

3. LVM3-M3 or OneWeb India-2 Mission

Why in News?

- Recently, ISRO's (Indian Space Research Organisation) heaviest launch vehicle LVM-3 (Launch Vehicle Mark 3) will launch a fleet of 36 OneWeb satellites, completing the first generation of the huge broadband constellation.

Highlights

- This will be the 18th launch of OneWeb and will add to the UK-based company's (OneWeb) existing constellation of 582 satellites.
- ISRO's commercial arm NSIL had signed a contract with OneWeb to launch 72 satellites in two phases.
- The first set of 36 satellites was launched in LVM3-M2/OneWeb India-1 mission on October 23, 2022.
- This is the second OneWeb fleet that India is launching. This initiated India's journey into the commercial heavy lift-off space.
- OneWeb Constellation operates in a LEO Polar Orbit.
- Satellites are arranged in 12 rings (Orbital planes) with 49 satellites in each plane.
- The orbital planes are inclined to be near polar (87.9 Deg.)
- The orbital planes are 1200 km above the Earth. Each satellite completes a full trip around the earth every 109 minutes.
- OneWeb already has connectivity solutions active today in key geographies across the globe and is bringing new areas online.
- OneWeb's high-speed, low-latency solutions will help connect communities, enterprises, and governments around the world, demonstrating the unparalleled potential of LEO connectivity.