

## **First Contract for NSIL**

Recently, New Space India Limited (NSIL), the newly created second commercial arm of the <u>Indian Space</u> <u>Research Organisation</u>, has bagged its first contract.

 A private US space services provider: Spaceflight, has booked ISRO's Small Satellite Launch Vehicle (SSLV), which is yet to be tested, for launching a spacecraft.

## **Small Satellite Launch Vehicle**

- The SSLV is the **smallest vehicle** weighing only 110-tonne.
- It would take only 72 hours to integrate, unlike the 70 days taken for launch vehicles like Polar
  Satellite Launch Vehicle (PSLV) or Geosynchronous Satellite Launch Vehicle (GSLV).
- **Cost-effective:** Its cost would be around Rs. 30 crores.
- It will be an on-demand vehicle.
- SSLV is perfectly suited for launching multiple microsatellites at a time and supports multiple orbital drop-offs.
  - The SSLV can carry satellites weighing up to 500 kg to Low Earth Orbit while the PSLV can launch satellites weighing in the range of 1,000 kg.
    - A **low Earth orbit** (LEO) is an **orbit** around **Earth** with an **altitude** above the Earth's surface of 2,000 kilometres (1,200 mi), and an **orbital** period between about 84 and 127 minutes.
- ISRO's SSLV was originally scheduled to have its first development flight on July 2019 but got delayed to end of 2019.

## **New Space India Limited**

- The establishment of NSIL was announced in Budget 2019.
- One of the mandates of NSIL is to mass-produce and manufacture the SSLV and the more powerful PSLV in partnership with the private sector in India through technology transfers.
- Its aim is to use research and development carried out by ISRO over the years for commercial purposes through Indian industry partners.
- It differs from ISRO's existing commercial arm Antrix Corporation:
  - Antrix will handle ISRO's commercial deals for satellites and launch vehicles with foreign customers.
  - NSIL will deal with capacity building of local industry for space manufacturing.

## Source: IE

