

PSLV-C50



Why in News?

- The Indian Space Research Organisation (ISRO) successfully placed India's 42nd communications satellite, CMS-01, into a transfer orbit carried on board by PSLV-C50.

About CMS-01

- CMS-01 is a communications satellite envisaged for providing services in extended C Band of the frequency spectrum.
- Its coverage will include the Indian mainland, and the Andaman & Nicobar and Lakshadweep islands, ISRO said.
- The satellite is expected to have a life of more than seven years.
- PSLV-C50 is the 52nd flight of PSLV and 22nd flight of PSLV in 'XL' configuration (with 6 strap-on motors). This was the 77th launch vehicle mission from SDSC SHAR, Sriharikota.

Communications Satellite

- A communications satellite is a type of artificial satellite that is placed in Earth's orbit for the purpose of sending and receiving communication data between a source and destination.
- It is used to provide data communication and relaying services for televisions, radio, telecommunication, weather and Internet services
- A communications satellite works when it receives data from terrestrial stations in the form of electromagnetic waves.
- The data is usually sent via large satellite dishes. Based on the intended destination, the communications satellite redirects the waves to the corresponding station.
- Communications satellites are vital for remote areas that do not have access to traditional landlines for telephone or Internet services.