

STATEMENT OF PAKISTAN DELEGATION
59TH SESSION OF THE SCIENTIFIC & TECHNICAL SUBCOMMITTEE (STSC) OF THE
UNITED NATIONS COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE
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Agenda Item No. 17: Examination of the Physical Nature and Technical Attributes of the Geostationary Orbit and its Utilization and Applications, including in the Field of Space Communications, as well as Other Questions Relating to Developments in Space Communications, Taking Particular Account of the Needs and Interests of Developing Countries, Without Prejudice to the Role of the ITU

Mr. Chairman

The delegation of Pakistan takes this opportunity to enlighten the issues faced by developing countries including Pakistan in accessing Orbit & Spectrum Resources (O&SR) at Geostationary Orbit (GSO).

We believe that GSO provides unique potential for implementing Information & Communication Technologies (ICT) and their applications for socio-economic benefits of countries. The GSO is limited natural resource which must be available to all Member States of UN/ International Telecommunication Union (ITU) on equitable basis irrespective of their technical capacities and its use must be governed by Article 44 of the ITU constitution and Outer Space Treaty of the United Nations.

Although ITU has developed planned band regime (AP30/30A/30B) guaranteeing equitable access to GSO for Member States with specific spectrum; however, it has certain technological limitations making it difficult to materialize (as per ITU's Master International Frequency Register (MIFR), notified GSO satellite filings in planned band are 306 while in unplanned band are 1361). Unplanned band where the technology is mature, the current utilization of Geostationary Orbit is on the first come first served basis that has made this natural resource unattainable for countries that do not have the technology or are late in their application to ITU. Even a country cannot provide satellite service within its national territory in unplanned band without frequency coordination agreements from high priority foreign satellites.

Mr. Chairman

As per our understanding following other issues are also critical for accessing GSO, its utilization & applications;

NGSO Fixed Satellite Service (FSS) Constellation. Another area of concern for GSO satellites is emergence of Low Earth Orbit (LEO) mega constellations. These LEO constellations comprise of thousands of satellites operating in frequency spectrum already allocated for GSO satellites. Most of them are operated by private entities to provide worldwide broadband connectivity. As per ITU Radio Regulations Provision No. 22.2, GSO satellites have priority over LEO satellites in FSS & BSS (Broadcasting Satellite Service) spectrum and same must be ensured through EPFD (Equivalent Power Flux Density) limits and arc avoidance techniques but existing limits defined in ITU Radio Regulations were devised keeping in view limited number of LEO satellites rather than mega constellations of thousands of satellites. Therefore, deployment of mega constellation in LEO put at risk utilization of GSO by developing countries. There is a need to study in detail and revise the current criteria of EPFD limits, allocation of frequency spectrum and arc avoidance angles for amicable solution of this issue.

International Mobile Telecommunication (IMT) Allocation in GSO Spectrum. The gradual allocation of GSO satellite frequency spectrum to IMT on sharing basis cannot be ignored. ITU studies show that sharing of frequency spectrum by IMT and GSO Satellite in the same region is not possible without putting severe constraints on both services. In addition, several countries have laid down roadmap for implementation of IMT service in their country in the bands not identified for IMT in the World Radio Communication Conferences (WRCs), particularly C-band 3600 - 4200 MHz which has been under trial for IMT in large number of countries since 2018. This situation is not favourable for developing countries having limited satellite resources as their existing ground infrastructure and satellites continue to extensively use C-band. The delivery of various important services such as connectivity with other countries, TV programming to these regions, etc. relies solely on C-band. Satellite services would be wiped out of the countries planning to implement IMT in C-band 3600 - 4200 MHz, there by hampering the utilization of geostationary orbit by developing countries.

Misuse of Suspension Clause. ITU's IRR provision No. 11.49 has also made vulnerable the access of developing countries to O&SR of GSO. It has been observed that Satellite operators perform satellite maneuvers for temporary operations at particular orbital slot for 90 days to fulfill ITU's condition and then remove the satellite claiming suspension of satellite operations under No 11.49 to retain the GSO for next 3 years. In some cases, this practice is repeated several times for an orbit slot thereby restricting the access of others to nearby orbit slots. There's need to devise further regulations in this regard.

COVID-19 Pandemic. Furthermore, the spread of COVID-19 pandemic has severely affected the satellite program of developing countries from last two years which could result

in loss of their rights at ITU to the GSO. ITU Member States are submitting requests to RRB for limited time extension of their rights on GSO due to delay caused by COVID-19 that constituted the force majeure. If these extensions are not granted, then it may have serious effect on the development of ICT infrastructure in developing countries through satellite technology. We believe the delay caused by COVID-19 pandemic in utilizing Geostationary orbit was beyond the control of any country, not self-induced, unforeseen, inevitable or irresistible. Therefore, international bodies may facilitate the developing countries to the maximum extent.

Mr. Chairman

Foregoing in view and in order to ensure sustainability of the optimum utilization of geostationary orbit, it is necessary to uphold this issue on the agenda of the Subcommittee and the Subcommittee may examine and scrutinize the above mentioned issues through the technical studies by ITU, creation of appropriate working groups and intergovernmental panels, as necessary.

Thank you Mr. Chairman

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