

DefConnect 2024

For Prelims: Self-Reliance, iDEX-Defence Innovation Organisation (DIO), Artificial Intelligence, Cybersecurity, Unmanned Aerial Vehicles, Acing Development of Innovative Technologies with iDEX.

For Mains: DefConnect 2024, Government Initiatives Regarding Indigenization and Defence.

Source: PIB

Why in News?

Recently, the Ministry of Defence has organised DefConnect 2024, aimed at promoting innovation, entrepreneurship, and <u>Self-Reliance</u> in defense production.

 The event serves as a platform to showcase the latest advancements in defense technology, foster collaboration between the public and private sectors, and encourage investment in defence startups

What are the Key Highlights of the DefConnect 2024?

Technology Showcase:

- The event features a technology showcase organized by <u>iDEX-Defence Innovation</u>
 <u>Organisation (DIO)</u>, where various startups present cutting-edge innovations in areas such as <u>Artificial Intelligence</u>, Robotics, <u>Cybersecurity</u>, <u>Unmanned Aerial Vehicles</u>, and Wearable Technology.
- This showcase underscores the potential of the Indian innovation ecosystem to contribute to defence technology.

Panel Discussions:

- DefConnect 2024 hosts panel discussions on pertinent topics related to defense innovation and entrepreneurship.
- These discussions provide insights into the Indian defence landscape, future trends, opportunities for startups, and strategies to promote diversity and inclusion in the sector.

Felicitation of Women Entrepreneurs:

 In recognition of the contributions of women entrepreneurs to the defense innovation ecosystem, DefConnect 2024 features a special felicitation ceremony for women entrepreneurs associated with iDEX.

iDEX Internship Program:

- As part of efforts to nurture young talent and groom the next generation of innovators, DefConnect 2024 launches a rolling internship program under the iDEX initiative.
- This program aims to provide hands-on experience and mentorship to aspiring innovators in defense technology.

Launch of Initiatives:

DefConnect 2024 witnesses the launch of various initiatives aimed at promoting innovation

and self-reliance in defence production, such as the ADITI (Acing Development of Innovative Technologies with iDEX) Scheme and DISC 11 (Defense India Startup Challenge).

• These initiatives underscore the government's commitment to fostering a vibrant defense innovation ecosystem.

Note

• Innovations for Defence Excellence (iDEX):

- iDEX, launched in 2018, is an initiative taken by the government to contribute towards modernization of the **Defence Industry.**
- It aims to promote innovation and technology development in Defence and Aerospace by engaging Industries (which includes <u>MSMEs</u>, start-ups, individual innovators, R&D institutes & academia).
- iDEX will be funded and managed by Defence Innovation Organization (DIO), and will function as the executive arm of DIO.
- **iDEX Prime** is a specific program **under the broader iDEX initiative,** focusing on larger, more complex challenges requiring greater financial support.
- Funding: iDEX Prime offers significantly higher grants compared to other programs under iDEX.
- There are different editions of iDEX Prime catering to specific needs:
 - **iDEX Prime (X):** This edition has larger challenges and grants compared to the regular iDEX Prime.
 - iDEX Prime (SPRINT): This edition focuses on faster development cycles and shorter deadlines for specific problem statements from the Indian Navy.

Defence Innovation Organisation (DIO):

- <u>Defence Innovation Organisation (DIO)</u>, is a not for profit organisation formed under section 8 of the Companies Act 2013.
- It is funded by Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL). It provides high-level policy guidance to iDEX.

What is Acing Development of Innovative Technologies with iDEX (ADITI) scheme?

About:

- The ADITI scheme worth Rs 750 crore for the period 2023-24 to 2025-26 falls under the iDEX (Innovations for Defence Excellence) framework of Department of Defence Production (DDP), Ministry of Defence.
- Under the scheme, **start-ups are eligible to receive grant-in-aid** of up to Rs 25 crore for their research, development, and innovation endeavours in defence technology.
- The scheme will nurture the innovation of youth, and help the country leap forward in the field of technology.
 - In the first edition of ADITI, 17 challenges Indian Army (3), Indian Navy (5), Indian Air Force (5) and Defence Space Agency (4) have been launched.

Objective:

- It aims to develop about 30 deep-tech critical and strategic technologies in the proposed timeframe.
- It also envisages to create a 'Technology Watch Tool' to bridge the gap between the
 expectations and requirements of the modern Armed Forces and the capabilities of the
 defence innovation ecosystem.

What is the Significance of State of the Art Technology in Defence?

Strategic Advantage:

• Cutting-edge technology provides a strategic advantage to nations in terms of defence

- capabilities.
- Advanced weaponry, surveillance systems, communication networks, and cyber capabilities can significantly enhance a country's ability to deter potential threats and protect its interests.

Operational Effectiveness:

- State-of-the-art technology enables military forces to operate more efficiently and effectively.
- This includes precision-guided munitions, advanced reconnaissance and surveillance systems, and sophisticated command and control systems, all of which contribute to mission success and minimise collateral damage.

• Adaptability and Flexibility:

- In modern warfare, adaptability and flexibility are crucial. State-of-the-art technology allows for rapid adaptation to changing threats and environments.
- Systems that can be upgraded or reconfigured quickly provide a significant advantage in dynamic situations.

Force Multiplier:

 Advanced technology acts as a force multiplier, enabling smaller forces to achieve disproportionate effects. With the right technology, a smaller, well-equipped force can effectively counter a larger, less advanced adversary.

National Sovereignty and Autonomy:

 Relying on indigenous state-of-the-art technology enhances a nation's sovereignty and autonomy. Dependence on foreign suppliers for critical defense technology can compromise national security interests and limit strategic decision-making.

What are Government Initiatives Regarding Defense?

- First Negative Indigenisation
- Positive Indigenisation List
- New FDI Policy in Defence Sector
- Defence Acquisition Procedure 2020
- Defence Industrial Corridors

The Vision

UPSC Civil Services Examination, Previous Years Question (PYQ)

Q. Atal Innovation Mission is set up under the (2019)

- (a) Department of Science and Technology
- (b) Ministry of Labour and Employment
- (c) NITI Aayog
- (d) Ministry of Skill Development and Entrepreneurship

Ans: (c)

Exp:

- The Atal Innovation Mission (AIM) is a flagship initiative set up by the NITI Aayog to promote innovation and entrepreneurship based on a detailed study and deliberations on innovation and entrepreneurial needs of the country.
- AIM is envisaged as an umbrella innovation organization that would play an instrumental role in alignment of innovation policies between Central, State and sectoral innovation schemes incentivizing the establishment and promotion of an ecosystem of innovation and entrepreneurship at various levels - higher secondary schools; science, engineering and higher academic institutions; SME/MSME industry, corporate and NGO levels.
- Therefore, option (c) is the correct answer.

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.** 'What introduces friction into the ties between India and the United States is that Washington is still unable to find for India a position in its global strategy, which would satisfy India's National self-esteem and ambitions'. Explain with suitable examples. **(2019)**

