

New Modernised Specifications a Giant Step towards More Effective Satcom - BIF

"New modernised specifications released by the Government will remove erstwhile restrictions which inhibited the use of modern Satcom technologies, and help deliver significant benefits to the end consumer by way of high capacity, high speed broadband, and better Quality of Service," – TV

Ramachandran, President, BIF

26th May 2021, New Delhi: Broadband India Forum (BIF), the leading independent Think-Tank and Policy Forum for technology agnostic Digital Communications in the country, has warmly welcomed the efforts of the Government in coming out with a new Standard for Interface Requirements for Communication & Broadcast Networks for Fixed-satellite service - FSS/Broadcasting-satellite service - BSS (Mandatory Technical Requirements). These new technical requirements are based on open, non-restrictive specifications and are fully aligned to the capabilities provided by the modern next-gen satcom technologies, namely High Throughput Satellites (HTS), NGSO (Non-Geo Stationary Orbit) Satellites (LEO, MEO, HEO), among others. This is also aligned to the recommendations of the NDCP 2018 and are consistent with the TRAI Recommendations made along these lines.

Rapid advancements in technology allow for satellites to provide a host of connectivity options along with ample power and capacity resources. These new TEC specifications/standard now allows the freedom and flexibility to the ground segment players (VSAT) of the satellite ecosystem to fully exploit the capabilities of the Next Generation Satellite Networks. Removal of erstwhile artificial technical barriers that inhibited carrier speeds, bandwidth, antenna sizes and permitted use of only certain frequency bands, will now enable optimal utilisation of the latest satcom technologies. It has the potential to enhance digital connectivity and provide high capacity cellular and Wi-Fi backhaul to all locations within the country, which is particularly relevant in view of the present pandemic scenario, and the path forward to 5G.

Some of the notable changes brought about by the new standards/specifications and the consequent benefits to the common man are:

- 1. The artificial barriers/caps on data rates which were earlier pegged to 2 Mbps in STAR Configuration and 4 Mbps in MESH Configuration, have been removed. This would now permit true high-speed, high-capacity satellite broadband proliferation currently available from the flock of Next Generation Satellites, viz. HTS & NGSO Satellites and enable use of satellite based broadband services to the citizens of the country.
- 2. Artificial caps that existed on uplink data rates, which were earlier linked to fixed antenna sizes have also been removed, thereby permitting modern high capacity smaller antenna sizes to cater to huge data throughputs. This will bring down the space, power and cost requirements of the operators, while enabling high throughputs, thereby making broadband through satellites more efficient.
- 3. These new flexible and liberalised guidelines are not only applicable to communication networks but also to the broadcast networks including DTH. In terms of frequency bands, besides the traditional C & Ku bands, the high capacity Ka bands have also been permitted for use in both broadband and broadcasting, along with flexible and higher power limits (PSD



limits) at the satellite antenna. This will pave the way for high-capacity, high-speed broadband networks using Satellites, and better QoS.

BIF President, Mr. TV Ramachandran, shared in this regard, "BIF warmly welcomes this move by the Government which will help deliver significant benefits to the end consumer by way of high capacity, high speed broadband services, and better Quality of Service. The move is aligned to the national goals of accelerating the Hon'ble PM's Digital India mission and the vision of achieving 'Broadband for All'. It is also aligned to the recommendations put forth in the NDCP 2018 for a new liberalised Satcom regime and the consistent TRAI recommendations along these lines for several years, so that Satcom is integrated into the mainstream to help connect the underserved and unserved regions of the country."

The announcement by the Government last year to promote the role of private sector in Satcom and liberalise the use of new Satcom technologies would get a big boost with the new liberalised specifications released by the Telecommunications Engineering Centre (TEC) - the technical and standardisation arm of the Department of Telecommunications, Government of India.

About Broadband India Forum

Broadband India Forum (BIF) functions as an independent policy forum and knowledge-based think-tank that works for the development and enhancement of the entire broadband ecosystem in a holistic, technology-neutral and service-neutral manner. BIF has established itself as a thought leader and a credible and effective voice, to help propel the nation to achieve the country's ambitious vision of creating a Digital India. To achieve this, BIF works to promote the rapid development of policies, so as to facilitate affordable and high-speed ubiquitous broadband throughout the country.

For further information, please contact: Kaustuv Sircar – kaustuv@broadbandindiaforum.com/+91-9999326911/+91-7003157047