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Radio Spectrum Policy Group

VIA EMAIL

CNECT-RSPG@ec.europa.eu

RE: Draft RSPG Opinion on Additional spectrum needs and guidance on the fast rollout of future wireless broadband networks

Facebook, Inc. (“Facebook”) is pleased to submit these comments in response to the Radio Spectrum Policy Group (“RSPG”) public consultation on its Draft RSPG Opinion on Additional spectrum needs and guidance on the fast rollout of future wireless broadband networks.

Facebook agrees with the RSPG’s assessment that the majority of the spectrum demand is currently in the mid-bands. This applies to both mobile broadband networks and local networks, including networks for vertical applications and Radio Local Area Networks (RLANs).

Facebook fully supports the RSPG proposal to investigate possible use of the band 3.8-4.2 GHz for local mobile applications while protecting receiving earth stations and other existing applications and services. Facebook notes that:

- The use of the 3.8-4.2 GHz should be studied from a technical compatibility perspective. Facebook does not consider necessary or appropriate to restrict the deployment models strictly to ‘vertical applications’, which definition would be challenging to establish. Facebook recommends developing Least Restrictive Technical Conditions that would enable a wide range of local network and local applications, including Ultra Reliable Low Latency Communication (URLLC) applications, but without excluding applications such as broadband communications.
- It is critical to ensure that the new systems protect receiving earth stations and other existing applications and services. Facebook believes that it would be productive to consider the 3.8-4.2 GHz band in the context of the spectrum sharing initiatives launched by RSPG. The 3.8-4.2 GHz band would be the perfect band to test and develop innovative spectrum sharing methods, adapted to the European environment.

Facebook recommends that the RSPG consider opening the 6425-7125 MHz to RLANs. RLANs play a key role for personal connectivity (*e.g.* connectivity of AR/VR glasses), local connectivity (connection of devices around the home and the office) and mobile connectivity (off-load of mobile broadband traffic, especially for devices within homes and buildings). Opening the 5945-6425 MHz is a significant first step to enable Wi-Fi 6E and channelisation up to 160 MHz.

However, Wi-Fi 7 is being standardised with 320 MHz channelisation to support higher data rates and lower latency. Such Wi-Fi connectivity would bring significant additional QoS not just for end users, but also for companies and industries using RLANs as a productivity tool. Enabling 320 MHz RLAN channels deployment would match the EU's ambition that all European households will be covered by a Gigabit network by 2030¹ with all main socio-economic drivers - such as schools, universities, research centers, transport hubs, hospitals, public administrations, and enterprises relying on digital technologies already covered in 2025.²

Most end users access their fiber connection through Wi-Fi and it is important to avoid that the Wi-Fi link becomes the bottleneck of the transmission. Enabling Wi-Fi 7/320 MHz channels in 5945-7125 MHz will guarantee that users will fully enjoy the benefits of the investment made in the EU fiber networks.

5945-6425 MHz would only support a single 320 MHz channel and therefore cannot be considered 'Wi-Fi 7 ready'. This explains why many countries around the world have opened - or are in the process of opening - the full 5925-7125 MHz band to RLANs. In particular, the USA, South Korea and Brazil have already moved forward and made the full 5925-7125 MHz available to RLANs. Many other countries (including the Kingdom of Saudi Arabia, Qatar, and Jordan) indicated in public consultations that they would align with what is the de facto worldwide ecosystem.

Facebook recommends that the RSPG modify its draft opinion to:

- Investigate possible harmonised use of the band 3.8-4.2 GHz for all local mobile applications, in a spectrum sharing situation with receiving earth stations and other existing applications and services.
- Investigate the possible use of the 6425-7125 MHz band for RLANs, in particular to enable the deployment of 320 MHz RLANs channels in Europe within the 5925-7125 MHz band.

¹ https://ec.europa.eu/info/sites/info/files/communication-digital-compass-2030_en.pdf

² <https://ec.europa.eu/digital-single-market/en/news/connectivity-european-gigabit-society-brochure>

Respectfully submitted:

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