

ITU-APT/L/24-25/955 Dated: 17th April, 2025

To Shri Jyotiraditya M. Scindia Hon'ble Minister of Communications Government of India New Delhi

## Subject: Urgent Need for Delicensing the 5925–6425 MHz Band to Support Innovation and Make in India

Dear Shri Scindia ji,

Greetings from the ITU-APT Foundation of India (IAFI).

We would like to congratulate you on your recent bold decision to open up new frequency bands for expanding the mobile services in the country, in particular your leadership in opening the upper GHz for 5G and 6G services by mobile operators. However, linked to that decision is the opening up f the complementary unlicensed Wi-Fi 7 in the lower 6GHz for which your decision is still awaited.

The lower 6 GHz band (5925–6425 MHz) has been progressively unlicensed for Wi-Fi around the world. As of the latest updates, more than 100 countries, including all the developed countries around the world have already opened the lower 6 GHz band (5925-6425 MHz) for Wi-Fi use. **See the list of countries that have unlicensed the lower 6GHz in Annex 1 attached**. This band is now globally recognized for the benefits of Wi-Fi 6E and Wi-Fi 7 for enhanced connectivity, capacity, innovation and new digital services, such as AR/VR, automated industries, robotic surgeries, etc. The Government's flagship initiatives such as PM-WANI and Bharat-Net are already playing a key role in expanding broadband access across the country. There is a pressing need for additional spectrum to avoid congestion and deliver seamless high-speed connectivity. Studies confirm that at least 2 GHz of Wi-Fi spectrum is essential to support modern home and enterprise broadband usage.

A global study by the Wi-Fi Alliance forecasts that the worldwide economic impact of Wi-Fi will soar to approximately ₹300 lakh crores (US\$4.9 trillion) by 2025. This economic value encompasses direct and indirect contributions across consumer usage, enterprise productivity, service delivery, and innovation.

We at IAFI strongly believe that the timely release of this band for unlicensed use will play a transformative role in achieving the goals of the Hon'ble Prime Minister's Digital India vision. With data consumption rising exponentially and the demand for high-quality, low-latency connectivity surging across homes, enterprises, and public spaces, Wi-Fi has emerged as an indispensable enabler of inclusive digital access as a support for 4G and 5G mobile services. Wi-Fi in lower 6GHz band provides:

- Support for Industry 5.0, robotics, AI and E-Health including robotic surgeries
- Lower 6 GHz band is extensively used for Wi-Fi globally and therefore has a sound device ecosystem resulting in an excellent affordability of devices which is important as most of these devices are used by end consumers
- Increased potential for export of telecom hardware and software due to multi trillion dollar export market for AR/VR and gaming software.
- Wi-Fi in lower 6GHz is critical to the innovative applications such VR, XR, Wearables etc.
- Absence of 6GHz will lead to reduced speed of Internet access in congested areas, in particular in condominiums, housing clusters etc.
- ISRO studies have shown that low power and very low power WiFi can coexist with existing satellite services. Further standard power WiFi could also be shared with satellite services through the use of AFC.
- No operator will be willing to buy the lower 6GHz in auctions, which is unlikely to have any global infrastructure in this band. Therefore, no auction revenue can be expected
- Support for work from Home and study at home for high population areas
- India too can benefit immensely by delicensing this band. It will empower rural and underserved communities by enabling cost-effective broadband deployments,

strengthen digital infrastructure in educational and health institutions, and foster domestic innovation and manufacturing. Furthermore, by supporting widespread access to spectrum, India can nurture startups and SMEs to build homegrown solutions, echoing the spirit of Atmanirbhar Bharat.

IAFI respectfully urges the Ministry to take expeditious steps to delicense the 5925–6425 MHz band, aligning India with global best practices while addressing its unique connectivity challenges.

This band is currently used by satellite uplinks and microwave links, both of which can coexist with Wi-Fi under well-established sharing mechanisms. Technical studies, including those conducted with the Department of Space and global satellite operators, confirm that lowpower indoor and limited outdoor Wi-Fi use can coexist without disrupting existing operations or revenue streams. The introduction of Wi-Fi 6E in this band can quadruple network efficiency compared to previous standards.

IAFI would welcome the opportunity to make a detailed presentation on this matter at your earliest convenience and remain at your service for any further technical inputs or clarifications.

With warm regards,

Zen.

Yours sincerely, Bharat B. Bhatia President, ITU-APT Foundation of India Vice Chairman - Asia Pacific, World Wireless Research Forum (WWRF) Chairman, ITU-R WP5D WG General Chairman, AWG Task Group on RLAN 504, World Trade Center, New Delhi – 110001 Mobile: +91 98101 73737

## Annex

List of some of the countries that have opened the lower 6 GHz band (5925-6425 MHz) for Wi-Fi use.

- 1. Andorra: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 2. Argentina: Adopted the entire 5925-7125 MHz band.
- 3. Australia: Adopted 5925-6425 MHz, considering 6425-7125 MHz.
- 4. Austria: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 5. Azerbaijan: Adopted 5925-6425 MHz.
- 6. Bahrain: Adopted 5925-6425 MHz.
- 7. Bangladesh: Adopted 5925-6425 MHz.
- 8. Belgium: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 9. **Brazil**: Adopted the entire 5925-7125 MHz band, but is considering narrowing it to 5925-6425 MHz for Wi-Fi 6E.
- 10. **Canada**: Adopted the entire 5925-7125 MHz band.
- 11. Chile: Adopted 5925-6425 MHz.
- 12. **Colombia**: Adopted the entire 5925-7125 MHz band.
- 13. Costa Rica: Adopted 5925-7125 MHz.
- 14. Dominican Republic: Adopted 5925-7125 MHz.
- 15. Egypt: Adopted 5925-6425 MHz.
- 16. El Salvador: Adopted 5925-7125 MHz.
- 17. European Union: Adopted 5925-6425 MHz.
- 18. Faroe Islands: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 19. France: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 20. Germany: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 21. Gibraltar: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 22. Guatemala: Adopted 5925-7125 MHz.
- 23. Hong Kong: Adopted 5925-6425 MHz, considering 6425-7125 MHz.
- 24. Iceland: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 25. Indonesia: Adopted 5925-6425 MHz.
- 26. Ireland: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 27. Isle of Man: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 28. Japan: Adopted 5925-6425 MHz, considering 6425-7125 MHz.
- 29. Jordan: Adopted 5925-6425 MHz.
- 30. Kazakhstan: Adopted 5925-7125 MHz.
- 31. Kenya: Adopted 5925-6425 MHz.
- 32. Liechtenstein: Adopted 5945-6425 MHz, considering 6425-7125 MHz.

- 33. Luxembourg: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 34. Macau S.A.R.: Adopted 5925-6425 MHz.
- 35. Malaysia: Adopted 5925-6425 MHz.
- 36. Mauritius: Adopted 5925-6425 MHz.
- 37. Mexico: Adopted 5925-6425 MHz.
- 38. Monaco: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 39. Morocco: Adopted 5925-6425 MHz.
- 40. Namibia: Adopted 5925-6425 MHz.
- 41. Netherlands: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 42. New Zealand: Adopted 5925-6425 MHz.
- 43. Norway: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 44. Oman: Considering 5925-6425 MHz.
- 45. Pakistan: Adopted 5945-6425 MHz.
- 46. Peru: Adopted 5925-7125 MHz.
- 47. Philippines: Adopted 5925-6425 MHz.
- 48. Portugal: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 49. Qatar: Adopted 5925-6425 MHz, considering 6425-7125 MHz.
- 50. Russian Federation: Adopted 5925-6425 MHz.
- 51. Saudi Arabia: Adopted 5925-7125 MHz.
- 52. Singapore: Adopted 5925-6425 MHz.
- 53. South Africa: Adopted 5925-6425 MHz.
- 54. South Korea: Adopted 5925-7125 MHz.
- 55. Spain: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 56. Switzerland: Adopted 5945-6425 MHz, considering 6425-7125 MHz.
- 57. Syria: Adopted 5925-6425 MHz.
- 58. Taiwan: Adopted 5925-6425 MHz.
- 59. Thailand: Adopted 5925-6425 MHz.
- 60. Togo: Adopted 5925-6425 MHz.
- 61. Tunisia: Adopted 5925-6425 MHz.
- 62. Turkey: Adopted 5925-6425 MHz.
- 63. United Arab Emirates: Adopted 5925-6425 MHz.
- 64. United Kingdom: Adopted 5925-6425 MHz, considering 6425-7125 MHz.
- 65. United States: Adopted the entire 5925-7125 MHz band.
- 66. Uruguay: Adopted 5925-7125 MHz.
- 67. Vietnam: Adopted 5925-6425 MHz.