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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 contribution to RSPG on the Radio Spectrum Policy Programme

The Dynamic Spectrum Alliance (DSA)[1] would like to offer its views on the new Radio Spectrum Policy Programme (RSPP) and the associated objectives on a 5-15 year horizon.

Principles and long-term objectives

Europe is adopting ambitious objectives through the European green deal, and the digital transition is a key enabler to reach these goals. However, the success of the digital transition hinges on robust connectivity. DSA therefore believes that improving broadband connectivity should be at the heart of the upcoming RSPP.

Improving broadband connectivity requires the European spectrum policy and strategy to rely on the following principles:

- Identify requirements for licensed and license-exempt spectrum.
- Ensure timely, appropriate, and balanced access to additional licensed and license-exempt spectrum.
- Leverage automated shared spectrum solutions to improve access to spectrum.

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

[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/.

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Practical medium-term objectives

As practical next steps, DSA would suggest that the RSPP take steps to implement the following specific objectives:

- Open the 3800-4200 MHz to new terrestrial broadband services through automated sharing with incumbents; and
- Open the 6425-7125 MHz band to unlicensed devices.

3800-4200 MHz

The 3800-4200 MHz is sparsely used in Europe, yet the incumbent services are important and require continuous access to the band. The UK has already opened access to the band for new terrestrial broadband services on the basis of a shared access license. The DSA has encouraged Ofcom 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.[2] 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 a EU harmonized framework, rather than letting each individual country adopt its own solution, which would likely result in fragmentation and further delay in market access and development.

6425-7125 MHz

Some of the most intensive spectrum sharing occurs in the license-exempt bands where 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 and deploy fixed networks and 5G networks. Both fixed and 5G networks rely on Wi-Fi to reach users within buildings, where the vast majority of traffic is generated and consumed.

[2] See http://dynamicspectrumalliance.org/wp-content/uploads/2020/02/DSA_Comments-to-Ofcom-2020-2021-Workplan-final-signed.pdf

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Maintaining the QoS of Wi-Fi is therefore critical to the success of both fixed and 5G EU initiatives.

Future WAS/RLAN applications still do not have access to a fully functional mid-band in the EU as the 5945-6425 MHz supports a single 320 MHz channel – or only three 160 MHz channels. Most other advanced regions (USA, Canada, South Korea) have correctly identified the need for sufficient mid-band spectrum and are enabling WAS/RLAN operations in the full 5925-7125 MHz band.

DSA acknowledges the EU specific challenges due to the importance of incumbent fixed links in 6425-7125 MHz. Adopting the opening of this band to WAS/RLAN as one objective of the RSPP would both provide clear guideline on the objective while granting sufficient time to identify the appropriate mechanism and regulatory framework for WAS/RLAN to operate in this band.

DSA notes that the 6425-7125 MHz band would bring little additional benefits for IMT connectivity given the harmonized availability of the 3400-3800 MHz band. Furthermore, IMT networks would be severely constrained due to sharing requirements with satellite application. Finally, implementing IMT networks in the upper part of the 6 GHz band would require removing fixed networks from the band, which is currently unrealistic.

The EU situation is therefore extremely clear and enables Member States to initiate the introduction of WAS/RLAN applications in the full 6 GHz band immediately. The new RSPP should adopt the opening of this band as a medium-term goal, paving the way for a new European Mandate to CEPT on possible use of WAS/RLAN in upper 6 GHz (6425-7125 MHz) band.

Respectfully submitted,

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Dynamic Spectrum Alliance