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Radio Spectrum Policy Group

VIA EMAIL

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RE: Draft RSPG Opinion on a Radio Spectrum Policy Programme (RSPP)

Facebook, Inc. (“Facebook”) is pleased to submit these comments in response to the public consultation of the Radio Spectrum Policy Group (“RSPG”) on the Draft RSPG Opinion on a Radio Spectrum Policy Programme (RSPP).

Facebook considers that the objectives of the [previous RSPP](#)¹ remain relevant, namely that the upcoming decision should *establish a multiannual radio spectrum policy programme for the strategic planning and harmonisation of the use of spectrum to ensure the functioning of the internal market in the Union policy areas involving the use of spectrum*.

The [2012 RSPP](#) identified spectrum objectives supportive of the connectivity objectives of the [2010 Digital Agenda for Europe](#). Facebook believes that the future RSPP should also be built around the current European connectivity objectives, namely:

- The 2025 EU connectivity targets identified under [Connectivity for a European Gigabit Society](#),
- The 2030 EU connectivity target in the Commission communication on [2030 Digital Compass: the European way for the Digital Decade](#).

2025 EU connectivity targets

The targets identified under [Connectivity for a European Gigabit Society](#) include objectives for fixed connectivity² (fibre/Very High Capacity Networks) and mobile connectivity³ (5G). Harmonised spectrum for mobile broadband has been identified and is now in the process of being made available by Member States. Facebook expects this process to be completed soon.

¹ DECISION No 243/2012/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 March 2012 establishing a multiannual radio spectrum policy programme

² All European households should have access to 100 Mbps connections by 2025, with the possibility to upgrade those networks to reach much higher speeds. All main socio-economic drivers - such as schools, universities, research centres, transport hubs, hospitals, public administrations, and enterprises relying on digital technologies - should have access to gigabit connectivity.

³ Uninterrupted 5G coverage should be available in all urban areas and all major terrestrial transport paths to connect people and objects. Access to mobile data connectivity everywhere, in all places where people live, work, travel and gather.

On the other hand, fulfilling the 2025 EU connectivity targets would require specific 2025 spectrum objectives to be identified by RSPG:

- 3.8-4.2 GHz for local applications. 5G is expected to support Ultra Reliable Low Latency Communication (URLLC) services, in particular to support [digitising the EU industry](#). URLLC services cannot be supported by mobile broadband networks and rely instead on local networks providing local connectivity. There is currently no EU harmonised spectrum for local connectivity. Facebook recommends the RSPP to include as a 2025 target to make the band 3.8-4.2 GHz available for local applications while protecting receiving earth stations and other existing applications and services.
- 6425-7125 MHz for Wi-Fi 7. Connectivity through fiber optic networks is expected to be the norm by 2025 for main socio-economic drivers (e.g. schools, hospitals, digital enterprises) and to be on the rise for EU households. The goal for 2025 is to provide gigabit connectivity to as many EU citizens as possible. However, most users access such networks through Wi-Fi. It is important to ensure that EU citizens reap the full benefits of Europe's Very High Capacity Networks through ensuring that the fibre network connectivity is available throughout their premises, be it houses, enterprise or factory. While opening the 5945-6425 MHz represents a first step enabling Wi-Fi 6E, only Wi-Fi 7 would deliver Very High Capacity Networks connectivity QoS, in line with the [corresponding BEREC guidelines](#). In particular, Wi-Fi 7 will deliver deterministic low latency, i.e. the latency over the Wi-Fi link will be less variable and more predictable. Wi-Fi 7 will require access to 320 MHz channels and would therefore require access to the full 5925-7125 MHz band. Facebook recommends the RSPP to include as a 2025 target to make the band 6425-7125 MHz available for Radio Local Area Networks (RLANs) while protecting existing applications and services in the band.

Facebook provides additional elements on these two proposals in its responses to the public consultations on the draft RSPG opinion on spectrum sharing and the draft RSPG opinion on Additional Spectrum Needs.

2030 EU connectivity targets, 5G coverage and 6G and next generation Wi-Fi priority spectrum bands

The Commission communication on [2030 Digital Compass: the European way for the Digital Decade](#) proposed ambitious 2030 connectivity targets that would enable the European way to a digitalised economy and society. Specifically, the Commission proposes as 2030 target: *“All European households will be covered by a Gigabit network, with all populated areas covered by 5G.”*

Facebook applauds these ambitious targets and suggests three corresponding spectrum measures to fulfill the vision of the commission.

1) Gigabit households need Wi-Fi 7 by 2025.

Wireless devices are central to our digital lives. When we work remotely, shop online, and use telemedicine, we typically do so from wireless devices, connecting to Gigabit networks through Wi-Fi. Wireless devices will become even more dominant going forward with the rise of Augmented Reality/Virtual Reality (AR/VR), holographic and haptic internet. Wi-Fi spectrum and Quality of Service (QoS) is absolutely critical for all such devices. The EU investment in Gigabit networks would not be effective if the connectivity QoS is degraded by the Wi-Fi link. Europe needs Wi-Fi 7 and should therefore make the full 5945-7125 MHz available to Wi-Fi by 2025 at the latest, to ensure all households are equipped by 2030.

2) Spectrum sharing and innovative cooperation models to cover 100% of the population with 5G.

Competition - in particular infrastructure competition - has proved to be a powerful tool to promote the availability of affordable state-of-the-art mobile broadband services. However, the deployment of competing mobile broadband infrastructure in rural areas is economically challenging, leading to a digital divide between urban and rural areas. While rural coverage challenges cannot be solved solely through spectrum sharing, Facebook argues that Europe should ensure that spectrum - and spectrum sharing frameworks - are not causing delay in the deployment of 5G networks in rural areas. Facebook recommends that BEREC and RSPG consider launching a joint initiative in full cooperation with Mobile Network Operators to identify the best spectrum award and licencing method supporting coverage of rural areas, making sure that cooperation between Mobile Networks Operators (MNOs) and other actors (e.g. local and national government) is actively promoted. MNOs are best placed to deliver mobile broadband services and should be involved in any such initiative, see for example, the [internet para todos initiative](#) from Telefonica.

3) 6G and next generation Wi-Fi priority spectrum bands identified in 2025 and made available by 2030

Facebook fully supports the Commission vision of inclusive Gigabit connectivity to households and 5G coverage of all populated areas. Facebook believes that these measures should be complemented with the introduction of innovative wireless technologies to put Europe in a leadership position. This goal would be in line with EU's ambition as stated by Pr. Van Der Leyen during her [2020 State of the Union address](#):

But Europe must now lead the way on digital – or it will have to follow the way of others, who are setting these standards for us.

Leading on digital and connectivity would require making spectrum available for both Mobile Broadband and Radio Local Area Networks. The early identification (2025) by Europe of target

bands for 6G and next generation Wi-Fi would not only enable their practical availability by 2030 but would also support EU leadership. Facebook proposes for the RSPP to set the following objectives:

- To identify by 2025 the 6G and next generation Wi-Fi priority spectrum bands enabling Europe to fulfil its 2030 connectivity targets.
- To make these bands available by 2030 at the latest.

Taking into account wider European policy initiatives

European policy initiatives should obviously be consistent. In that regard, the RSPP should be consistent with initiatives such as the EU Green Deal, the transport policy or the Audio-visual Media policy. However, the RSPP should maintain its focus on spectrum availability, including for such policy initiatives.

The [2012 RSPP](#) also took into account non technical elements and explicitly mentioned: *Regulatory measures on spectrum therefore have economic, safety, health, public interest, cultural, scientific, social, environmental and technical implications.*

The [2012 RSPP](#) took these policy objectives into account in the definition of its own policy objectives which were all centered on spectrum availability and spectrum management. For example, the [2012 RSPP](#) did not adopt the 2020 goal of 30 Mbps for all as a policy objective, but identified which spectrum objective (identify by 2015 1200 MHz of suitable spectrum for wireless data traffic) would support this wider policy objective.

Facebook recommends the upcoming RSPP to adopt specific spectrum policy objectives that would best support wider policy objectives, rather than requesting each spectrum decision to take into account potential *economic, safety, health, public interest, cultural, scientific, social, environmental implications*. Such objectives are best taken into account at the policy/political level, during the adoption of the RSPP, and not at the implementation level, by bodies of spectrum experts that lack competence in such a wide array of topics.

Respectfully submitted:

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