Strengthening India's Defense Ecosystem: How Policy Reforms Can Unlock Manufacturing Potential

July 3, 2025

In 2020, the Indian Government sought to revolutionize the defense production ecosystem through sweeping changes to the acquisition procedure. 5 years later, India remains one of the world's largest importers of arms, with a defense production ecosystem that is abundant with blind spots. As the Ministry of Defense seeks to overhaul the entire defense ecosystem in 2025, a holistic approach must be taken, one that pivots India from a "Defense Manufacturer" to a "Defense Producer" and ensures holistic self-reliance.

Current Scenario and Problems

Defense production in India today is governed by the Defense Acquisition Procedure (DAP) 2020. Its main tenets included incentivizing OEMs to partner with Indian companies to "Make in India", the establishment of Defense Industrial Corridors

to attract domestic and foreign companies to establish themselves in India and to maximize the percentage of Indigenous Content (IC) and the Transfer of Technology (ToT) in India's defense manufacturing ecosystem. However, the DAP 2020 only scratched the surface of the larger defense production problem in India. Its hyper-focus on defense manufacturing in India is not nearly enough to realize the vision of "Atmanirbharta" in the defense production process. While 'Make in India' is crucial, there needs to be an equal and supportive focus on 'Innovate, Design and Develop in India' to enable holistic growth.

The Ministry of Defense (MoD) has declared 2025 as its "year of reforms" for the defense sector. A key aspect of this reform is revising the DAP 2020. It has set up a panel chaired by the Director General (Acquisition). Among other reasons, the need for this reform is a function of the underwhelming participation of foreign OEMs in the Indian Defense Production ecosystem, despite the goals of the DAP 2020. Central Government statistics show that FDI equity inflows from April 2000 to March 2025 for India's Defense Industries were USD 21.74 million (0.003% of the total FDI in this period). While this is an improvement from USD 10.15 million between April 2000 and March 2021, it remains an extremely small portion of India's growing FDI appetite.

A key obstacle in this regard is the DAP 2020's dual, and often conflicting, emphasis on Indigenous Content (IC) requirements and the transfer of Intellectual Property Rights (IPR) to the Indian partner. For instance, in the most preferred category of Buy (Indian-Indigenously Designed, Developed, and Manufactured) under the DAP 2020, the Indian partner of the Joint Venture (JV) must:

- Hold more than 50% ownership of the subsidiary.

- Purchase the IPR from the foreign OEM or own the systems-level IPR.

- Ensure that the platform meets the 50% IC requirement.

This means that the foreign OEM is restricted to a 49% FDI stake in the JV, must transfer their IPR, which they may be unwilling or unable to sell due to their own government's restrictions, and must also restructure their global supply chains to meet the IC threshold.

Recent progress in the defense production process is only apparent

Under DAP 2020, the government increased the FDI threshold to 74% from 49% under most pathways in the automatic route (except the most favorable IDDM pathway) in a bid to attract foreign OEMs to partner with Indian companies to manufacture in India. However, the conflicting prioritization of both IPR and IC, along with the FDI restrictions, discourages foreign OEMs from entering into meaningful JVs in India.

In 2015, under the government approval route, 100% FDI was allowed for OEMs if critical technology was transferred in the process. However, the only successful case under this category is that of Saab, which has 100% ownership of its Indian subsidiary for producing shoulder-fired rockets. Moreover, a 2022 report on the Ease of Doing Business in India's Aerospace and Defense sectors by the UK-India Business Council revealed that a lack of infrastructural support, overlapping regulatory jurisdictions, and bureaucratic delays, among other issues, remain prevalent in India. These issues affect players of all sizes and origins in the defense ecosystem.

A key objective of India's vision for the defense production ecosystem is to include private players in what has historically been a state-dominated sector. While private

companies like Tata Advanced Systems Ltd. (TASL), Larsen and Toubro (L&T), and BharatForge have made significant headway in defense platform production, this space is still dominated by the 16 government-owned Defense Public Sector Undertakings (DPSUs). In 2022-2023, out of the USD 13.65 billion accrued to defense production in India, private companies contributed only USD 2.65 billion. This contrasts with the DPSUs contributing USD 10.12 billion, while other PSUs and JVs made up the rest. On the defense Research and Development (R&D) side, the government's Defense Research and Development Organization (DRDO) remains the dominant force despite valuable contributions from private OEMs and MSMEs.

Lastly, a PIB release from March 2025 pointed out that India manufactured 65% of its defense equipment needs domestically. While impressive, it is also important to contrast this statistic with some of the key indigenous production projects and their design origins. India owns only the license to domestically produce these platforms, while the foreign OEM holds the core IPR. India not owning the original core design IPR to these primary defense platforms/weapon systems means that while we can produce and manufacture these platforms, we cannot upgrade or export them without permission from the foreign partner. This creates a huge dependency for India's defense design ecosystem and a longevity problem for our defense manufacturing ecosystem. Some instances are:

- JV between India and Russia to produce the AK-203 Assault Rifles. The core IPR for India's new standard-issue infantry rifle is owned by its Russian producer.
- Sukhoi Su-30 MKI jet engines that are assembled in India by HAL are under a licensing deal from the original Russian producer, who holds the core IPR.
- Scorpène Class Submarines are manufactured and commissioned in India under Project-75, but the original core IPR is held by the French designers of the

submarine.

Charting towards holistic self-reliance

The objective of India's defense production ecosystem today is twofold:

a. It must meet the immediate short-term needs of its armed forces by continuing to bolster its defense manufacturing base through long-lasting and impactful domestic and foreign partnerships.
b. It must meet its long-term ambitions of becoming a defense producer that can meet domestic and foreign demand through the cultivation of its defense innovation, design, and development network, which encompasses both domestic and foreign, private and public, and large and small players.

India has thus far focused primarily on the first objective. Despite the flaws in the current system, the DAP 2020 has a solid foundation. The first objective can be fulfilled by prioritizing IC requirements over IPR transfers. This would help meet the immediate needs of our armed forces while also preparing the defense manufacturing base in India for future indigenous production. The trade-off here will be relaxing the need for ToT and IPR transfer while increasing the IC requirements for platforms purchased by the Indian Armed Forces.

While this will create a gap and short-term dependency on foreign companies operating in India, it will lead to increased FDI in the defense sector, along with regional industrial ecosystem development. Another pathway for this can be further incentivization in the Defense Industrial Corridors through central tax rebates and preferred status to boost MSME and private sector participation.

Recently, the Indian government amended the rules for Special Economic Zones (SEZs) that specialize in the development and manufacturing of semiconductors. Currently, there are no notified defense-related SEZs in India. Such SEZs that specialize in defense innovation, design, and development can be crucial towards achieving the second objective, as they will allow for the concentration of talent and resources. There are several benefits to these Defense R&D SEZs: co-development with foreign designers in these SEZs will allow Indian companies to retain the core IPR of the platform they produce, it will increase private sector participation in the defense production process as they will have access to government facilities and foreign resources, foreign designers setting up in India will pass on knowledge to domestic partners and boost their design capabilities, etc.

The trade-off in this case is a significant capital investment from the government, in the form of revenue loss, and the development of shared facilities for defense design and development. The MoD will also have to relax its No Cost No Commitment (NCNC) provision to incentivize domestic and foreign participation. Additionally, the Services HQ (SHQ) will need to give the R&D SEZs preference for upcoming projects to build their capabilities. However, this also presents an opportunity for the SHQ to target the indigenous, private-public development of essential defense technologies, such as nuclear-powered platforms, jet engines, and radar systems, which are used across various defense platforms.

The implementation of these initiatives will allow India to reach its goals of defense manufacturing in the short term (by 2035) while also putting India on the path to holistic self-reliance in the defense production ecosystem in the long term (by 2050). The future of India’s defense production ecosystem stands at a crucial crossroads today. Amidst these uncertain defense futures, the MoD must chart towards a holistic self-

reliance in its “year of reforms”.