

March 25, 2021

Radio Spectrum Policy Group

European Commission

Directorate General for Communication Networks, Content and Technology (CONNECT)

Electronic Communications Networks and Services Directorate

Spectrum Unit B4

B-1049 Brussels

Re: DSA response to the public consultation on the Additional spectrum needs and guidance on the fast rollout of future wireless broadband networks

The Dynamic Spectrum Alliance (DSA)¹ would like to offer its views on the Draft RSPG Opinion on additional spectrum needs for Europe. The DSA sees strong additional spectrum needs for both:

- local terrestrial broadband services, including private networks and industry 4.0 applications, and
- license-exempt systems, to support the introduction of high-performance Wireless Access Systems including Radio Local Area Networks (WAS/RLAN) in Europe.

Spectrum sharing

The DSA firmly believes that spectrum sharing (both vertical and horizontal) enables market growth, increased stakeholder involvement in providing broadband connectivity, new opportunities for innovation, new use cases, and more efficient use of spectrum. Spectrum sharing

¹ The Dynamic Spectrum Alliance is a global, cross-industry alliance focused on increasing dynamic access to unused radio frequencies. The membership spans multinational companies, small- and medium-sized enterprises, academic, research, and other organizations from around the world, all working to create innovative solutions that will increase the utilization of available spectrum to the benefit of consumers and businesses alike. A full list of the DSA members is available on the DSA's website at www.dynamicspectrumalliance.org/members/.

is likely to become the central tool to respond to additional spectrum needs of evolving and future applications.

The DSA suggests that the RSPG should merge its initiatives on additional spectrum needs and on spectrum sharing.

3800-4200 MHz

The DSA supports the RSPG proposal to “*investigate the possible use of the band 3.8-4.2 GHz for local [...] applications while protecting receiving earth stations and other existing applications and services.*”

The 3800-4200 MHz is sparsely used in Europe, yet the incumbent services are important and will require continuous access to the band. The DSA encourages RSPG to implement as soon as possible automated dynamic spectrum sharing technologies in the band to enable both licensed and unlicensed/opportunistic access to critical 5G spectrum. The 3800-4200 MHz band is extremely valuable for new fixed and mobile broadband services, including private networks and industry 4.0 applications.

The benefits derived from new services in the band would be maximized through the adoption of an EU harmonized framework, rather than each individual countries adopting their own solutions, which would likely result in fragmentation and further delay in market access and development.

The DSA recommends national regulators not restrict the spectrum sharing framework to only vertical applications. Local networks can support a wide range of applications, including vertical applications but including also mobile and fixed broadband services. Enterprises and factories deploying a local network in 3800-4200 MHz on their premises would most likely want to have the option to leverage this network for all of their applications, not just the applications identified as vertical applications.

The DSA recognizes that the requirements of vertical applications should be taken in utmost account during the studies but recommends the regulatory framework to be adopted on a service neutral basis.

Additional unlicensed spectrum: 6425-7125 MHz

DSA concurs with the view expressed by the RSPG that innovation is spurred by diversity of authorization methods and technology. License-exemption, or general authorization, has without doubt been an extremely successful method that created a tremendous innovation push during the last decades. And it is in the license-exempt bands where some of the most intensive spectrum sharing occurs and horizontal sharing between applications delivers great value by supporting concurrent operation of multiple applications and technologies.

Wi-Fi remains the single most impactful technology to deliver connectivity, as the vast majority of the internet traffic terminates over Wi-Fi. The EU has adopted ambitious plan to improve broadband coverage and deploy fixed networks and 5G networks. However, to reach the users where the vast majority of traffic is generated and consumed, i.e., within buildings, fixed and 5G networks rely on Wi-Fi. The current and next generation Wi-Fi technologies (Wi-Fi 6E and Wi-Fi 7) are capable of extending the bandwidth and QoS provided by gigabit access networks to the user, provided that appropriate regulatory conditions are ensured. Making a sufficient amount of spectrum available for Wi-Fi, or WAS/RLAN in general, is therefore critical to the success of both fixed and 5G EU initiatives.

As it stands today, future WAS/RLAN applications will not have access to a fully functional mid-band in the EU as the 5945-6425 MHz band merely supports a single 320 MHz channel – or three 160 MHz channels. Advanced economies in all three ITU regions (e.g., USA, Canada, South Korea, Brazil, and Saudi Arabia) that have adopted forward-looking spectrum management strategies and acknowledged the need for sufficient license-exempt mid-band spectrum are enabling WAS/RLAN operations in the full 5925-7125 MHz band.

DSA acknowledges the importance for the EU to protect the incumbent fixed links and fixed satellite systems operating in the 6425-7125 MHz band. Adopting the opening of this band to WAS/RLAN as one objective of the RSPG would both provide clear guidance on the objective while granting sufficient time to identify the appropriate mechanisms and regulatory framework for WAS/RLAN to safely operate in this band.

The DSA recommends that the RSPG investigate the possible use of the band 6425-7125 MHz for WAS/RLAN devices while protecting existing primary applications and services in the band.

Respectfully submitted,



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