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National Broadcasting and Telecommunication Commission
87 Phaholyothin Road Soi 8
Samsennai, Phayathai
Bangkok 10210
standard@nbtc.go.th

Re: Notice of NBTC announcement on technical standards for telecommunications equipment and equipment for radio communications equipment that uses the frequency 5925 – 6425 MHz

Dear National Broadcasting and Telecommunication Commission - NBTC,

The Dynamic Spectrum Alliance (DSA[1]) respectfully submits these comments in response to the National Broadcasting and Telecommunication Commission (the Commission) '**Notice of NBTC announcement on technical standards for telecommunications equipment and equipment for radio communications equipment that uses the frequency 5925 – 6425 MHz**' (Notice) in which the Commission announces the Technical Standards for Telecommunications and Radiocommunication Equipment Operating in the 5925–6425 MHz Frequency Band.

The DSA commends the Commission for its initiative to conduct this public consultation and dedicate the 5925 – 6425 MHz frequency band. Thailand joins a growing list of countries worldwide that are adopting policies to facilitate access by Wireless Access Systems, including Radio Local Area Networks (WAS/RLAN), to additional spectrum that will support the latest technology for wireless networks, including Wi-Fi 6E and Wi-Fi 7. The DSA supports the NBTC's proposed parameters for both RLAN Low Power Indoor (LPI) and Very Low Power (VLP) use and the adoption of internationally recognized standards for devices in the band. We strongly believe greater spectrum allocations for Wi-Fi devices will enhance the digital infrastructure of Thailand and enable businesses and consumers to take advantage of next generation wireless connectivity and digital applications.

Additional Comments about the 6425 – 7125 MHz and Standard Power Applications

This consultation does not address it, but if NBTC considers opening the 6425 – 7125 MHz frequency range for WAS/RLANs use in the future, the standards should support the 320 MHz wide channels enabled by Wi-Fi 7. With wider channels, access points will be able to support extremely high-capacity bandwidths, enabling vital applications for the 21st century.

[1] The DSA is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more efficient utilization of spectrum, fostering innovation and affordable connectivity for all. Our membership spans multinationals, small-and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing. A full list of DSA members is available on the DSA's website at www.dynamicspectrumalliance.org/members.

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In addition to enable LPI and VLP uses, the DSA also encourages the Commission to consider Standard Power device allocation in the 6 GHz band. Standard Power devices propagate farther, enabling greater download and upload speeds on end-user devices. If NTBC wishes to implement standard power applications, the FCC Part 15.407 could be considered a reference. It sets a maximum 36 dBm EIRP and a maximum power spectral density of 23 dBm/MHz. It is worth noting that for outdoor devices, the maximum EIRP is limited to 125 mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon. Standard Power and outdoor WAS/RLAN devices are able to operate in the 6 GHz band under a spectrum-sharing regime known as Automated Frequency Coordination (AFC). Spectrum sharing is an increasingly used tool by authorities around the world to balance spectrum allocations and ensure new commercial entrants and incumbents can co-exist in a band without harmful interference.

Finally, the DSA would like to highlight that the WRC-23 decisions sought to provide flexibility to different administrations on their best approach to use the 6 GHz band and that, in particular, footnote 5.457E[2] ensured that both Wi-Fi and IMT technologies are recognized.

The DSA appreciates the opportunity to comment on this public consultation. We look forward to working with the NBTC on the next steps and providing any technical information that might be useful for the Commission.

Respectfully submitted,

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[2] 5.457E The frequency bands 6 425-7 125 MHz in Region 1 and 7 025-7 125 MHz in Region 3 are identified for use by administrations wishing to implement the terrestrial component of International Mobile Telecommunications (IMT). This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. Resolution 220 (WRC-23) applies.
The frequency bands are also used for the implementation of wireless access systems (WAS), including radio local area networks (RLANs). (WRC-23)