

**GOVERNMENT OF INDIA
SPACE
LOK SABHA**

UNSTARRED QUESTION NO:3655
ANSWERED ON:01.12.2010
LAUNCH OF SATELLITES
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Will the Minister of SPACE be pleased to state:

- (a) the names of the Satellites launched by the country during the last three years and the locations from where these were launched;
- (b) the number of failed launches, the reasons therefor and the cost involved;
- (c) the rank/status of India in the world in Satellite launching system; and
- (d) the steps taken by the Government to develop launching system?

Answer

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTRY OF PARLIAMENTARY AFFAIRS AND MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRI V.NARAYANASAMY):

(a) During the last three years i.e., from January 2008 till November 2010, a total of 8 national satellites and 18 satellites for international commercial customers were launched using India's Polar Satellite Launch Vehicle (PSLV) and Geo-synchronous Satellite Launch Vehicle (GSLV). All launches were carried out from India's spaceport, Satish Dhawan Space Centre, Sriharikota Range (SDSC-SHAR).

List of national satellites launched is as follows:

Satellite name Date of launch Launch vehicle Result

CARTOSAT-2A	Apr, 2008	PSLV-C9	SUCCESS
IMS-1	Apr, 2008	PSLV-C9	SUCCESS
CHANDRAYAAN-1	Oct, 2008	PSLV-C11	SUCCESS
RISAT-2	Apr, 2009	PSLV-C12	SUCCESS
ANUSAT	Apr, 2009	PSLV-C12	SUCCESS
OCEANSAT-2	Sep, 2009	PSLV-C14	SUCCESS
GSAT-4	Apr, 2010	GSLV-D3	FAILED
CARTOSAT-2B	Jul, 2010	PSLV-C15	SUCCESS

(b) During this period, the launch of GSLV-D3 carrying GSAT-4 satellite was not successful. The primary cause of GSLV-D3 failure is attributed to the anomalous stoppage of Fuel Booster Turbo Pump (FBTP) of Indigenous Cryogenic Upper Stage.

The cost of the GSLV launch vehicle is around Rs 170 crores and that of the GSAT-4 satellite Rs 150 crores.

(c) India is one among the six space faring nations in the world that have these capabilities.

(d) Indian Space Research Organization (ISRO) presently has two operational launch vehicles viz. Polar Satellite Launch Vehicle (PSLV) and Geo-synchronous Satellite Launch Vehicle (GSLV) for launching earth observation, scientific and communication satellites.

ISRO is also developing a heavy lift-launcher GSLV-MkIII for meeting the heavier satellite launch mass requirements.