



Defence India Start-up Challenge 5.0

Why in News

Recently, the Ministry of Defence launched the 5th edition of the **Defence India Start-up Challenge (DISC)** under **Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO)**.

- Thirty-five problem statements – 13 from the Services and 22 from **Defence Public Sector Undertakings (DPSUs)** – were unveiled under **DISC 5.0**. Some of which are:
- Situational awareness, augmented reality, **Artificial Intelligence**, aircraft-trainer, non-lethal devices, **5G network**, **Underwater Domain Awareness**, **Drone** SWARMS and data capturing.

Innovation for Defence Ecosystem (iDEX)

▪ About:

- It was **launched in 2018**, as an ecosystem to foster **innovation & technology development in Defence and Aerospace** by engaging innovators & entrepreneurs to deliver technologically advanced solutions for modernizing the Indian Military.
- It provides **funding/grants to MSMEs, start-ups, individual innovators, R&D institutes and academia** to carry out research and development.
- iDEX is funded and managed by “**Defence Innovation Organisation**”.

▪ Core Objectives:

- **Indigenization:** Rapid development of **new, indigenized and innovative technology**.
- **Innovation:** Creates a culture of engagement with **innovative startups to encourage co-creation**.

Key Points

▪ About:

- DISC aims at supporting **Startups/MSMEs** (Micro Small and medium Enterprises)/Innovators to **create prototypes and/or commercialize products/solutions in the area of National Defence and Security**.
- It is meant to **achieve self-reliance and foster innovation and technology development** in the defence and aerospace sectors.
- It was launched by the Ministry of Defence in partnership with **Atal Innovation Mission**.
- Under the program, **the start-ups, Indian companies and individual innovators** (including research & academic institutions) can participate.
- **DISC 5.0** will be a **massive leap towards leveraging the startup ecosystem** to develop India's defence technologies, equipment design and manufacturing capabilities.

▪ Vision:

- **Prototyping:** Help **create functional prototypes** of products/technologies relevant for

national security, and spur fast-moving innovation in the Indian defence sector.

- **Commercialization:** Help new tech products/technologies **find a market and early customer in the form of the Indian Defence Establishment.**

- **Significance:**

- It forms a link between **youth, academia, R&D, start-ups and the armed forces.**
- These challenges **will also encourage startups to become more attuned to innovative concepts and inculcate the approach of creative thinking** in India's budding entrepreneurs.

Indigenisation of Defence Sector

- **About:**

- Indigenisation is the capability of **developing and producing any defence equipment within the country** for the dual purpose of achieving **Self Reliance** and reducing the burden of imports.
 - Self-reliance in defence manufacturing is one of the key objectives of Department of Defence Production.
- **Defence Research Development Organisation (DRDO)**, Defence Public Sector Undertakings (DPSUs), **Ordnance Factory Board (OFB)** and private organisations are playing a critical role in indigenisation of defence industries.
- The **defence ministry has set a goal of a turnover of USD 25 billion in defence manufacturing by 2025** that included an export target of USD 5 billion worth of military hardware.

- **Need of Indigenisation:**

- **Reducing Fiscal Deficit:**

- India is the **second largest arms importer in the world** (after Saudi Arabia).
- Higher import dependency leads to an increase in the **Fiscal Deficit**.

- **Security Imperative:**

- Indigenisation is critical to **National Security** also.
- It keeps intact the technological expertise and **encourages spin-off technologies and innovation that often stem from it.**

- **Employment generation:**

- Defence manufacturing will lead to the **generation of satellites industries that in turn will pave the way for generation of employment opportunities.**

- **Strategic Capability:**

- Self sufficient and self-reliant defence industry **will place India among the top global powers.**
- **Nationalism and Patriotism** can increase with indigenious production of defence equipment, that in turn will **not only boost the trust and confidence** of the Indian forces but will **also strengthen a sense of integrity and sovereignty in them.**

- **Challenges to Indigenisation of Defence Sector:**

- **Lack of Private participation:**

- The defence manufacturing has been dependent **on DRDO & Defence PSUs only.**
- The participation of the private sector has been allowed only recently.

- **Lack of expertise:**

- In the Navy only, the **naval architects were recruited from IITs & were provided training in foreign countries.**

- However, the army & air force does not have such a capacity building programme.
- **Hurdles in manufacturing:**
 - Bureaucratic hurdles, Political hurdles, Shortage of human & technical resources, Lack of timely delivery.
- **Inefficient budgeting:**
 - Most of the defence budget goes towards salaries, perks & maintenance of equipment.
- **Corruption:**
 - Arms sales & lobbying reduced efficiency and effectiveness of defence spending.
- **Lack of Coordination:**
 - Lack of coordination **between academia, military & industry** and poor R&D due to lack of government funding and poor industry-academia collaboration.
- **Other Related Initiatives:**
 - [First Negative Indigenisation:](#)
 - In August 2020, the government announced that **India will stop the import of 101 weapons and military platforms** like transport aircraft, light combat helicopters, conventional submarines, cruise missiles and sonar systems by 2024.
 - [Positive Indigenisation List:](#)
 - It places **import restrictions on 108 military weapons and systems** such as next-generation corvettes, airborne early warning systems, tank engines and radars.
 - It is planned to be implemented progressively with effect from **December 2021 to December 2025.**
 - [New FDI Policy in Defence Sector:](#)
 - In May 2020, the government announced increasing the **Foreign Direct Investment limit from 49 % to 74 % under the automatic route** in the defence sector.
 - [Defence Acquisition Procedure 2020:](#)
 - It **contains policies and procedures for procurement and acquisition** from the capital budget of the Ministry of Defence in order to modernise the Armed Forces including the **Coast Guard.**
 - [Defence Industrial Corridors:](#)
 - The **defence corridors will facilitate a well-planned and efficient industrial base** that will lead to increased defence production in the country.

Way Forward

- **Private Sector boost** is necessary as it can infuse efficient and effective technology and human capital required for modernisation of indigenous defence industry.
- **In-house design capability** should be **improved** amongst the three services, the Navy has progressed well on the path of indigenisation primarily because of the in-house design capability, the Naval Design Bureau.
- The government can provide an **autonomous status to DRDO** which will improve the number of sub-contracts to the private sector and also instil confidence to private sectors.

[Source:IE](#)

