GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

RAJYA SABHA

UNSTARRED QUESTION NO. 607

TO BE ANSWERED ON THURSDAY, DECEMBER 04, 2025

ISRO's UPCOMING MISSIONS AND GAGANYAAN PROGRAMME

607. SMT. JEBI MATHER HISHAM:

Will the PRIME MINISTER be pleased to state:

(a) the details of seven major missions ISRO plans to execute by March 2026 along with their objectives, including the first uncrewed mission under the Gaganyaan programme;

(b) the steps being taken to ensure the success of commercial satellite deployments and enhance country's competitiveness in the global space market;

(c) the projected outcomes of these missions in terms of technological development, international collaborations and country's strategic position as a rising power in the global space sector; and

(d) the manner in which Government plans to leverage these space missions for National development, including applications in communications, navigation, disaster management and scientific research?

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) Yes. The department has scheduled seven major missions by March, 2026, the details are as follows:

Sl. No.	Mission	Objectives
1.	LVM3 M6/ NSIL	Dedicated commercial launch of BlueBird Block-2 satellite of M/s. AST SpaceMobile Inc., USA through a

Sl. No.	Mission	Objectives
		commercial agreement with M/s. NewSpace India Limited (NSIL)
2.	PSLV C62/ EOS N1	Dedicated launch of an Earth Observation Satellite undertaken by NSIL for strategic user along with 18 nos. of co-passenger satellites from different Indian and International users
3.	HLVM3 G1/ OM1	First uncrewed mission of Gaganyaan to demonstrate end-to-end mission, including aerodynamics characterization of human rated launch vehicle, mission operations of Orbital Module, Re-entry and recovery of Crew Module
4.	GSLV F17/EOS-05	Launch of Earth Observation Satellite for strategic user.
5.	PSLV C63/TDS-01	Launch of Technology Demonstration Satellite (TDS-01) to demonstrate new technologies including high Thrust Electric Propulsion System, Indigenous TWT (Travelling Wave Tube) Amplifier, Quantum Key Distribution
6.	PSLV N1/ EOS-10	First PSLV vehicle realized by NSIL through Industry consortium that will launch Earth Observation Satellite for Oceanographic studies along with Indo-Mauritius joint satellite (IMJS) and Leap-2 Satellite from Indian NGE as co-passengers
7.	SSLV L1/ NSIL	Dedicated commercial mission by NSIL

(b) Post reforms in Space sector, NewSpace India Limited (NSIL) has taken several steps across the space value chain, including upstream and downstream, to ensure the success of commercial satellite deployments and enhance India's competitiveness in the global space market. Towards this, NSIL has undertaken commercial satellite missions on a demand driven mode to meet the customers' requirements. Till date, NSIL has already deployed two commercial communication satellites to cater to Direct-to-Home [DTH] and broadband needs of Indian customers. Further, NSIL has planned to launch at least three (3) commercial communication satellites in the next 3 to 4 years.

As part of its Launch services business activities, NSIL has taken steps to actively market launch services on-board PSLV, SSLV and LVM3 launcher to the international customers. Till date, NSIL has successfully launched total 137 customer satellites on-board 5 PSLV, 2 LVM3 and 2 SSLV missions.

To increase the number of commercial satellite deployments, NSIL has taken steps to build end-to-end launch vehicle through Indian Industry. As part of this, NSIL is realizing 5 no. of PSLV-XL through HAL and L&T consortium. The 1st fully Indian Industry manufactured PSLV would be launched by Q1 of 2026. To build capacity in Indian Industry, NSIL along with IN-SPACe signed a Technology Transfer Agreement with HAL during Sep. 2025. With the above initiatives, NSIL is aiming to enhance India's competitiveness in the global space market.

(c) The projected outcomes of these missions in terms technological development, international collaboration, and India's strategic position as a rising space power:

- These dedicated missions undertaken by NSIL will further establish India as a major player in the commercial launch services market.
- This demonstration of new technologies like high Thrust Electric Propulsion System will enable the realization of all electric satellites in future.
- Demonstration of Indigenous TWT (Travelling Wave Tube) Amplifier will enable Atma Nirbharatha in critical technologies of Satellite Transponders.
- First uncrewed Gaganyan mission is flight validation of various new technology elements for next uncrewed mission and Crewed Mission for Gaganyaan Programme.

(d) TDS-01 satellite will validate new technologies and indigenous components for satellite platform, thereby contributing to self-reliance. The technologies and components, once proved in TDS-01, will be employed in navigation and communication missions in the near-future.

NVS-03 satellite will be a part of the NavIC constellation meant for providing PNT services to the country. It will be utilized for ongoing applications like vehicle tracking, real-time train tracking, fishing vessel communication and support system, etc.

Among the satellites planned for launch by March 2026, the Oceansat-3A (EOS-10) satellite mission is for Meteorological, Oceanographic and Land applications. The satellite has Ocean Colour Monitor (OCM), Scatterometer, Sea Surface Temperature Monitor (SSTM) and Millimeter wave Atmospheric Temperature and Humidity Sounder (MATHS), as payloads. This Satellite in tandem with Oceansat- 3 (EOS -06) will provide daily data for various applications.

The data products from these instruments will support in Potential Fishing Zone identification, Phytoplankton/ chlorophyl/ concentration, costal zone management, Ocean dynamics, numerical weather predication models, tropical cyclone monitoring & forecasting and various land and atmospheric applications.

Space science missions are vital engines for national progress, extending their benefits far beyond pure discovery. Globally, successful missions like the Chandrayaan series and Adtiya L-1 generate immense national pride, strengthening India’s stature in the global arena. Domestically they directly promote Science, Technology, Engineering & Mathematics (STEM) education among students by next generation. These missions also drive rapid skill development in both specialized hardware and advanced software.

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