

To Shri Ashwini Vaishnaw, Hon'ble Minister of Communications and IT Sanchar Bhawan New Delhi-110001 January 06, 2023 ITU-APT/L/22-23/485

Dear Sir,

Greetings from the ITU-APT Foundation of India (IAFI) a non-profit, non-political registered society in India. IAFI has been advocating the economic benefits of 6 GHz Wi-Fi, as new technology advances and the demand for Wi-Fi grows significantly.

As is evident, the Wi-Fi Data traffic has been growing at a much faster rate with the rollout of 5G. This has been the case with each successive cellular generation from 2G onwards. Demand for Wi-Fi will only continue to grow with increased fiber deployments and cellular generations. Next generation use cases will require much faster data to enable immersive experiences such as robotic surgeries, Industrial automation, AR/VR. This requires expansive computational resources and connectivity- several times faster than 5G. Such high speed cannot be delivered by a wide-area networks such as IMT. Instead, local-area, short range communications such as the next generation Wi-Fi technologies designed for extremely high throughput and spectral reuse is the only solution. Wi-Fi 6E has the capabilities required for advanced use cases as it delivers faster speed, lower latency, higher efficiency, and higher density. It is a success already and by 2024 there will be billions of devices installed globally, able to operate from 5.925 to 7.125 GHz, from over 1.5 million Wi-Fi 6E access points and 350 million Wi-Fi 6E devices in 2022. 6 GHz frequency band is uniquely suited to meet growing demand for Wi-Fi, connectivity. There is no alternative spectrum now or in the future.

IMT networks in 6 GHz are not feasible as frequency harmonization cannot be achieved as most countries in the world have already opened this band for Wi-Fi. Besides, market fragmentation does not allow economies of scale necessary for a viable IMT ecosystem in 6 GHz. Wi-Fi 6E in 6 GHz band has expanded significantly around the world since 2020. More than 40 countries such as USA, Australia, Hong Kong, Japan, Malaysia, European Union, Norway, Switzerland, UK, Jordan, Morocco, Qatar, UAE etc. have already adopted it while several other countries are considering the 6 GHz band for part or full for license exempt use. Wi-Fi 7 and Wi-Fi 8 that enables enhanced VR/AR/XR, Industrial IoT, automotive, telepresence, immersive 3-D will depend on the 6 GHz access, and 320 MHz channels will be optimized for demanding emerging use cases.

IAF has been building momentum with other industry stake holders to open the 6GHz frequency bands for a license exempt use in India and other Asian Countries. Last week, I met with Shri K. Rajaraman, Secretary DoT and made a presentation on this issue as a part of the outcome of our recent spectrum conference. The 2nd India Spectrum Management Conference that was inaugurated by Hon'ble Minister of State for Communications, Shri Devusinh Chauhan.

License exempt use of 6GHz will open new opportunities for innovators and manufacturers to develop products and technologies and also increase opportunities for smart home and industrial products being manufactured in India for export markets. 6 GHz band is currently extensively used by satellites for up linking of broadcasting channels as well as by VSAT for providing data connectivity. Therefore, it will not be possible to use this band for licensed mobile operators. However, as various studies have shown, this band could be shared by indoor-only low-power Wi-fi routers. Since the band cannot be auctioned, delicensing it for Low Power indoor use will not cause any revenue loss to the Government. On the other hand, this move will add huge economic benefit to the economy and help increase the GDP. In addition, this move will also support, Atamnirbhar India as most of the Wi-Fi routers are fully made in the country.

We therefore humbly request you to kindly open the 6 GHz band for license exempt use of WiFi urgently so that software and hardware exporters in India could access this huge global market.

Best Regards

Bend.

Bharat B Bhatia, President, ITU-APT Foundation of India (IAFI) Vice Chairman, Asia Pacific, World Wireless Research Forum(WWRF)



Source: Wi-Fi Alliance | Nations Adopting Wi-Fi 6E / 6 GHz

Much of North and South America have fully implemented Wi-Fi 6E / 6 GHz. The following countries have fully begun commercial utilization of the 5925-7125 MHz frequency space:

- Brazil
- Canada
- Costa Rica
- Guatemala
- Honduras
- Peru
- Saudi Arabia
- United States

Many more countries have adopted, 5925-6425 MHz:

- Australia
- Chile
- European Union
- Hong Kong
- Iceland
- Japan
- Jordan

- Kenya
- Liechtenstein
- Malaysia
- Morocco
- New Zealand
- Norway
- Qatar
- Switzerland
- United Arab Emirates
- United Kingdom

Of these nations, Japan, Qatar, and the United Kingdom are considering use of the higher end of the Wi-Fi 6E / 6 GHz frequency space, 6245-7125 MHz

The following nations are considering use of the full Wi-Fi 6E / 6 GHz frequency spectrum, 5925-7125 MHz:

- Australia
- Colombia
- Hong Kong
- Mexico