DSA

DYNAMIC • SPECTRUM • ALLIANCE

ICASA – PUBLIC HEARINGS - NRFP

DR. MARTHA SUAREZ, PRESIDENT

DYNAMIC SPECTRUM ALLIANCE, DSA

16 JANUARY 2026

WHO WE ARE

The Dynamic Spectrum Alliance (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.

DSA comments on the 2nd draft National Radio Frequency Plan 2025

- DSA commends ICASA's progressive approach to the entire 6 GHz band:

  - 5925–6425 MHz already authorized for license-exempt WAS/RLAN use in Annexure B of the Radio Frequency Spectrum Regulations (as amended by GG No. 48643 of 23 May 2023)
  - 6425–7125 MHz explicitly recognizing WAS/RLAN as a typical application in the NRFP.

- This forward-looking approach aligns with WRC-23 Footnote 5.457E and ATU-R Recommendation 005 (SS4-13), positioning South Africa to benefit from mature global Wi-Fi ecosystems and advance broadband inclusion.

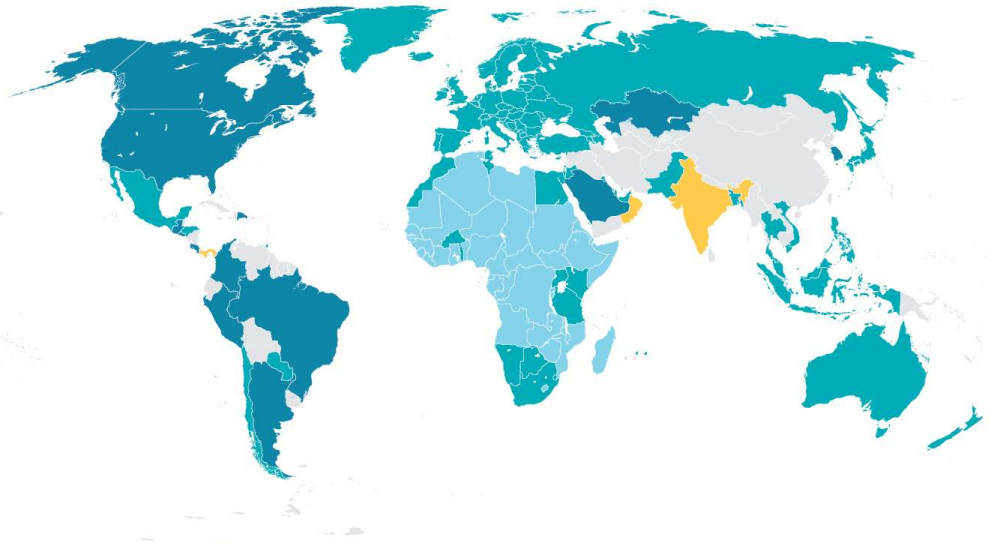
DSA comments on the 2nd draft National Radio Frequency Plan 2025

- 6 GHz proposal is strategic for digital infrastructure in South Africa, enabling rapid deployment of mature Wi-Fi 6E and Wi-Fi 7 technologies that lower broadband costs, expand digital inclusion, and support sustained economic growth across urban, peri-urban, and rural communities.

- Several countries have adopted license-exempt policies for the 6 GHz band, fostering a harmonized international market for devices, equipment, and services.

License-Exempt in the 6 GHz band

GLOBAL PROGRESS TOWARDS LICENCE-EXEMPT ACCESS TO THE 6 GHz BAND



ADOPTED 5925-7125 MHz

Argentina
Brazil
Canada
Colombia
Costa Rica
Dominican Republic
El Salvador
Guatemala
Kazakhstan
Peru
Saudi Arabia
South Korea
USA

ADOPTED 5925/45-6425 MHz *

Australia
Bahrain
Bangladesh
Botswana
Burkina Faso
Chile
CEPT Area
Egypt
Eswatini
European Union (480 MHz)
Honduras
Hong Kong
Indonesia
Israel
Jordan
Kenya
Kuwait
Macau
Malaysia
Mauritius (480 MHz)
Mexico
Morocco
Namibia
New Zealand
Pakistan
Paraguay
Philippines
Oman
Qatar
Russia
Singapore
South Africa
Taiwan
Tanzania
Thailand
Togo
Trinidad and Tobago
Tunisia
UAE
Uganda
United Kingdom
Vietnam

RECOMMENDED 5925-6425 MHz *

Africa / ATU

UNDER CONSULTATION

India
Oman
Panama

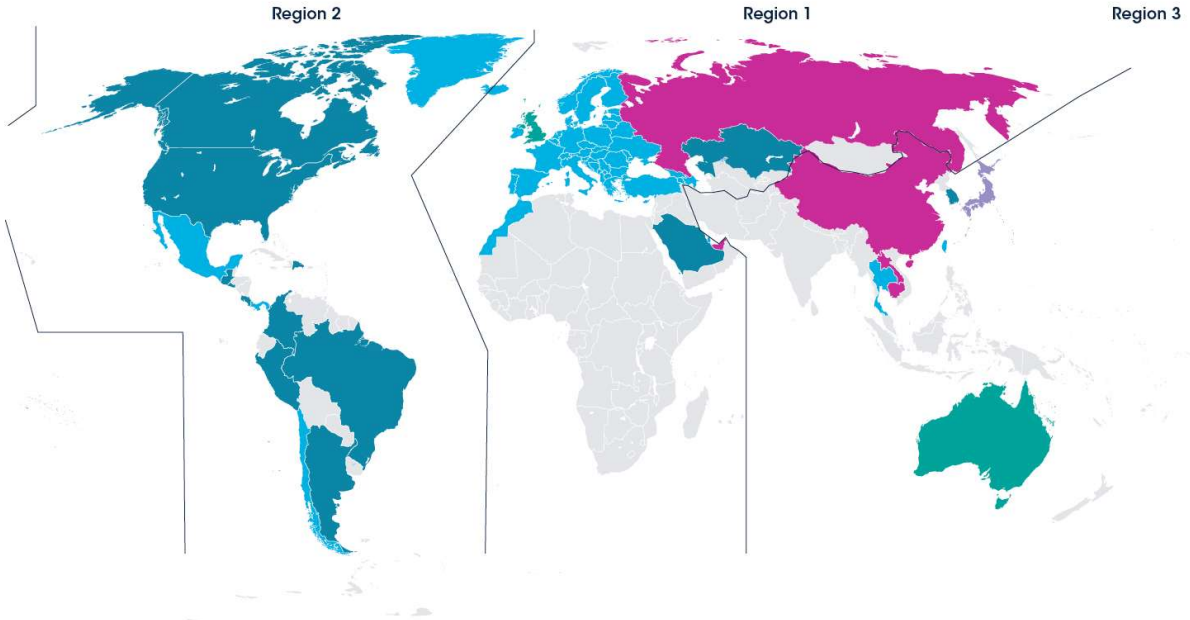
* Position on 6425-7125 MHz varies by country

Data correct as of July 2025

6GHz.info

DSA
DYNAMIC · SPECTRUM · ALLIANCE

GLOBAL STATUS OF THE UPPER 6 GHz BAND

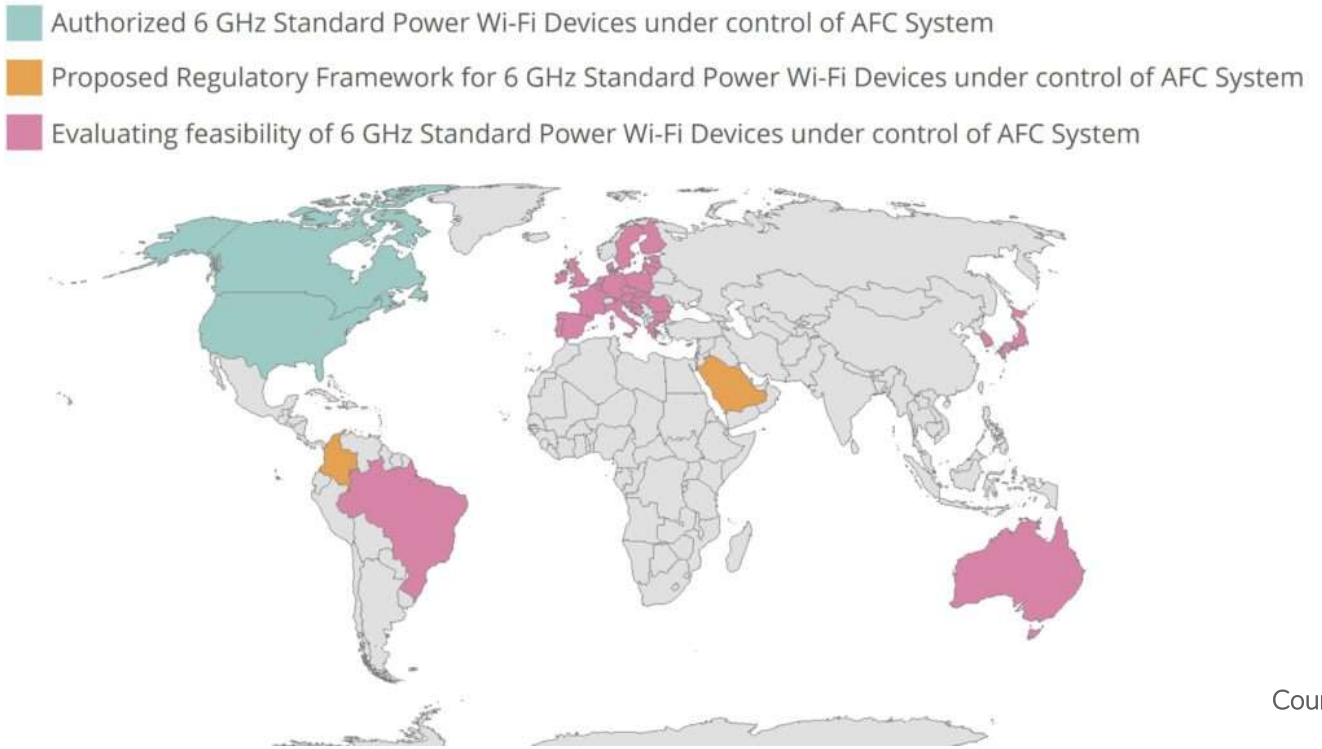


OPEN FOR LICENCE-EXEMPT USE	PROGRESSING LICENCE-EXEMPT USE	EVALUATING LICENCE-EXEMPT USE	EVALUATING SELECTIVE USE OF LICENCE-EXEMPT AND LICENSED USE	EVALUATING LICENSED USE
Argentina Brazil (under review) Canada Colombia Costa Rica Dominican Republic El Salvador Guatemala Kazakhstan Peru Saudi Arabia South Korea USA	Japan	Chile Europe (CEPT countries) Mexico Panama Qatar Taiwan Thailand	Australia UK	Cambodia China Hong Kong Lao P.D.R Maldives Russia United Arab Emirates

Data correct as of July 2025

6GHz.info

License-Exempt in the 6 GHz band is about innovation: AFC



Courtesy of Wi-Fi Alliance

DSA comments on the 2nd draft National Radio Frequency Plan 2025

- This proposed framework preserves capacity for a wide range of local broadband use cases while avoiding spectrum fragmentation that would undermine spectral efficiency and erode both consumer and enterprise benefits. For example, access to additional Upper 6 GHz spectrum is of critical importance for indoor enterprise deployments to avoid co-channel interference among densely spaced Wi-Fi access points, which will be essential for reducing latency and enabling the capabilities of Wi-Fi 7 and Wi-Fi 8 to support mission-critical applications.

- Industry anticipates a need for at least fifteen 80 MHz channels or seven 160 MHz channels to fully utilize Wi-Fi 7 and future Wi-Fi 8 protocols, with increasing demand expected for wider 320 MHz channels in the years ahead.

DSA
DYNAMIC • SPECTRUM • ALLIANCE

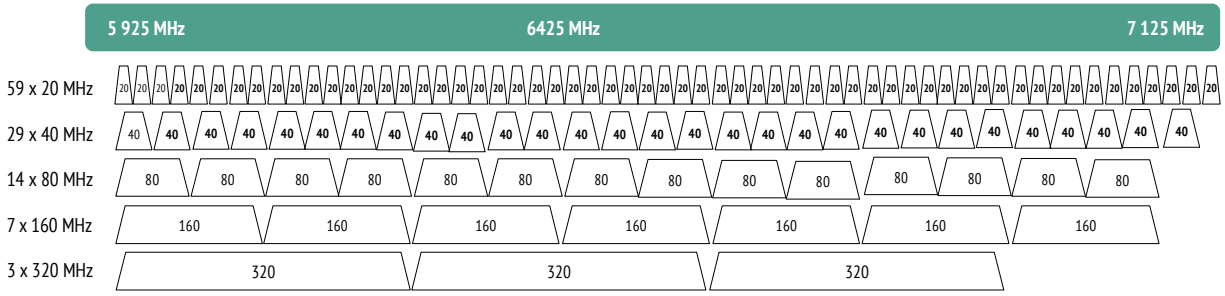
Larger bandwidth channels enable innovative applications and use cases

320 MHz Channels

BW

Wi-Fi @ 2.4 GHz and @ 5 GHz
20 MHz, 40 MHz, 80 MHz, 160 MHz

Wi-Fi @ 6 GHz
320 MHz



Applications and Use Cases

- Fixed Wireless Broadband
  - Enterprise Wi-Fi
  - Connected Homes (Fiber + Wi-Fi)
  - High-speed broadband satellite Wi-Fi networking
- Industrial IoT including autonomous systems
- AR/VR/XR applications
  - Digital twin rendering
  - Product/building design
  - Medical procedure simulation
- Ultra high-definition streaming / Growing video

Applications and Use Cases

- High-speed gigabit connectivity in dense multi-dwelling unit residential buildings
- Artificial Intelligence (AI)-based virtual assistants
- University and research campus broadband, Medicine Centers, Retail Facilities, sports stadiums
- 6 GHz is about innovation… Not only Wi-Fi, also UWB, Bluetooth and IoT in other industries

https://www.dynamicspectrumalliance.org/whitepapers-reports/

DSA
DYNAMIC • SPECTRUM • ALLIANCE

… All While Ensuring Protection for Incumbent Users

DSA comments on the 2nd draft National Radio Frequency Plan 2025

- In addition to extensive studies already conducted, real-world experience confirms that WAS/RLAN operations can safely coexist with fixed and satellite incumbents across the 6 GHz band. Not only do LPI and VLP devices currently operate without interference to 6 GHz incumbents, but AFC-managed SP devices also operate on a commercial basis without any impact

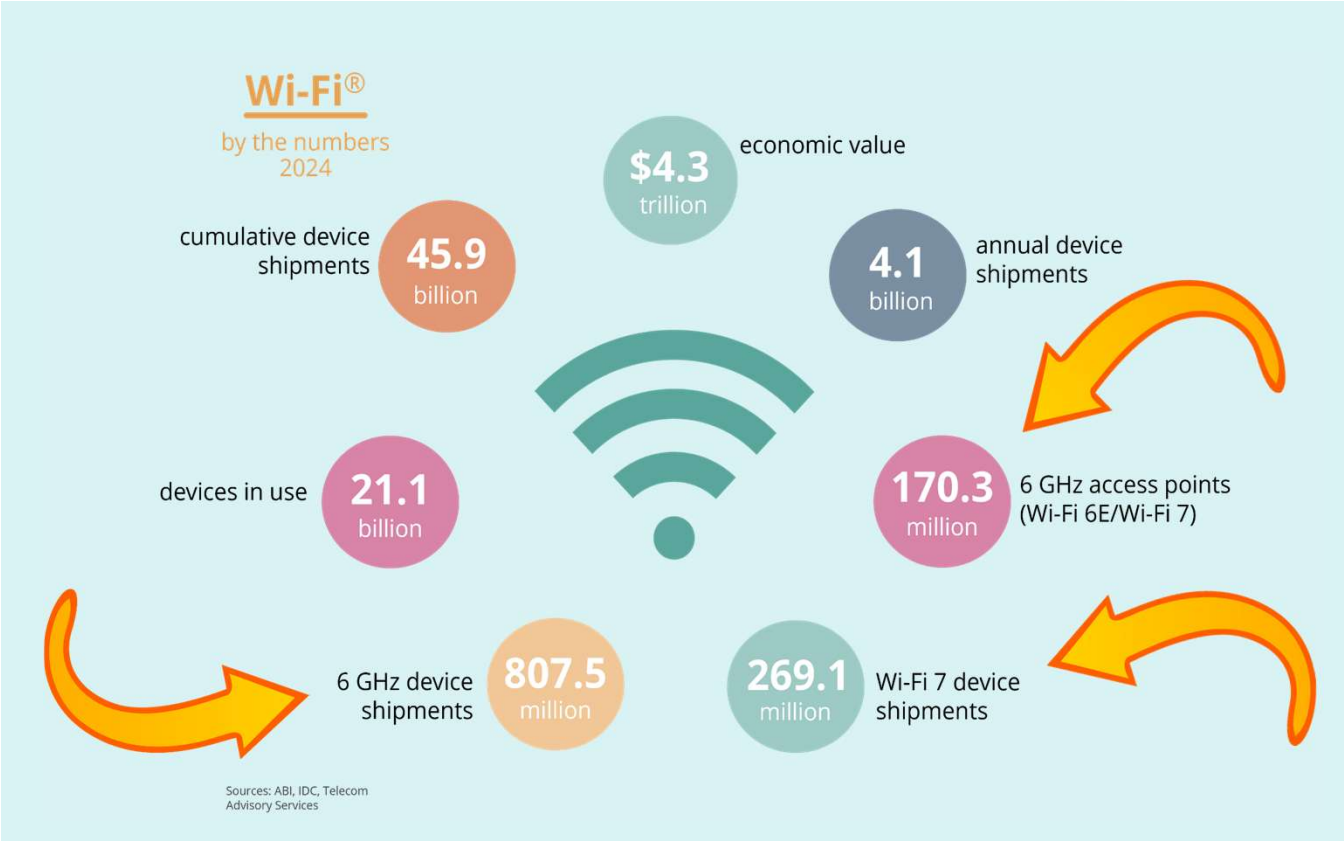
- Globally, over 19.5 billion Wi-Fi devices are in use with an annual shipment of 3.8 billion units, highlighting its widespread adoption and the ongoing evolution through advancements like Wi-Fi 6E, Wi-Fi 7, and soon Wi-Fi 8.

https://www.wi-fi.org/beacon/the-beacon/wi-fi-by-the-numbers-technology-momentum-in-2023

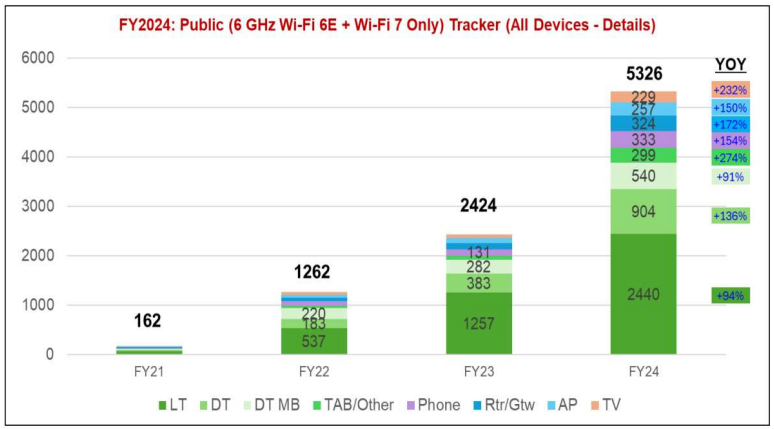
DSA
DYNAMIC • SPECTRUM • ALLIANCE

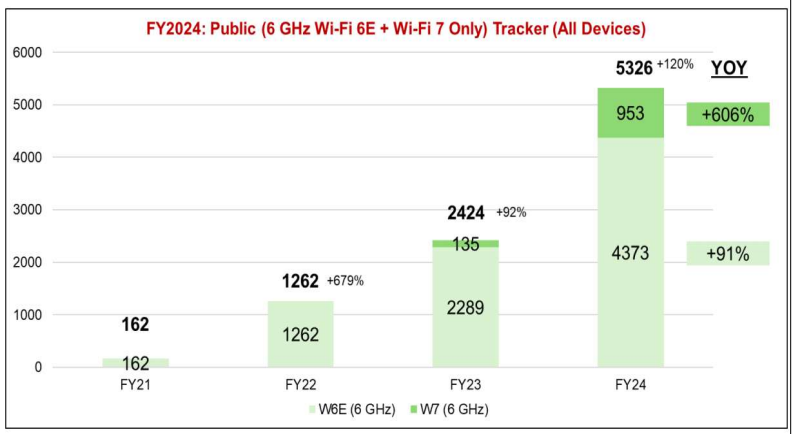
Wi-Fi in the 6 GHz Band: A Mature and Standardized Ecosystem

6 GHz Wi-Fi 6E and Wi-Fi 7 already supported by a large ecosystem



Unprecedented momentum in 6 GHz Wi-Fi adoption



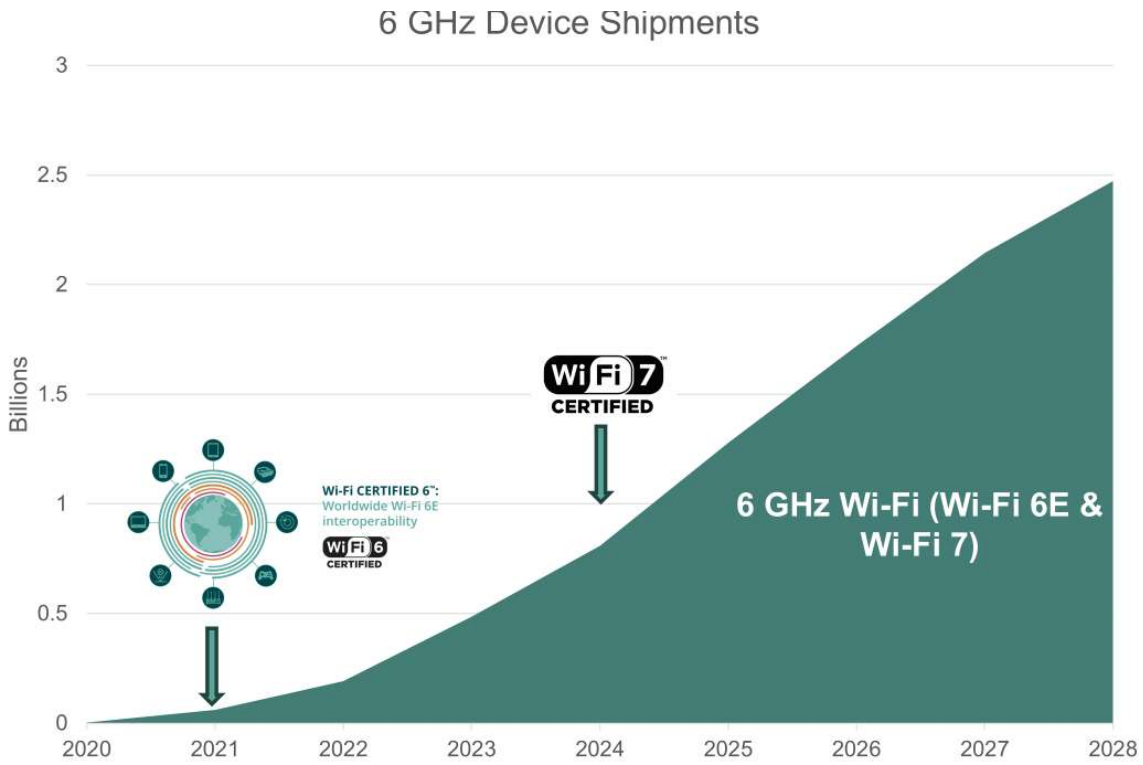


>5000 (Wi-Fi 6E + Wi-Fi 7) device models supported 6 GHz in 2024
The total number of 6 GHz device models nearly doubled in both 2023 and 2024

Intel Wi-Fi 6E/7 device model tracking is based on public information compiled from vendor/retailer websites, press releases, and third-party reviews.
Intel provides this assessment for informational purposes only. Intel cannot guarantee its accuracy, and it is subject to change without notice.

https://wifinowglobal.com/news-and-blog/massive-market-adoption-5000-wi-fi-devices-now-support-6-ghz-1230-support-wi-fi-7-intel-says/

6 GHz Wi-Fi adoption reaches 2.5 billion in 2028



Courtesy of Wi-Fi Alliance

DSA comments on the 2nd draft National Radio Frequency Plan 2025

- The DSA recommends that ICASA amend Annexure B of the Radio Frequency Spectrum Regulations, to specify comprehensive operating conditions for full 6425–7125 MHz band, similar to those specified for WAS/RLAN in the 5925-6425 MHz bands:

(1) Low Power Indoor (LPI) at 23 dBm e.i.r.p. for indoor-only deployment
(2) Very Low Power (VLP) at 14 dBm e.i.r.p. for both indoor and outdoor use

- The DSA supports the ongoing development of regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum (GG 52415 No. 6066 of 28 March 2025).

Closing remarks:

- The 6 GHz band is a prime example of success, timely regulations have fostered innovation and driven significant private-sector investment, resulting in gigabit connectivity for users and promoting digital inclusion.
- Wi-Fi stands as a market leading technology.
- Fiber, Wi-Fi and NTN will support next-generation use cases and shape future spectrum requirements.

DSA

DYNAMIC • SPECTRUM • ALLIANCE

ENABLING LICENSE-EXEMPT ACCESS TO THE ENTIRE 6 GHZ BAND ENSURES BROADER SOCIETAL BENEFITS, LEVERAGES EXISTING INFRASTRUCTURE, AND ADDRESSES REAL CONNECTIVITY NEEDS—WITHOUT COMPROMISING THE PROTECTION OF INCUMBENT USERS.

THANK YOU

WWW.DYNAMICSPECTRUMALLIANCE.ORG

DSA

DYNAMIC • SPECTRUM • ALLIANCE