## GOVERNMENT OF INDIA DEPARTMENT OF SPACE

#### RAJYA SABHA

### **UNSTARRED QUESTION NO. 927**

TO BE ANSWERED ON THURSDAY, JULY 27, 2023

#### ENCOURAGEMENT TO SPACE SECTOR

#### 927. DR. SUDHANSHU TRIVEDI:

Will the PRIME MINISTER be pleased to state:

- (a) the steps being taken to encourage participation of private companies in the space sector;
- (b) the steps being taken for enhancing India's capabilities in the space sector and achieving self-reliance in space technology; and
- (c) the steps being taken to promote research and education in the space sector?

#### **ANSWER**

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

(a) Government has taken several steps to encourage participation of private companies in the space sector. The sector has already been opened up for enhanced participation of private enterprises in the space sector by allowing them to conduct end-to-end activities across all verticals of space domain.

In this regard, IN-SPACe has been created for the promotion and handholding of Non-Government Entities for their space activities, which includes enabling the usage of ISRO facilities, setting up the IN-SPACe technical Centre, mentorship support, seed fund scheme and industry meets.

Besides, New Space India Limited (NSIL] has taken steps towards realization of PSLV through Indian Industries and transferring technologies to Indian Industries.

Further, Department of Space has released a comprehensive, overarching space policy that encourages the participation of private sector in end-to-end space activities.

(b) Several steps have been taken to enhance India's capabilities in the space sector and towards achieving further self-reliance in space technology. These include sustaining and augmenting

project-oriented R&D in ISRO, towards development of all-round capabilities across all the verticals of space domain viz. space transportation, space infrastructure, space applications and human spaceflight.

The technology elements in this regard include:

- Development and operationalization of indigenous space transportation systems;
- Manufacturing and operating space assets comprising of fleet of satellites catering to the needs of earth observation, satellite communication, meteorology, space science & navigation;
- Towards development of indigenous human spaceflight capability;
- Setting up and operations of ground infrastructure, and
- Implementation and institutionalization of operational programs related to the applications of space technology to the common problems of man and society.

Further, several capacity building initiatives have been undertaken to strengthen the ISRO-industry-academia triad, besides the reforms in the space sector that envisage private sector as a co-traveler in the exploration of outer space.

(c) Government has taken several initiatives to promote research and education in the space sector. Eight numbers of Space Technology Cells (STCs), Six numbers of Regional Academic Centre for Space (RAC-S) and Six numbers of Space Technology Incubation Centres (S-TIC) have been set up across the country for carrying out focused research and development activities. Apart from this, research activities have been initiated in association with Centre for Nano Science and Engineering (CeNSE) at Indian Institute of Science (IISc), Bengaluru; Satish Dhawan Centre for Space Sciences at Central University of Jammu, Jammu and Veer Surendra Sai University of Technology (VSSUT), Burla, Sambalpur, Odisha.

Further, under the sponsored research programme of ISRO called "RESPOND", several research and development projects are going on involving different academic institutions in the country. Indian Space Research Organisation (ISRO) also encourages industry for joint development of focused technologies as a part of developmental activities

Besides, IN-SPACe has also been undertaking different promotional activities to encourage academia for further research and education in space sector.