

June 25, 2024

Eng. Ahmad Abdulla AlMuslemani President Communications Regulatory Authority (CRA) State of Qatar

## **Re:** Class License for Short Range Devices – Version No. (5)

Dear Eng. Ahmad Abdulla AlMuslemani -

The Dynamic Spectrum Alliance (DSA)<sup>1</sup> respectfully submits these comments in response to the Communications Regulatory Authority (CRA) public consultation on "Class License for Short Range Devices – Version No. (5)" (the Consultation Document), which seeks input on the use of radio spectrum for short range devices, including Wireless Access Systems including Radio Local Area Networks (WAS/RLANs).

The DSA welcomes CRA's interest in this important topic and fully supports its plans to make spectrum available for WAS/RLANs, particularly in the 6 GHz band which supports the introduction of the latest generation of Wi-Fi technologies: Wi-Fi 6E and Wi-Fi 7.

In order to maximize the opportunities for both consumer and enterprise use of WAS/RLANs, the DSA encourages CRA and other administrations around the world to authorize all three categories of WAS/RLAN devices, namely:

- (1) Very Low Power (VLP) devices that can operate both outdoors and indoors across the entire 6 GHz band, and
- (2) Low Power Indoor (LPI) devices that can operate across the entire 6 GHz band, both of which can do not require automated frequency sharing, and
- (3) Standard Power (SP) devices that can operate both outdoors and indoors under the coordination of an automated database management system, known as the Automated Frequency Coordinator (AFC). Depending on the incumbent services licensed within the country, SP devices may only be able to operate in portions of the 6 GHz band.

<sup>&</sup>lt;sup>1</sup> 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



While some countries have permitted licence-exempt operations in only the lower 500 MHz of the band, countries in all three ITU Regions have permitted license-exempt use across the entire 6 GHz band (5925-7125 MHz). The use of the entire 6 GHz band for Wi-Fi is perfectly aligned with the results of the last World Radiocommunications Conference (WRC-23) and the Radio Regulations. Note 5.457E, explicitly recognizes that the 6 GHz frequency bands are also used for the implementation of WAS/RLANs<sup>2</sup>. The WRC-23's backing of the use of WAS/RLANs in the 6 GHz band across the world is a significant win for the long-term prosperity of Wi-Fi as the industry prepares for the move to Wi-Fi 7. Countries worldwide are actively deploying LPI, VLP, and SP devices on a licence-exempt, shared basis in the 6 GHz band, leveraging wider channel availability (up to 160 MHz with Wi-Fi 6E) to increase spectrum efficiency while maintaining the ability to share spectrum with incumbents and other licence-exempt deployments. Wi-Fi 7 accommodates 320 MHz channels, which will further improve latency, throughput, reliability, and quality of service.

For SP and outdoor operations, AFC systems have been designed to provide channel availability information to licence-exempt devices, while ensuring that incumbent systems, including fixed point-to-point microwave links, are protected from interference. When an authorized and authenticated device queries an AFC for spectrum availability, the AFC assesses which incumbent receivers have the potential to receive excess energy from the licence-exempt device based on its location and potential transmit power. The AFC calculates the maximum transmit power for that device's location on each 6 GHz channel and provides a list of options for the device to select. The device must check in with the AFC daily to determine if any changes to incumbent use of the band have occurred that would alter the channel and transmit power options available to it. Several DSA members have developed AFC systems for the 6 GHz Band and are authorized AFC system operators in the United States and Canada. DSA anticipates that many of these same AFC system developers will also seek to operate in countries, such as Korea, and Saudi Arabia.

As CRA finalizes updating its Class License for Short Range Devices, the DSA respectfully suggests that CRA:

- 1) make the entire 6 GHz band (5925-7125 MHz) for license-exempt use to advantage of the full potential of this band; and
- 2) authorize the three categories of license-exempt devices: VLP, LPI, and SP devices under the management of an AFC System.

Authorizing the entire 6 GHz band for licence-exempt use will allow Qatar's residents and enterprises to benefit from all the Wi-Fi 6E devices commercially available today, and importantly, also allow them to benefit from Wi-Fi 7 products that will soon become widely available. Notably, making the 6425-7125 MHz band available for licence-exempt device to share with incumbent users will continue to allow fixed service, fixed satellite service, and other incumbents thrive in the band.

 $<sup>^2</sup>$  **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)



The DSA appreciates the opportunity to provide input on CRA's Consultation Document. We are available to discuss these comments and provide any additional information as CRA considers options for implementing the latest generation of WAS/RLAN devices in Qatar.

Respectfully submitted,

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// Martha SUAREZ President Dynamic Spectrum Alliance