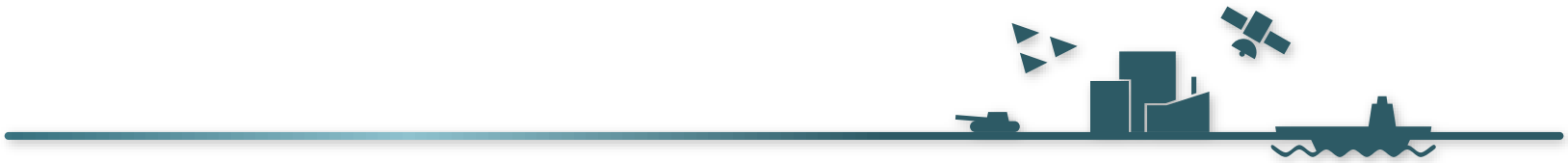


Defense Production and Technology Base

February, 2026

Acquisition, Technology, & Logistics Agency

Defense Production and Technology Base as Defense Capabilities Themselves

National Security Strategy of Japan (Excerpt) (Approved by Cabinet on Dec 16, 2022)

(iii) Reinforcing Defense Production and Technology Base as Defense Capabilities Themselves

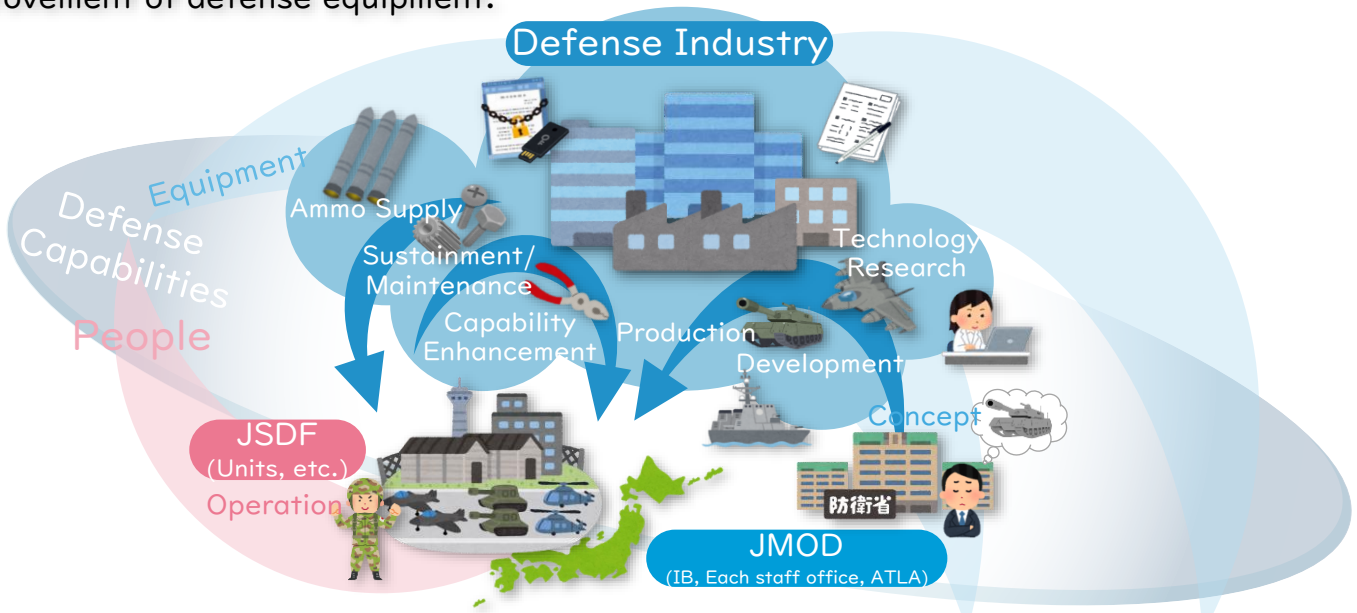
Japan's defense production and technology base is an indispensable foundation for ensuring stable research and development, production, and procurement of defense equipment in Japan.

Therefore, Japan will advance defense production and technology bases because they are characterized as defense capabilities themselves. Specifically, in order to build a strong and sustainable defense industry, Japan will promote various initiatives, including making business projects more attractive and actively leveraging the outcomes of advanced technological research in the public and private sectors for research and development of defense equipment. Japan will also reinforce the system for research and development of new defense equipment and take other measures.

National Defense Strategy (Excerpt) (Approved by the National Security Council and Cabinet on Dec 16, 2022)

I Reinforcing defense production base

Japan's defense industry is important, considered as a partner responsible for national defense along with MOD/SDF in terms of securing equipment for SDF to carry out its missions, and it is necessary to maintain and reinforce the capability to produce high performance equipment and secure high operational rates. To this end, in the defense industry, Japan will secure not only advanced technological capabilities and quality control capabilities through reinforcing the defense technology base, but also the production, sustainment, maintenance, repair, and capacity improvement of defense equipment.



Efforts Concerning Japan's Defense Production and Technology Base

Problem Awareness at the Time of Formulating the Current Three Strategic Documents (JFY2022)

- Compared to the commercial sector, the defense industry faces lower profit margins and limited prospects for growth, resulting in a decline in its attractiveness.
- Consequently, business withdrawals have occurred, undermining the defense production and technology bases and affecting the operational availability of equipment.

Increase in the Defense Budget (JFY2023-)

- Under the Defense Buildup Program, GOJ has allocated the budget necessary and sufficient to achieve a fundamental reinforcement of defense capabilities. (Project costs over the program period*: approx. ¥17.2 trillion➡approx. ¥43.5 trillion; Maintenance and sustainment costs*2: approx. ¥4 trillion➡approx. ¥9 trillion)

Launch of Various Initiatives to Strengthen the Defense Production Base

- Introduction of a new profit structure (from Apr 2023) that appropriately evaluates corporate efforts, with reference to profit levels in the commercial sector.
- Enforcement of the Defense Production Base Strengthening Act and establishment of a new system that directly subsidizes capital investment by small and medium-sized suppliers (from Oct 2023).

Revision of the Guidelines for the Three Principles on Transfer of Defense Equipment and Technology (Dec 2023 / Mar 2024)

- Defense equipment transfer is effective not only for creating a desirable security environment, but also for ensuring the growth potential of Japan's defense industry.
- This opened new export pathways for companies participating as component and parts suppliers.

* On a contract basis. Compared with the planned amount (on a contract basis) under the former plan, "Medium Term Defense Program" (JFY2019-2023), which was approx. ¥17.2 trillion (on a contract basis), the planned amount under the current plan, "Defense Buildup Program," is approx. ¥43.5 trillion.

*2 On a contract basis. Compared with the planned amount under the former plan (same as above) for "maintenance and sustainment of equipment and securing operational availability," which was approx. ¥4 trillion (on a contract basis), the planned amount under the current plan (same as above) for the same purpose is approx. ¥9 trillion.

Lessons from Ukraine / Emergence of Supply Chain Risks

Exposure of Vulnerabilities in War Sustainability

- The battle has continued for nearly four years. Ukraine has consumed at least approx. 2,000 artillery rounds per day※1
- In the U.S. and European countries, where investments in the defense industry had been sluggish, production capacity became strained due in part to supply-chain disruptions caused by the COVID-19 pandemic, exposing the vulnerability of the defense industrial base.

Responding to Warfare Using Drones / Rapid Update Cycles: Urgent Challenges

- Both Ukraine and Russia have deployed millions of low-cost drones.
- Advantages have been gained through asymmetric approaches that visualizes the battlefield and destroying the adversary's high-value assets at low cost.
- Operational update requirements at the front line are incorporated within an extremely short period (2-3 weeks) and rapidly fielded to combat units. ※2

Intensifying Supply Chain (SC) Risks

- Due to Russia's aggression against Ukraine, the situation in the Middle East, and China's export controls on critical minerals, SC risks have become increasingly evident.

※1 As of March 2024.
※2 ISW report (2024) "A Defense of Taiwan with Ukrainian Characteristics : Lessons from the war in Ukraine for the Western Pacific"

International Trends ①
-Formulation of Defense Industrial Strategies-

- As responses to Russia's aggression against Ukraine have become prolonged, the production of defense equipment and related items has been strained, bringing the vulnerabilities of the industrial base to the fore.
- Major countries have formulated "defense industrial strategies," working to rebuild and expand production capacity, realize rapid innovation cycles, and promote international supply-chain cooperation.

U.S.

- In Jan 2024, the National Defense Industrial Strategy was formulated and released for the first time.
- The strategy points out that Russia's aggression against Ukraine led to a sharp increase in demand for U.S. and its allies' weapon systems, forcing a rapid expansion of defense industrial production capacity.
- It provides incentives for spare production capacity, which is essential to respond to increased demand from allies and partners as well as to unforeseen disruptions.

EU

- In Mar 2024, the European Defence Industrial Strategy was formulated and released for the first time.
- The 'military application of civilian technologies' and the 'establishment of rapid production scaling and mass-production systems' are identified as key elements for strengthening defense posture.
- Support is provided for building spare industrial capacities that can remain readily operational in order to ensure flexibility in responding to urgent surges in demand.

Australia

- In Feb 2024, the Defence Industry Development Strategy was formulated and released for the first time.
- Russia's aggression against Ukraine has highlighted the importance of resilient supply chains with trusted partners, and has renewed recognition of the critical role of domestic production capacity and industrial base.

UK

- In Sep 2025, the Defence Industrial Strategy was formulated and released.
- The war in Ukraine has underscored that "the strength of the armed forces depends on the strength of the industrial base that supports them," particularly the importance of maintaining sufficient stockpiles of ammunition and supplies, rapid delivery by industry, and fast and continuous innovation cycles between industry and the front line.

International Trends ②
Rapid Acquisition: U.S. Acquisition Transformation Strategy-

- The U.S. Department of War has announced plans to fundamentally transform outdated acquisition processes and a weakened defense industrial base by prioritizing speed and flexibility, accepting greater levels of risk, and shifting from a compliance-driven culture to one that emphasizes rapid execution.
- The reform direction focuses on drastically reducing acquisition lead times in order to enable early fielding of capabilities.

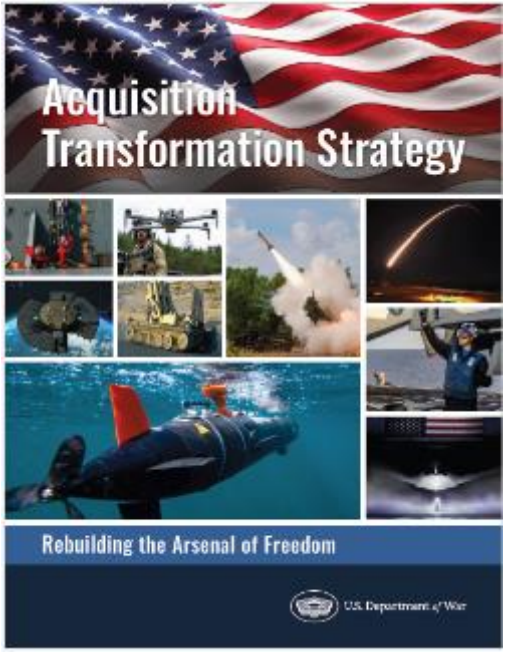
◆ Proactive Use of Innovative Contracting Approaches

Commercial Solution Openings
- -A solicitation approach for commercial technologies
- -In theory, significantly simpler and faster than traditional Requests for Proposals (RFPs)

Other Transaction Authorities
- -Contracting authority that enables extremely rapid and flexible agreements without using the Federal Acquisition Regulation (FAR)
- -Allows a seamless transition from experimentation and prototyping to production and full-scale deployment

Middle Tier of Acquisition
- -A speed-focused acquisition pathway aimed at achieving operational deployment within five years or less, with minimal development

Software Acquisition Pathway
- -A dedicated framework designed to rapidly introduce software, recognizing the fast pace of software evolution
- -Assumes continuous updates based on operator feedback, rather than delivery of a "finished product"



➡ "Search" through CSO, "contract" through OTA and MA, and "continuously improve" through SAP.

◆ Full-Scale Adoption of **Mission Engineering**

A shift away from equipment-based project management toward kill-chain-based project management aimed at ensuring the maximum employment of capabilities

= Prioritize the effective employment of capabilities across the entire operation (Capability Portfolio Management), over the standalone performance of individual equipment

Rather than treating safety and performance certification processes as absolute, the approach seeks a balance with operator needs, while deliberately accepting a certain level of risk

International Trend ③ -Positive Cycle of Defense and Economy-

▸Amid the global trend of countries increasing their military expenditures, governments have increasingly emphasized the economic benefits when explaining the necessity of defense spending to their citizens.

U.S.
2024 NIDS

・Strengthening the capabilities of the defense industry promotes technological integration between the public and private sectors, thereby enhancing the competitiveness of the overall economy.

・ Developing foreign markets for defense equipment accelerates the growth of the defense industry and generates positive spillover effects for the domestic economy.

・ Advancing dual-use technologies contributes to industrial competitiveness and the creation of employment opportunities.

・ Increasing defense expenditures in industrial regions—such as the southern and mid-western parts of the continent—will lead to job creation and support the revitalization of local industries.

UK
"Defense Dividend"
2025 SDR

・The defense industry serves as an engine of national economic growth.

・ Expanding exports of defense equipment enhances the competitiveness of domestic industries, promotes further technological development, and creates employment opportunities through the reinvestment of profits.

・ Developing dual-use technologies enables private-sector growth while simultaneously strengthening defense capabilities.

・ Defense investment contributes to improving the quality of public infrastructure, thereby reinforcing the overall national industrial base and supporting medium- to long-term economic growth.

EU
2025 Defence Industry Transformation Roadmap

・The 'military application of civilian technologies' and the 'establishment of rapid scale-up and mass-production frameworks' are key elements of strengthening defense postures.

・To ensure flexibility in responding to sudden surges in demand, support is being provided for the development of spare industrial capacities that can be kept in a state of constant readiness.

・Within the EU's largest research and development budget, Horizon Europe, which had traditionally been oriented toward "civilian" purposes, "dual-use" has been added as an eligible category for investment and financing in deep-tech start-ups (SUs) and for R&D subsidies related to digital technologies.

ROK
2024 Defense Innovation 4.0

・ Integrating private-sector technologies—such as AI, automation, cyber, and quantum—into defense equipment, and promoting defense-technology spin-offs, will enhance the overall competitiveness of the defense industry.

・ Strengthening local recruitment and industrial foundations through the development of defense supply chains.

International Trend ④ -Promoting Defense Innovation-

- Efforts are advancing to build a research and development ecosystem through industry-government-academia collaboration in order to incorporate cutting-edge science and technology into military applications.
- In particular, start-ups have rapidly increased their presence as key actors in the social implementation of advanced scientific and technological innovations. In the U.S., Ukraine, and other countries, the active utilization of start-ups in the defense sector is progressing.

【Examples Start-up Utilization in the U.S.】

Company	Main Areas / Achievements
ANDURIL Anduril	▸ Strengths in AI, autonomous systems integration ▸ Development of various UAVs and USVs, centered on the AI-enabled command and control system “Lattice OS”
EPIRUS Epirus	▸ Development of the counter-UAV system “Leonidas” using AI and electromagnetic pulses ▸ Acceleration of development through the use of SBIR and OTA mechanisms
Palantir Palantir	▸ Deployment to the U.S. military and NATO of an advanced data integration and analytics platform capable of supporting rapid and accurate decision-making for military operational planning

【Examples of Start-up Utilization in Ukraine】

Company	Main Areas / Achievements
Dwarf Engineering LLC	▸ Provision of resilience software for drones that overcomes radio-frequency jamming ▸ Enables flight without reliance on GPS, even under conditions of control-signal interference
LIFESAVER LifesaverSIM	▸ Provision of a ‘game-based, simulation-style lifesaving skills training application’ operating on mobile devices ▸ Designed to meet on-the-ground needs, including combat casualty care
SWARMER SWARMER	▸ Development of AI-controlled drone swarm (swarm control) technologies

Desired State of the Defense Production and Technology Base

① Having the ability to provide, in a timely manner and in sufficient quantities, the defense equipment necessary for a fundamental reinforcement of defense capabilities.

② Having the ability to secure production, sustainment, and maintenance capabilities that can respond to prolonged conflicts and enhance deterrence.

③ Having the ability to develop and provide equipment that supports new ways of warfare, including:

- The ability to develop and produce asymmetric equipment and equipment leveraging dual-use technologies (e.g., establishing a production base for low-cost attack drones), and
  The ability to secure rapid update cycles for defense equipment (e.g., proactive utilization of SDx)
- The ability to incorporate cutting-edge science and technology through the establishment of a defense innovation ecosystem, incl. academia and start-ups.

※ Software-Defined Anything (a collective term for technologies that are controlled and managed through software)

④ Having the ability to grasp the overall picture of the supply chain and enhance its resilience, there by eliminating SC risks.

⑤ Having the ability, as an 'entity that realizes a virtuous cycle between defense and the economy,' to make investments and actively export defense equipment and dual-use products, which also contributes to ②.

Issues for Consideration and Direction of Approaches

1 Approaches to Securing Production, Sustainment, and Maintenance Capabilities Capable of Responding to Prolonged Conflicts and Enhancing Deterrence

For example:
-Government ownership of manufacturing facilities; Examination of efficient ways to utilize development and production resources
-Strengthening supply chain resilience through diversification of procurement sources, development of alternative materials and technologies, stockpiling, and enhanced cooperation with allies and partners.

2 Response to New Ways of Warfare (Collaboration with Start-ups, academia, etc., and the utilization of dual-use technologies)

For example:
-Promoting new market entry by start-up companies and other new actors; Considering flexible contracting frameworks
-Development and production of missiles and unmanned systems through extensive use of commercial off-the-shelf components

3 Initiatives to Realize a "Virtuous Cycle between Defense and Economy"

For example:
-Strengthening the supply capacity of materials and components, incl. dual-use items, to respond to increasing demand for defense equipment
-Establishing frameworks to promote the equipment transfer; Strategic communication to encourage investment in the defense industry