

## IAFI\* counter comments to the view presented by Windsor Place Consulting (WP) in its submission in relation to the TRAI consultation on "Public consultation paper on auction of spectrum in frequency bands identified for IMT/5G"

The view presented by Windsor Place Consulting (WP) in its submission in relation to the TRAI consultation on "Public consultation paper on auction of spectrum in frequency bands identified for IMT/5G" is not at all tenable as this band is not part of the current TRAI consultation. Further, the band being proposed by WP is not identified for IMT/5G by the ITU.

The submission by WP that the upper part of the 6 GHz band (6425 MHz to 7125 MHz) could be considered for IMT/5G is not relevant to this consultation. Further this issue was already considered by the WRC-19 and rejected – mainly on India's strong opposition – due to extensive use of this band in India for:

- Cable Headend & HITS uplink: Free-to-air & pay TV channels
  - Over 900 satellite TV channels Including 300+ Pay TV channels
  - 1600 Registered MSOs with 117 million subscribers
  - Almost 200 million TV households in India
- Large satellite earth stations (feeder links), used for trunk & heavy traffic
- Telemetry, tracking, and command (TT&C) uplink, used for monitoring & control of the satellites
- VSATs (deployed ubiquitously), primarily used by businesses, military and government applications. ~300,000 VSAT Terminals in C and KU bands:
- Niche services such as feeder links for MSS, navigation satellites, satellites ranging, etc.

However, the use of this band can be further enhanced by delicensing of the band for unlicensed technologies such as Wi-Fi and NR-U which can be deployed at low power.

Studies have shown that these low power services can easily coexist with the current users

in this band. While indoor WIFI and NR-U kind of services can share the band to increase the spectrum efficiency, ubiquitous IMT services will cause harmful interference to the sensitive public broadcast and other critical services.

Countries including the US, Canada, Brazil, Chile, South Korea, Mexico and Saudi Arabia have already delicensed the full 6GHz band 5925-7125 MHz for Wi-Fi while continuing to share the same with satellites. In addition, CEPT and several countries in the EU have delicensed the band 5.925-6.425 GHz for Wi-Fi. The delicensing of the 6 GHz band is continuing around the world and is expected to cover the entire world.

The 6 GHz band between 5925 and 7025 MHz is much wider than the 2.4 GHz and 5 GHz bands. The wide channels, along with other distinct features such as lesser interference, enable Wi-Fi 6E to perform with better speeds and lower latency, even in multi-user connected, congested, and dense networks, which is a typical case in India.

Further delicensing of the of the 6 GHz band (5925-7025 MHz) will lead to opening of more spectrum for supporting the PM-WANI with room for seven new 160 MHz channels, the 6 GHz band could potentially serve as a multi-lane superhighway for the latest Wi-Fi devices. The bands support new Wi-Fi versions, Wi-Fi 6E and NR-U offer much higher data speeds and shorter range than previous versions of Wi-Fi.

Such application of 6 GHz is the acceptable way forward rather than the allocation of 6 GHz for IMT/5G, a case already considered and rejected by the WRC-19. WRC-19 also after detailed discussions listed 7025-7125 MHz for identification in Asia, including India, for further studies, These studies are currently being carried out by the ITU and IAFI is actively involved in these studies.

## \*About IAFI

ITU-APT Foundation of India (IAFI) is a non-profit, non-political, non-partisan registered society based in India. IAFI is recognized by the ITU as an international/regional Telecommunications organization and granted sector Member of all the three ITU Sectors - ITU-R, ITU-T and ITU-D. We are working for the last 18 years with the prime objective of encouraging involvement of professionals, corporate, public/private sector industries, R&D organizations, academic institutions, and such other agencies in the activities of ITU and APT IAFI was founded in 2003 by a group of Telecom professional, with Padamshree P S Saran, retired secretary DOT as the first chairman. Our members include many stalwarts of the telecom sector including former telecom secretaries, members, advisors and DDGs of the DOT and Telecom Commission, former Wireless Advisors and other DOT and WPC officers. IAFI also have many corporate members from India and other countries including R&D organizations, telecom operators, manufacturers and technology providers. For details see <a href="ITU-APT.ORG">ITU-APT.ORG</a>

