

November 6, 2024

A Madame TOURE Namahoua
Directeur Général de l'ARTCI
Réponse à la consultation publique relative à la stratégie de gestion des fréquences radioélectriques
dans le secteur des Télécommunications
Abidjan, Marcory Anoumabo
18 BP 2203 Abidjan 18
Côte d'Ivoire
consultation-strategiegestionfrequences@artci.ci

Re: DSA Comments to the Stratégie de gestion des fréquences

Dear Colleagues,

The Dynamic Spectrum Alliance¹ (DSA) appreciates the opportunity to provide input on ARTCI's proposed Frequency Management Strategy for the Telecommunications Sector.

The DSA and its members collaborate with regulatory authorities worldwide to advance innovative spectrum management approaches that broaden spectrum access options and expand connectivity. These approaches include adopting new licensing frameworks integrating licensed, licence-exempt, and lightly licensed access.

Our response focuses on the strategic future use of the 6GHz band (5925-7125MHz).

Wi-Fi has become indispensable to broadband connectivity. Over 21.1 billion Wi-Fi devices are currently in use worldwide, and 4.1 billion are shipped every year, according to IDC². The technology has consistently enabled affordable internet access and facilitated business operations. New Wi-Fi advancements, such as Wi-Fi 6E and Wi-Fi 7, promise to further expand these benefits, driving social and economic progress in Côte d'Ivoire.

With the growth in Wi-Fi adoption, traffic in existing bands (2.4GHz and 5GHz) has intensified, underscoring the need for additional spectrum. As governments work to unlock the full potential of Wi-

¹ The DSA is a global, cross-industry, not for profit organisation advocating for laws, regulations, and economic best practices that will lead to more efficient utilisation 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 organisations 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 complete list of DSA members is available on the DSA's website at dynamicspectrumalliance.org/members.

² Source: <https://www.wi-fi.org/beacon/the-beacon/wi-fi-by-the-numbers-technology-momentum-in-2023>

Fi technology, allocating sufficient spectrum becomes essential. Opening the entire 6GHz band (5925-7125MHz) for licence-exempt use would offer an invaluable opportunity to deploy WAS/RLANs, especially with next-generation Wi-Fi technologies, such as Wi-Fi 6E and Wi-Fi 7. This step would be instrumental in supporting Côte d'Ivoire's digital economy and advancing the broader digital transformation agenda.

Currently, only 455MHz (5150-5350MHz and 5470-5725MHz) of mid-band spectrum is generally available for licence-exempt use in most of ITU Region 1 (Africa, Europe, and the Middle East). This limited and fragmented allocation restricts the availability of sufficiently wide channels needed to support newer applications. Additional mid-band spectrum, with fewer operational constraints, is needed to accommodate the growing demand and maximise the benefits of Wi-Fi 6E and Wi-Fi 7.

In July 2021, the African Telecommunications Union (ATU) published Recommendation ATU-R 005, recommending that the lower 6GHz (5925-6425MHz) band be made available for licence-exempt WAS/RLANs. To date, to the best of our knowledge, this recommendation has not been implemented in Côte d'Ivoire yet. We encourage ARTCI to consider implementation and welcome ARTCI's commitment to pursue strategic objective (j), section 5.1, of the Spectral Resources Management Framework.

Regarding strategic objective (k), under section 5.1, we kindly encourage ARTCI to fully consider the implications of WRC-23 outcomes regarding the 6425-7125MHz band.

Footnote 5.457E in Resolution 220 (WRC-23) of the Radio Regulation highlights that:

*“The frequency bands 6 425-7 125MHz in Region 1 and 7 025-7 125MHz 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).”

This provision empowers administrations to choose the mobile applications that best suit their needs, be it IMT, WAS/RLAN, or both.

While we note that the lower 6GHz band has a 100% occupancy rate in Abidjan, and the upper 6GHz band has a 50% occupancy rate nationally, numerous countries have opened part or all of the 6GHz band for licence-exempt use without adverse effects on incumbent services.

It's also important to note that WP5D is still developing guidelines for administrations wishing to implement IMT in the band with regards to fixed services (FS), fixed satellite service (FSS) downlink, and

space research service (SRS). WRC-23 has requested these guidelines, and WP 5D is working on these topics with a target completion date of October 2025.

Work on upper 6GHz band frequency arrangements for IMT by updating recommendation ITU-R M.1036 was initiated at WP 5D and shall be finalised in ITU-R Study Group 5 by December 2024. For RLAN applications, final arrangements through Recommendation M.1036 will be decided during WP5A's November meeting. Once both Recommendations M.1036 and M.1450 have been approved by SG5, next step can be to consider how to make the band available. CEPT is currently working on a preferred solution by conducting studies on potential hybrid sharing between both technologies (WAS/RLAN and IMT), an EC mandate is also under preparation for a quick trigger of technical and regulatory discussions that will shape the future use of the band in Europe considering both technologies.

Given the pending developments in ITU and regional discussions on this band, we believe that immediate action on a national allocation of the upper 6GHz band to IMT may not be necessary. In the meantime, the consultation document indicates that over 1GHz of IMT low and mid-band spectrum remains unallocated, as well as various mmWave bands. We believe that if more spectrum is needed for IMT use, ARTCI should consider starting from bands that have lower frequencies (to maximise coverage) and have a well-developed IMT equipment ecosystem.

Regarding the WAS/RLAN use in the 5GHz band, DSA kindly recommends that the usage conditions for 5GHz WAS/RLAN is aligned with international best practices by enabling license-exempt for all type of WAS/RLAN devices in this band.

The DSA and our members are ready to support ARTCI with further information and guidance on dynamic spectrum management and how it can drive competition and help bridge the digital divide.

Respectfully submitted,



s/. Dr. Martha SUAREZ
President
Dynamic Spectrum Alliance