

India

Agenda Item – 10

Global Navigation Satellite Systems

Mr. Chairman and Distinguished delegates,

Indian delegation is happy to note the importance attached to the topics related to global navigation satellite system by this subcommittee, and by the General Assembly. On this occasion, the Indian delegation would like to update this sub-committee on the progress of India's satellite navigation programme since the last session.

Mr. Chairman,

India pursues two paths as part of its Satellite navigation programme, viz., GAGAN and NavIC. GAGAN (GPS Aided GEO Augmented Navigation) is a satellite based augmentation system (SBAS), while NavIC (Navigation with Indian Constellation) is an independent regional navigation system.

GAGAN has been established by Indian Space Research Organisation (ISRO) in association with the Airports Authority of India (AAI) to provide increased position accuracies required for civil aviation applications. NavIC has been implemented as an independent regional satellite based navigation service. Signal-in-Space (SIS) Interface Control Document (ICD) of NavIC has been placed in public domain to enable the production of user receivers. The capabilities of the system have been successfully tested and demonstrated in various sectors. Currently, more than 30 mobile phone models released in India have NavIC capability and this number is increasing.

Mr. Chairman,

NavIC has been recognized by the International Maritime Organization as a component of Worldwide Radio Navigation System (WWRNS) in 2020. Further, NavIC has been incorporated in the industry standards of Third Generation Partnership Project (3GPP) and Radio Technical Commission for Maritime Services (RTCM) in 2020. During 2021, India has worked towards the development of International Electrotechnical Commission (IEC) standard for NavIC based shipborne receiver

equipment with the support of Indian standards body BIS. Draft standard has been submitted to the IEC working group. Further, there is an initiative to develop a generic GNSS receiver performance standard under the International Maritime Organisation (IMO). India is a part of this effort along with other member states. India also collaborated with European Union to develop common SBAS IEC standard including GAGAN and EGNOS. Draft standard for SBAS is being prepared.

Mr. Chairman,

NavIC-based safety-of-life alert dissemination system has been in operation for fishermen to provide alerts on impending disasters. Details of the broadcast messages are hosted in website for public access. India has also developed distress acknowledgement system using NavIC. This system will be operationalised shortly.

India appreciates the excellent work carried out by the UN Office on Outer Space Affairs (UNOOSA), as the Executive Secretariat for the International Committee on GNSS (ICG) and for the Providers' Forum. These efforts are helping to bring synergy among the global players in satellite navigation. India participated in 15th meeting of the ICG and 24th meeting of the Providers' Forum in both online and offline mode during Sept.-Oct. 2021.

In the area of capacity building, Indian Space Research Organisation organised an on-line course on "*Introduction to satellite navigation*" from 13th to 24th Sept. 2021. The course was attended by 56 participants from 14 different countries.

Mr. Chairman,

In conclusion, the Indian Delegation assures its continued commitment to this sub-committee and to the ICG global forum in addressing the issues of common interest for satellite navigation system providers and also in taking the benefits of GNSS to all countries, especially to the developing countries.

Thank you Mr. Chairman and distinguished delegates.