# 4th Positive Indigenisation List

**For Prelims:** Defence Public Sector Undertakings (DPSUs), Positive Indigenisation List (PIL), Micro, Small, and Medium Enterprises (MSMEs), Mission DefSpace, iDEX scheme, Defense Industrial Corridors, NETRA

**For Mains:** Status of Indigenization of the Defence Sector in India.

## Why in News?

In a significant move towards promoting self-reliance in the defence sector and reducing imports, **India's** Defence Public Sector Undertakings (DPSUs) have received approval for the **fourth** Positive Indigenisation List (PIL).

- The list comprises **928 strategically-important Line Replacement Units (LRUs),** sub-systems, spares, and components, with an import substitution value of approximately **Rs 715 crore.**

## What is a Positive Indigenisation List?

- **About:**
  - The concept of the **positive indigenization** list entails that the **Indian Armed Forces, comprising the** Army, Navy**, and** Air Force, will exclusively source the listed items from domestic manufacturers.
    - These manufacturers may include entities from the **private sector or Defense Public Sector Undertakings (DPSUs).**
  - The fourth Positive Indigenisation List follows three previous PILs that were published in **December 2021, March 2022, and August 2022**, respectively.
    - So far, 310 items have been successfully indigenised, with the breakdown as follows: **262 items from the first PIL, 11 items from the second PIL, and 37 items from the third PIL.**
    - This initiative is in line with **India's vision of** 'Atma Nirbharta' **(self-reliance)** and aims to boost the domestic **defence industry, enhance investment, and reduce dependency on imports.**
- **Indigenisation and In-house Development:**
  - To achieve indigenization, the DPSUs will utilize different routes under the **'Make' category,** focusing on in-house development through the capabilities of Micro, **Small, and Medium Enterprises (MSMEs)** and the private Indian industry.
  - This approach will provide a boost to the economy, encourage investment in the defense sector. Additionally, this **initiative will foster the growth of design capabilities** within the domestic defense industry by actively involving academia and research institutions.
- **Procurement and Industry Participation:**
  - The DPSUs are set to initiate procurement action for the items listed in the fourth PIL. To facilitate the process, Srijan Portal Dashboard has been specifically designed for this purpose.

## What is the Status of Indigenisation of the Defence Sector in India?

- **Need for Indigenization:**
  - India's arms **imports fell 11% between 2013-17 and 2018-22,** the country is still the **world's top importer of military hardware in 2022 highlighted by** a report by the Stockholm International Peace Research Institute (SIPRI).
- **Current Estimates and Targets:**
  - Current estimates place India's **defensive capital expenditure at USD 130 billion** over the next five years.
  - The defense ministry has set a **USD 25 billion (Rs 1.75 lakh crore)** turnover goal in defense manufacturing in the next **five years,** including an export target of USD 5 billion worth of military hardware.
- **Government Initiatives:**
  - **Priority Procurement: The Defense Acquisition Procedure (DAP)-2020** gives priority to the procurement of capital items from domestic sources under the Buy Indian (IDDM) category.
  - **Liberalised Foreign Direct Investment (FDI) Policy:** The FDI policy allows for **74% FDI under the automatic route in the defense industry,** and **up to 100% through Government route** wherever it is likely to result in access to modern technology.
  - **Mission DefSpace:** The Mission DefSpace has been launched to promote defense-related innovations and developments in the space sector.
  - **Innovations for Defense Excellence (iDEX) Scheme:** The iDEX scheme involves startups and MSMEs in defense innovation projects, fostering their participation and contribution.
  - **Defense Industrial Corridors:** Two **Defense Industrial Corridors** have been established in **Uttar Pradesh and Tamil Nadu,** focusing on developing defense manufacturing ecosystems and attracting investments.
- **Examples of Indigenous Defense Arsenal in India:**
  - **Tejas Aircraft:** The **Tejas** is a lightweight, multi-role supersonic aircraft designed and developed indigenously in India.
  - **Arjun Tank:** Developed by the **Defense Research and Development Organization (DRDO),** the Arjun Tank is a 3rd generation main battle tank that showcases India's expertise in armored vehicle technology.
  - **NETRA:** The NETRA is an airborne early warning and control system developed domestically, providing crucial surveillance and reconnaissance capabilities.
  - **ASTRA:** India has successfully developed the **ASTRA**, an **all-weather beyond-visual-range air-to-air missile,** enhancing the country's air defense capabilities.
  - **LCH 'Prachand':** It is the first indigenous **Multi-Role Combat Helicopter** which has potent ground attack and aerial combat capability.
  - **ICG ALH Squadrons:** In a major boost to further strengthen the capabilities of the **Indian Coast Guard, ALH Mk-III squadrons** were commissioned in Porbandar and Chennai in June and December 2022.
- **Challenges:**
  - **Technological Gap:** Developing **cutting-edge defence technologies** and acquiring advanced capabilities is a significant challenge for India.
    - The country has traditionally relied on foreign suppliers for critical defence technologies, and **bridging the technological gap requires substantial investments in research and development (R&D), as well as collaboration with industry and academia.**
  - **Infrastructure and Manufacturing Base: Building a robust defence industrial base and infrastructure to support indigenous production is a major challenge.**
    - The defense manufacturing ecosystem in India needs to be modernized, with improvements in infrastructure, technology transfer, skilled workforce development, and streamlined procurement processes.
  - **Testing and Certification:** Ensuring the quality, reliability, and safety of indigenously developed defense systems through rigorous testing and certification processes is crucial.
    - Developing **robust testing facilities and establishing effective quality control mechanisms are essential for gaining** the confidence of users and export markets.

## Way Forward

- **Create a Defense Innovation Ecosystem:** There is a need to establish a dedicated **defense innovation ecosystem** that brings together defense organizations, research institutions, startups, and technology companies.
    - This ecosystem should promote **collaboration, knowledge sharing, and technology transfer** to drive indigenous defense capabilities.
- **Defense Technology Accelerators:** Establish **defense technology accelerators that provide mentorship, funding, and resources to startups and small and medium-sized enterprises (SMEs)** working on cutting-edge defense technologies.
    - These accelerators should facilitate connections with defense organizations, offer access to test facilities, and help navigate regulatory processes.
- **Defence Skilling and Training Programs:** There is a need to develop skilling and training programs to bridge the gap between **academia and industry in defense-related disciplines.**
    - Collaborating with universities and technical institutes to design specialized courses and **certifications that align with defense technology requirements will be a significant step in this direction.**

## UPSC Civil Services Examination, Previous Year Question (PYQ)

### ***Prelims***

### Q. In the context of the Indian defense, what is 'Dhruv'? (2008)

(a) Aircraft-carrying warship
(b) Missile-carrying submarine
(c) Advanced light helicopter
(d) Intercontinental ballistic missile

**Ans: (c)**

### ***Mains***

Q. What is the significance of Indo-US defence deals over Indo-Russian defence deals? Discuss with reference to stability in the Indo-Pacific region. (2020)

Q. How is S-400 air defence system technically superior to any othersystem presently available in the world? (2021)

**Source: PIB**