

**GOVERNMENT OF INDIA  
SPACE  
LOK SABHA**

UNSTARRED QUESTION NO:2790  
ANSWERED ON:10.12.2014  
LAUNCH VEHICLES  
Kamaraaj Dr. K.

**Will the Minister of SPACE be pleased to state:**

- (a) the details of the variety of Launch Vehicles (Rockets) developed by the ISRO;
- (b) the capabilities of each of the launch vehicles and payloads they can carry;
- (c) the cost of manufacturing each of these launch vehicles; and
- (d) the details of the launches planned by ISRO in the coming two years?

**Answer**

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

(a) The variety of Launch Vehicles (Rockets) developed by ISRO are:

- i) Satellite Launch Vehicle (SLV-3)
- ii) Augmented Satellite Launch Vehicle (ASLV)
- iii) Polar Satellite Launch Vehicle (PSLV)
- iv) Geosynchronous Satellite Launch Vehicle (GSLV)

At present, ISRO has taken up the design and development of heavy lift launch vehicle, GSLV-MkIII, with the capability to launch 4 tonne class of communication satellites to Geosynchronous Transfer Orbit.

(b) The capabilities and the payload they can carry for each launch vehicle is given below:

Sl. No	Launch Vehicle	Capability	Payload
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- |       |       |   |  |
|-------|-------|---|--|
| (i)   | SLV-3 | 40 kg to Low space science Earth Orbit satellites   |  |
| (ii)  | ASLV  | 150 kg to Low space science Earth Orbit satellites  |  |
| (iii) | PSLV  | 1750 kg to Sun Remote Sensing Synchronous satellites<br>Polar Orbit<br>1425 kg to Navigation Sub-Geo satellites<br>synchronous Transfer Orbit |  |
| (iv)  | GSLV  | 2200 kg to Communication Geosynchronous satellites<br>Transfer Orbit  |  |

(c) SLV-3 and ASLV were developed by ISRO to demonstrate and validate various critical technologies required for launch vehicles and currently are not being manufactured. The present cost of manufacturing of currently operational launch vehicles, i.e., PSLV (Core

alone version) is `129 Crores, PSLV (XL version) is `145 Crores and GSLV is `173 Crores

(d) The launches planned by ISRO in the next two years include- (i) Eight Polar Satellite Launch Vehicles (PSLVs) for launching Remote Sensing, Navigation & Space Science satellites, (ii) Three Geosynchronous Satellite Launch Vehicles (GSLVs) for launching communication satellites and (iii) One Experimental flight of GSLV MK-III, to validate the vehicle design.