

Mission DefSpace

written by iasexam.com | 17/05/2023



Context- In May 2023, Innovations for Defence Excellence (iDEX) signed its 250th contract, the first under Mission DefSpace, and its 100th SPRINT (Navy) contract in New Delhi.

About DefSpace Mission

- **Background:** Mission DefSpace was sent off by the State head during DefExpo at Gandhinagar in October, 2022.
- **Objectives:** It means to support the Indian Confidential Space industry through challenges tending to each phase of a space mission – from mission wanting to satellite information examination.
- **Challenges:** It was launched with 75 end-user-relevant Defense Space Challenges. The challenges are broken down into the following five groups:
 - Launch System,
 - Satellite System,
 - Communication & Payload System,
 - Ground System and
 - Software System
 - They give a comprehensive 3600 outline of the room.
- **Eligibility:** Confidential Enterprises, including New businesses, MSMEs and Individual Trailblazers, are qualified to apply.

What is CubeSats?

- The primary iDEX agreement of Mission DefSpace was signed for improvement of cubesats.

- CubeSats are a class of research spacecraft called nanosatellites, which are measured; low-cost; straightforward to produce, integrate, and launch; what's more, structure a component for launch-on-demand capabilities.
- CubeSats are constructed with standard dimensions of 10 cm x 10 cm x 10 cm (Units, or "U"). They can be 1U, 2U, 3U, or 6U in size, and regularly weigh under 1.33 kg (3 lbs) per U.

SPRINT

- A lightweight ASIC (Application-Specific Integrated Circuit) based satellite communication system was developed in exchange for the 100th SPRINT (Navy) contract.
- **Background:** Under the 'Run' drive, a sum of 75 Test proclamations for the Indian business were uncovered by PM Modi during the Maritime Development and Indigenisation Association (NIIO) course 'Swavlamban' In July 2022.
- **Target:** As part of the "Azadi ka Amrit Mahotsav," the initiative aims to integrate at least 75 technologies and products into the Indian Navy by August 2023.

Innovations for Defence Excellence (iDEX)

- **Foundation:** iDEX is the leader drive of the Service of Safeguard (MoD) which was sent off by the Head of the state in 2018.
- **Objective:** It aims to develop the nation's defense and aerospace infrastructure and encourage new businesses to contribute to the defense industry.

Service provider: The Defense Innovation Organization (DIO), which was established under the Department of Defence Production, MoD, is in charge of putting iDEX into action.