# GOVERNMENT OF INDIA DEPARTMENT OF SPACE

## **RAJYA SABHA**

# **UNSTARRED QUESTION NO. 1092**

# TO BE ANSWERED ON THURSDAY, FEBRUARY 13, 2025

#### **GAGANYAAN-1 MISSION**

#### 1092. SMT. RANJEET RANJAN:

Will the PRIME MINISTER be pleased to state:

- (a) the total funds allocated to the Gaganyaan-1 mission, including details of the expenditure categories;
- (b) whether there have been any changes or revisions in the budget since its initial allocation and if so, the reasons for the same;
- (c) the private enterprises involved in the development of the Gaganyaan-1 mission, along with their specific contributions; and
- (d) the manner in which the collaboration with private enterprises aligns with Government's broader vision for space sector privatization and innovation?

## **ANSWER**

# MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

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- (a) Gaganyaan Programme is currently approved with a financial sanction of ₹20,193 Crores. The envisaged expenditure is categorised into Revenue (₹ 341 Crores) and Capital (₹ 19852 Crores) elements catering to necessary technology development activities and undertaking uncrewed/ crewed flight missions (Total: 8 Nos.).
- (b) Yes, there has been a revision in the scope and financial sanction of Gaganyaan Programme. The vision for space in the Amrit kaal envisages including other things, creation of an operational Bharatiya Antariksh Station by 2035 and Indian Crewed Lunar Mission by 2040. Towards building these new capabilities to enable longer duration Indian human space missions, various technologies have to be developed and validated. As per the revised scope, demonstration of these technologies is planned through eight missions (2 Crewed+6 Uncrewed) in a phased manner.

- (c) ISRO together with collaborating national agencies is responsible for development of various technologies which are planned to be demonstrated in this mission. Private enterprises are contributing enormously to the programme specifically in areas such as realisation of launch vehicle systems, sub-systems and critical structures (simulated Crew Module/ Crew Module) for ground/ flight test program, Crew Module Recovery Models, Virtual reality based training simulators, realisation of various subsystems of indigenous Environment Control and Life Support System (ECLSS) as well as avionics packages for ground simulations. Some of these contributing private enterprises are Tata Advanced Systems Limited, Tata Elxsi, Larsen & Toubro, Walchandnagar Industries, Manjira Machine Builders, Godrej Aerospace, Data Patterns India, Centum Electronics etc.
- (d) The Government of India has announced reforms, in June, 2020, in the space sector towards enabling the private players to provide end-to-end services towards enhancing the Indian space economy to a significant level. Indian Space Policy-2023 was released in April, 2023 as an overarching, composite and dynamic framework to implement the space reform vision. It helps to promote greater participation of Non-Governmental Entities (NGEs) in the value chain of space economy in order to develop robust, innovative and competitive space ecosystem aiming for a larger share of India in global space economy. It also enables the NGEs to make use of infrastructure created through public funds. Further, amendment was made to the Foreign Direct Investment policy for space sector, enabling higher threshold of foreign investments in various space domains.

Indian National Space Promotion and Authorisation Centre (IN-SPACe), a single-window agency, was formed under Department of Space, to promote, regulate and authorize space activities of Non-Governmental Entities (NGEs). Further, in order to carry out space activities, the facilities across various ISRO centres will also be permitted for use by private sector through IN-SPACe. New Space India Ltd (NSIL), a CPSE under the Department of Space will transfer the matured technologies developed by ISRO to Indian industries. ISRO will also nurture Indian space industries by sharing its experiences on quality and reliability protocols, documentation, testing procedures etc. Announcement of Opportunities and initiatives like 'Atmanirbharta in development of space technologies/ products/ systems through Indian industry' are also being undertaken offering challenges in new domains of space technology.

As a result of Space Sector Reforms and associated initiatives by the Department of Space, exponential increase in space start-ups is witnessed. M/s Skyroot Aerospace and M/s Agnikul Cosmos have successfully launched their sub-orbital flights in 2023 & 2024 respectively. Several other start-ups have significantly progressed towards launch vehicle & satellite development and space applications.