements as early as possible to drive interoperability and modularity across Allies and Partners.**

    Interoperability is not achieved by agreement alone—it requires that systems be designed from the outset with open, standardized interfaces that allow components from multiple national suppliers to be integrated without bespoke engineering. The Integrated Battle Command System (IBCS) demonstrates the operational value of a government-owned open interface standard: by publishing government-owned Interface Control Documents, IBCS enables any sensor or effector that meets the standard to join the allied kill chain without proprietary modification.

    The U.S. Government should use existing international forums—NATO's C3 Board, the AUKUS Advanced Capabilities working groups, and bilateral defense science and technology agreements with Japan, South Korea, and Australia—to establish Modular Open Systems Approach (MOSA) standards for IAMD and C-UAS system families as early in the acquisition lifecycle as possible. Standards established early prevent proprietary lock-in; standards imposed retroactively require costly re-engineering. Specific near-term actions should include: adopting a common data standard for IAMD engagement coordination across NATO member systems; extending the IBCS Interface Control Document framework to AUKUS partner systems; and establishing a joint MOSA working group under COMPACT with industry participation from prime contractors across all five LOE partner nations.

18. **Improve licensing coordination to expand government purpose rights while protecting intellectual property.**

    The current U.S. Government purpose rights framework is a structural impediment to allied co-production. When a U.S. defense contractor owns the technical data package for a critical sub-component, allied partners cannot independently manufacture that component even when both governments have agreed in principle to co-production. Norway's Naval Strike Missile model—where the Norwegian government owns the IP and directs Kongsberg on what to share, with whom, and on what timeline—enables faster co-production decisions than the U.S. contractor-ownership model because the government can act without re-negotiating commercial licensing agreements for each new partner.

    The Acquisition Transformation Strategy's movement toward expanded government purpose rights should be accelerated with specific provisions for allied licensing. This should include: a standard 'allied co-production license' clause inserted into all new IAMD and C-UAS development contracts, granting the government the right to sublicense specified technical data packages to vetted Five Eyes, NATO, and Major Non-NATO Ally partners; a mandatory IP disclosure requirement during source selection, so that evaluators can assess whether a proposed technical approach will be licensable to allied co-producers; and a streamlined interagency process for licensing decisions that avoids the multi-year delays currently imposed by ITAR-adjacent technology security reviews.

19. **Distinguish between genuine co-development, co-production and co-assembly, and pursue the first two.**

    Co-assembly, where partner countries receive all U.S.-manufactured components for final integration, places identical stress on the same U.S. supply chain while adding geographic complexity. True co-development and co-production, where allied partners design and manufacture components that alleviate specific U.S. supply chain gaps, is the model worth scaling. Japan's co-production of SM-3 Block IIA seekers, kill vehicles, and SRM sub-assemblies exemplifies the right approach because it began as a co-development effort that evolved into co-production program.

20. **Accelerate interoperability integration. Consider Integrated Battle Command System (IBCS) proliferation across allied nations through a formal interoperability certification regime.**

    The Integrated Battle Command System (IBCS) is the only operational allied C2 capable of cueing any launcher to any sensor across national boundaries. Poland achieved Full Operational Capability in December 2025 as the first NATO ally, and MoUs with the UK (Northrop-MBDA, November 2025), Germany, South Korea (LIG Nex1), and Taiwan (NCSIST) signal growing demand. However, uptake is constrained by cost, ITAR restrictions on government-owned Interface Control Documents, and the absence of a multilateral interoperability certification regime. A government-owned ICD-based open interface standard would prevent sole-source lock and enable any IBCS-compatible national system, including future DEW effectors, to join the allied kill chain.

21. **Establish Australia as the primary co-sustainment hub for allied IAMD weapon systems in the Indo-Pacific.**

    Australia's GWEO enterprise and existing co-production partnerships position it as the logical host for regional maintenance, repair, and overhaul that currently drives production capacity back to Tucson and Huntsville. Workshop participants noted that using allied maintenance capacity to sustain existing systems frees U.S. production facilities to increase throughput. AUKUS Pillar II's ITAR-free framework within the three partner nations provides the legal vehicle for the necessary technology access.

22. **Use the April 2025 FMS Reform Executive Order (EO 14268) to advance Missile Technology Control Regime (MTCR) Category I reform for IAMD seeker, kill vehicle, and propulsion co-production with qualified non-FVEY Allies.**

    Historical ITAR restrictions on seekers, warhead guidance, and kill vehicle technologies have prevented the distributed co-production achievable with less-sensitive munitions. The regulatory outcome under EO 14268 is not yet settled, but the workshop reached consensus that ITAR/MTCR reform, not just for assembly activities but for genuine component-level co-production, is essential to scaling allied production capacity. The SM-3 Block IIA model, navigated over 25 years with Japan, provides the template for which components can be transferred and to which partners.

23. **Support the creation of a dedicated international program office for low-cost precision-guided munitions, independent of existing single-service program offices.**

    Workshop participants identified that every existing IAMD program office's primary customer is its lead service, and that no existing program office has the mandate, resources, or incentive to conduct international industrial base collaboration. A new international program office, modeled on the NATO Sea Sparrow Program Office model, should be established with its own resources and allied partner representation from the outset, avoiding the downstream friction points that bilateral retrofit creates. The Munitions Acceleration Council should be engaged as a key partner in this effort.

Line of Effort 4:

Shift DSCA and FMS to a Wartime Footing While Modernizing Processes

The Foreign Military Sales system was designed for a different era and remains structurally misaligned with the pace and scale of demand the current threat environment requires. Workshop participants were unequivocal that FMS is not simply slow. Rather, it is optimized for the wrong mission, building partner capacity in peacetime through individually managed cases rather than sustaining allied magazine depth at wartime rates. The reforms in this line of effort treat FMS modernization not as an administrative improvement but as a strategic imperative: without a restructured process backed by a modernized IT enterprise and AI-assisted monitoring, the demand aggregation and industrial investments achieved under LOEs 1 through 3 will continue to stall in the delivery pipeline.

Recommendations

24. **Employ systemic changes to DSCA to move from "building partner capacity" to "enabling wartime footing," and use this approach to overhaul FMS.**

    The Foreign Military Sales system was designed for a different era: its foundational purpose was to build partner capacity in peacetime through deliberate, relationship-managed arms transfers. The current strategic environment, characterized by active continental warfare in Europe, magazine depth depletion across the alliance, and PRC military modernization on a wartime production schedule, demands a fundamentally different operating model. FMS must shift from a capacity-building posture to a wartime sustainment posture, with processes, IT systems, and workforce authorities redesigned accordingly.

    Specific systemic changes should include: replacing case-by-case FMS case processing with pre-established umbrella agreements for priority systems that allow Allies to order against a standing framework rather than initiating a new case for each procurement; establishing a dedicated FMS Surge Operations cell within DSCA that can activate expedited processing timelines when stockpile thresholds fall below specified levels; reforming the FMS pricing model to eliminate the administrative surcharges that make FMS systematically more expensive than direct commercial sales for Allies with sophisticated procurement systems; and creating a 'wartime FMS' authority, analogous to the Presidential Drawdown Authority for U.S. stocks, that allows the Secretary of War to authorize accelerated FMS delivery timelines for Allies facing imminent threats without the standard 36-to-48-month delivery pipeline. The Promoting American Military Sales Task Force (Task Force) should serve as the senior-level governance body for this transformation, with DSCA accountable for quarterly implementation reporting.

25. **Modernize the FMS IT enterprise with a "big data" architecture specifically designed to aggregate international demand signals**.

    Workshop participants were unequivocal: FMS rests on an antiquated IT enterprise, and the current system cannot pull a consolidated demand picture across partner nations. The solution is not incremental efficiency improvement to existing workflows—it is a new enterprise IT architecture that builds the supply-chain intelligence capacity that the current threat environment requires. AI agents can and should be deployed to run continuous analysis of interdependencies and chokepoints across the supply chain 24/7.

26. **Establish a systemic friction-point monitoring function, informed by AI-assisted analysis, to provide continuous visibility into regulatory and commercial chokepoints.**

    Workshop participants noted that friction points—environmental permitting for chemical production facilities, MOFAT diplomatic clearance processing, contracting bottlenecks, export license renewal cycles—are currently invisible to planners until they halt production. A structured monitoring function, potentially hosted at MITRE in partnership with the Defense Industrial Production Board, should provide ongoing visibility into the full supply chain—from raw material producers through prime contractors—and trigger corrective action before a chokepoint halts production.

27. **Reform FMS/DSCA processes based on identification of friction and bottlenecks through better data analytics, risk mapping, and appropriate AI solutions.**

    The lesson from the January 2026 PAC-3 7-year framework (scaling from 600 to 2,000 interceptors/year) and the THAAD ramp (96 to 400/year over seven years) is that each year of delay in capacity investment costs approximately 1,400 PAC-3 MSEs and 300 THAAD interceptors. A warm-base contract maintains a production line at a floor quantity with a premium payment from multiple nations, pre-negotiated surge activation conditions triggered by stockpile thresholds rather than ad hoc negotiations, and allocation rules established in peacetime.

    Critically, warm-base contracts must flow financing to sub-tier suppliers, not just to prime contractors. Workshop participants repeatedly cited examples of primes receiving warm-base funds that never flowed downstream to tier-2 chemical suppliers, seeker manufacturers, or SRM propellant producers. Contract structures must require documented sub-tier funding flows with verification mechanisms.

CONCLUSION

Aggregating Demand and Linking Supply Chains with Allies and Partners Reduces National Security Risk and Builds Effective Arsenals Faster, at Lower Costs

The 27 recommendations in this paper are not aspirational. Every technical, institutional, and regulatory obstacle identified across four lines of effort has a known solution or a demonstrated precedent: the SM-3 Block IIA co-production model, the NATO Sea Sparrow Program Office's centralized procurement architecture, ESSI's voluntary opt-in governance, AUKUS Pillar II's ITAR-free framework, and Ukraine's demonstrated capacity to produce 100,000 interceptor drones per year at commodity prices. The industrial and institutional tools exist.

Department of War, State, and Commerce leadership, in collaboration with U.S. Congress, have made it clear that the U.S. has the political will to deploy solutions at the required speed and scale. Allied defense budgets are at historic highs. Significant increases in military spending over the past three years and projected spending levels over the next five years will continue to strengthen U.S. and allied industrial bases simultaneously. This also illuminates the necessity to make governments more resilient, cost-effective, interoperable, and capable through improving multinational coordination of supply, demand, and sustainment.

The Arms Transfer Task Force has executive-level mandate. The Acquisition Transformation Strategy has established the policy direction. NATO is already working to declassify aggregated demand figures. The PAC-3 7-year framework has demonstrated that multi-year demand certainty unlocks industrial investment. The IBCS proliferation agenda is advancing with signed MoUs across Europe, the Indo-Pacific, and the Middle East. The window for structural reform is open. As one workshop participant observed: "Two years from now, there might not be the same appetite to do something dramatically different."

The binding constraint is not technology, not law, and not money. It is the institutional friction that prevents existing authorities from being used at the speed the threat requires. COMPACT, a multinational demand signal protocol, warm-base surge contracts, MOSA standards, and a reformed FMS posture are the mechanisms by which that friction is overcome. None requires new treaty instruments. All require deliberate, senior-level actions to prioritize allied industrial integration over the path of least institutional resistance, alignment of institutions and tools that already exist, and better use of AI to leverage data for faster decision-making.

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