# GOVERNMENT OF INDIA DEPARTMENT OF SPACE

# LOK SABHA UNSTARRED QUESTION NO.2390

### **TO BE ANSWERED ON WEDNESDAY, NOVEMBER 30, 2016**

#### **INDIGENOUS SATELLITES**

## 2390. DR. KIRIT P. SOLANKI:

Will the PRIME MINISTER be pleased to state:

- (a) the number of indigenous satellites successfully placed into the space orbit by India during the last three years along with the number of satellites which got destroyed before being placed in the orbit;
- (b) whether other countries have used the information given by the satellites which have been placed into the orbit for their own interests without the knowledge of our Government and if so, the details thereof;
- (c) the number of satellites which our Government have placed into the orbit with the help of other countries along with the cost involved therein and the present status of these satellites at present;
- (d) whether some countries want to take help of Indian Spacecraft launching stations to launch their satellites; and
- (e) if so, the details thereof?

### **ANSWER**

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG & PENSIONS AND IN THE PRIME MINISTER'S OFFICE

(DR. JITENDRA SINGH):

- (a) During last three years i.e. during 2013-14, 2014-15 and 2015-16, fourteen (14) indigenously built satellites have been successfully placed in their orbit. During the above said period, no satellite got destroyed before being placed in the desired orbit or in the orbit.
- (b) No Madam.
- (c) As on date, 29 satellites have been launched from outside the country. Out of these, for 3 satellites (Aryabhatta, Bhaskara-1 & Bhaskara-2) free launch was provided by Russia as part of Indo-Soviet friendship and for 1 satellite (Apple), Ariane offered a free launch in their developmental flight. Remaining satellites were launched by hiring launch services on a commercial basis. The details are attached in Annexure-1.

## (d) & (e)

The Indian satellite launching station, located at Sriharikota, is used exclusively for launch vehicles developed by ISRO. While 79 foreign satellites from 21 countries have already been launched into orbit using ISRO's Polar Satellite Launch Vehicle under commercial arrangements with Antrix Corporation Limited (Antrix), agreements have been signed for launching 109 foreign satellites from 10 countries viz. Canada, Germany, Israel, Italy, Japan, Kazakhstan, Malaysia, Netherlands, Switzerland and USA. The launches of these foreign satellites are envisaged by December 2018.

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Annexure referred to in reply to part (c) of Lok Sabha Unstarred Question No. 2390 for answer on 30/11/2016

Satellites launched with the support from other countries

SN	Satellite	Country	Launch	Launch Cost	Present Status
			Date	(₹ in Crores)	
1	Aryabhatta	Russia	19-04-1975	free	India's first experimental satellite. Mission completed
2	Bhaskara-1	Russia	07-06-1979	free	Mission completed
3	Bhaskara-2		20-11-1981	free	Mission completed
4	Apple	France	19-06-1981	free	Mission completed
5	INSAT-1A	T-1B United States T-1C of America	10-04-1982	468.57	Failed in Orbit
6	INSAT-1B		30-08-1983		Mission Completed
7	INSAT-1C		22-07-1988		Mission Completed
8	INSAT-1D		12-06-1990		Mission Completed
9	IRS-1A	Russia	17-03-1988	7.50	Mission Completed
10	IRS-1B		29-08-1991	31.80	Mission Completed
11	INSAT-2A	France	10-07-1992	785.10	Mission Completed
12	INSAT-2B		23-07-1993		Mission Completed
13	INSAT-2C		07-12-1995		Mission Completed
14	INSAT-2D		04-06-1997		Failed in orbit
15	INSAT-2E		03-04-1999		Mission Completed
16	IRS-1C	Russia	28-12-1995	60.31	Mission Completed
17	INSAT-3A	France	10-04-2003	2273.63	Working 1 ½ years beyond Designed Life
18	INSAT-3B		22-03-2000		Mission Completed
19	INSAT-3C		24-01-2002		Working 2 ½ years beyond Designed Life
20	INSAT-3D		26-07-2013		Expected life 4 more Years
21	INSAT-3E		28-09-2003		Mission Completed
22	INSAT-4A	France	22-12-2005	875.00	Expected life 1 ½ more Years
23	INSAT-4B		12-03-2007		Expected life 2 ½ more Years
24	GSAT-7	France	30-08-2013	485.29	Expected life 4 more Years
25	GSAT-8	France	21-05-2011	297.00	Expected life 6 ½ more Years
26	GSAT-10	France	29-09-2012	406.82	Expected life 11 more Years
27	GSAT-15	France	11-11-2015	601.19	Expected life 11 more Years
28	GSAT-16	France	07-12-2014	581.00	Expected life 10 ½ more Years
29	GSAT-18	France	06-10-2016	458.69	Expected life 15 more Years