

ISRO's LVM-3 launch

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In news- Recently, the second commercial launch of the Indian Space Research Organisation's (ISRO) LVM-3 saw 36 OneWeb satellites placed in orbit.

LVM3-M3/OneWeb India-2 mission-

- This was the second mission for Network Access Associates Limited, United Kingdom (OneWeb Group Company) under a commercial agreement with NewSpace India Limited (NSIL) to launch 72 satellites to Low-Earth Orbits.
- one web is supported by the UK government and India's Bharti Enterprises.
- In this mission, LVM3 would place 36 OneWeb Gen-1 satellites totalling about 5,805 kg into a 450 km circular orbit with an inclination of 87.4 degrees.
- It was the **sixth launch for India's heaviest rocket LVM-3** – which includes the **launch of Chandrayaan-2** in 2019 – and the second one where it demonstrated the **capability of launching multiple satellites in low earth orbit (LEO)**.
- The eighteenth launch of OneWeb satellites brought the constellation's total number of satellites to 618.
- The company intends to use 588 active satellites in its first-generation constellation to provide global connectivity at high speed and low latency.
- **OneWeb's high-speed, low-latency solutions will assist in connecting communities, businesses, and governments worldwide, demonstrating the unparalleled potential of LEO connectivity.**

India's plans to increase commercial launches-

- India has been concentrating on increasing its share of the global commercial space market ever since the country decided to open the space sector to private players in 2020. It is one of the world's major space-faring nations, but it only has 2% of the commercial market at the moment. With 36 OneWeb satellites launched in October 2022, the heavy launch vehicle entered the commercial market.
- The launches not only established LVM3 as a commercial vehicle propelling ISRO's entry into the commercial heavier launch market, but it also earned the agency upwards of Rs 1,000 crore.
- The service provided to OneWeb, for which the space agency had to move around a few of its missions, ended up earning it one of the highest revenues. And, over the years, there has been an increase in funds that the space agency has generated.
- **The government plans to increase India's 2% share in the commercial market to 10% by 2030** through commercial launches by ISRO and launches offered by private companies like Skyroot and Agnikul, which are in the process of developing their own launch vehicles.
- Keeping the commercial sector in mind, **ISRO has also developed the Small Satellite Launch Vehicle (SSLV)**, which is meant to provide on-demand launch services commercially.
- It has a low turn-around time of days and costs much less than the current workhorse Polar Satellite Launch Vehicle (PSLV).
- Two development flights of the SSLV have been completed – one successful, one partially successful – and it has been inducted into the ISRO fleet.
- Till date, ISRO has launched 384 foreign satellites from at least 36 countries, with at least 10 dedicated commercial missions and several other Indian missions where they were carried as co-passenger satellites.
- The highest number of these commercial launches have

been by companies from the United States.

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