

Geostationary orbit and its utilization and applications**Madam Chair and Distinguished delegates,**

Electronic communication has become part and parcel of one's day to day life. The convergence and synergy of terrestrial, cellular, OFC [optical Fibre cable] and SatCom technologies is bringing connectivity solutions for reaching out to different geographical regions. India is one of the growing digital economy. More and more applications are coming up and demand for bandwidth is increasing with time. The Geostationary Orbit finds an immense utilization to place communication satellites.

Madam Chair,

India has a fleet of communication satellites operating over the region with communication transponders in C-band, Extended C-band, Ku-band, Ka/Ku band and S-band. Presently, the 18 satellites in orbit provide 317 operational transponders and 25 Gbps high throughput satellite (HTS) capacity. These have played a significant role in meeting country's requirements in various sectors such as communication, broadcasting, meteorology, navigation, disaster warning and search & rescue data services. The flagship Digital India programme and BharatNet which are focussed to enhance the digital connectivity to village level, are also well supported by the communication satellites.

Madam Chair,

ISRO has launched exclusive satellites for meteorology applications. At present, two satellites namely INSAT-3D and INSAT-3DR are in operation providing the meteorological data in different bands. During the year 2023, tropical cyclones like Mocha, Biparjoy, Tej, Hamoon were monitored with INSAT 3D and 3DR. Another satellite namely INSAT-3DS is scheduled for launch in early 2024.

Madam Chair,

Government of India has taken measures to further enhance the GSO based Space technology and applications in the various activities of Central Ministries/ Departments and State Governments. The support for societal programmes like Telemedicine, Tele-education and Disaster Management Support (DMS) Programmes is continued with an aim to address specific requirements at different strata of the society. The satellite communication is used wherever terrestrial communication is not penetrated adequately.

Madam Chair,

As a gift to the neighbouring countries, India has built and launched 'South Asia Satellite' in 2017 to provide satellite communication services to South Asian nations and also across the region. Bhutan, The Maldives and Bangladesh are getting benefit of South Asia Satellite and other Nations are working out their plans to utilize it effectively.

Madam Chair,

India is a member of the international COSPAS-SARSAT programme for providing distress alert and position location service satellite system. Satellite aided Search and Rescue payload is carried on 3 of our GSO satellites, INSAT-3D (82°E), INSAT-3DR (74°E) and GSAT-17 (93.5°E) operating in 406 MHz band. During 2023, Indian Mission Control Centre (INMCC) provided search and rescue support to 9 distress incidents in Indian service area and contributed in saving 22 human lives.

Madam Chair,

The MSS Service through GSO satellite provides the communication to the portable and hand-held devices. ISRO has also developed a unique application to send emergency messages to fishermen at sea, alerting them about the on-set of natural disasters such as cyclone, tsunami, etc. Using MSS service an indigenous solution has been developed and implemented for tracking the trains on real-time namely "Real-time Train Information System (RTIS)". This contributes to enhance the safety of train services apart from adding to the efficiency in train operations. So far about 6000 trains are covered with this feature of real-time tracking. In addition, similar solution is being deployed in the Indian fishing vessels / boats, for safety of fishing community while at sea.

Madam Chair,

Government of India has opened the space sector for larger participation of non-government players. This enables and encourages the private initiatives to build, own, operate and provide space based services from both GSOs and NGSOs. With this, it is expected that the capacity will be augmented substantially for supporting socio-economic development.

Madam Chair,

In conclusion, the Indian delegation would like to convey this esteemed gathering that India is effectively utilising the geostationary orbit slots for operation of communications & meteorological satellites towards socio-economic development and risk mitigation

Thank You Madam Chair and Distinguished delegates.