

SUMMARY

National Digital Communication Policy 2018 (NDCP-2018) has highlighted the importance of bridging the digital divide to foster economic growth, drive social inclusion and meet consumer demand. However, millions of Indians still do not have access to broadband internet, particularly those living in rural or remote areas. Satellite systems offer significant advantages for expanding broadband coverage with instant coverage across these unconnected areas. In particular, LEO constellations just ~1000 km from earth are expected to cover the entire globe for providing high-bandwidth high-capacity connectivity with Low latency.

Deployment of non-geostationary (non-GSO) satellites is rapidly increasing representing an innovative breakthrough approach to use satellite technology in connecting the unconnected. This will help billions of unconnected people to reap the benefits of today's digital economy. Providing connectivity is difficult in rural or remote areas, not only due to terrain and their isolation, but also because the cost of providing service via terrestrial mobile networks yields a poor return on investment for sparsely populated areas as compared to urban areas. Satellite connectivity is also important for the aviation and maritime sectors that operate aircraft and vessels that can be out of reach of terrestrial networks during their journeys.

In the recent months a number of new LEO constellations have been in the news:

1. Bharti Enterprises-led low earth orbit (LEO) broadband satellite communications company OneWeb will soon start launching an initial set of 360 satellites to construct a global satellite constellation that will provide enhanced broadband and other services to countries around the world.

2. Telesat, another LEO NGSO entity is launching Telesat LEO , a revolutionary satellite constellation of highly advanced satellites in low-earth-orbit to deliver fiber quality throughput (Gbps links; low latency) anywhere on earth as well as provide a future-proof solution for backhaul cellular/5G traffic. Telesat will provide high-speed broadband access to rural and remote communities, planes, ships, enterprise and government users.