

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

**LOK SABHA
UNSTARRED QUESTION NO.3032**

TO BE ANSWERED ON WEDNESDAY, MARCH 14, 2018

FAILED LAUNCH

3032. ADV. M. UDHAYAKUMAR:

Will the PRIME MINISTER be pleased to state:

- (a) whether after 39 successes the launch of PSLV failed recently;**
- (b) if so, the details thereof;**
- (c) whether this was the PSLV's first failure; and**
- (d) if so, the corrective measures proposed by ISRO to ensure that future launch will be a successful one?**

ANSWER

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

(DR. JITENDRA SINGH):

- (a) Yes, Madam.**
- (b) The launch of 41st flight of PSLV (PSLV-C39) that took place on August 31, 2017, from the Second Launch Pad, at Satish Dhawan Space Centre, Sriharikota, with Indian Regional Navigational Satellite (IRNSS-1H weighing 1425 kg) at 19:00 hrs IST, could not reach the designated orbit of 284 x 20650 km, due to non-separation of Payload Fairing (also known as heat shield) during the 2nd stage of the flight.**

A detailed analysis of the flight data and ground test data of the PSLV-C39 Mission revealed that the root cause of the non-separation of Payload Fairing was due to the malfunctioning of the vertical jettisoning system. The cause for the malfunctioning was the non-initiation of detonation in the vertical jettisoning system.

(c) No, Madam. The recent failure of PSLV-C39 was the second failure. In September 1993, the first developmental flight of PSLV (PSLV-D1) was unsuccessful.

(d) Towards enhancing the robustness of the jettisoning system in future launches, certain changes have been incorporated in the vertical jettisoning system of the Payload Fairing, which were validated through extensive simulations including the full scale Payload Fairing separation test. The reliability of the system was demonstrated by the subsequent successful PSLV-C41/Cartosat-2 Series Mission on January 12, 2018.
