

# RADIO SPECTRUM POLICY GROUP: Draft Work Programme for 2022 and beyond

Ericsson thanks the RSPG for its continuous efforts in terms of Spectrum Policy recommendations to the European Commissions and welcomes the possibility to comment on its draft work programme for 2022 and beyond.

Ericsson agrees on the identified work items by the RSPG and believes that these are key to achieve the European goals for the European Digital Society. We would like to emphasize the importance to build a strong spectrum portfolio for the evolution of 5G as the basis for the EU to regain a 6G frontrunner market deployment leadership position. Indeed, 5G is also the key enabler for driving the green transition across all industries and public services, advancing the European Green Deal and helping achieve the region's 2050 climate neutral objectives.



## Peer review and Member States cooperation on authorisations and awards

Collaboration and best practice exchange between Member States are critical to enabling the pro-investment 5G spectrum assignments that can encourage accelerated, expansive infrastructure deployment. The Peer Review process, now formalized through Article 35 of the Code, plays a key role in facilitating and promoting this. The RSPG is to be congratulated on its increased efforts to improve the transparency of the process and enable industry's input into it. Both elements are key in ensuring that assignment processes support the step change connectivity needed underpin Europe's green and digital transitions.

Within the parameters of the Peer Review process set by the Code, the RSPG could improve collaboration, transparency and information exchange with industry. The Work Programme provides includes "Stakeholder workshops on awards". Ericsson would suggest that this could be more regular and formalized so that industry can provide timely input and reflections both on completed assignment processes and future awards. The RSPG has a key role to play in supporting the collection and dissemination of best practice and encouraging all Member states to participate in the peer review process. Maximum transparency and stakeholder involvement can only serve to improve the outcome for all.

## WRC-23

Ericsson would like to emphasize the importance of the European Union in the International Telecommunication Union (ITU) for spectrum harmonization and thus the opportunity that this implies for Europe. Indeed, WRC is a key event to allow Europe to further harmonize in the region and globally, allowing the Union to benefit from a large ecosystem and the economies of scale that this represents.

Ericsson welcomes the RSPG work on recommendations on European Union position(s), on items which are of particular importance for the Union policies as well as the assistance to the European Commission in formulating its proposal for a council decision on the positions to be taken on behalf of ITU WRC-23.

WRC-23 focuses on future spectrum in the low and mid-bands range for the Mobile service, being 6 GHz under AI1.2 and 470-960 MHz under 1.5, of particular importance for the European Union. Ericsson would like to recall the efforts from the European Commission to secure the initial 5G deployments by defining pioneer bands in low (700 MHz), mid (3.4-3.8



GHz) and high bands (26 GHz) as well as the recent efforts to open large amounts of spectrum for RLAN (5945-6425 MHz)<sup>1</sup> and for local-area connectivity<sup>2</sup>. Hence, a natural step for the Union is to consider its strong spectrum portfolio for the evolution of 5G (particularly 6GHz and 470-694 MHz) as the basis for the EU to regain a 6G frontrunner market deployment leadership position. We also note the importance of the 3.4-3.6 GHz band under AI1.2 and AI1.3 to further increase harmonization of a 5G European band.

Ericsson supports the proposed scope of RSPG activity, the planned type of deliverables and the time schedule as proposed by the RSPG.

## **“Good offices” to assist in bilateral negotiations between Member States**

The RSPG Good Offices function has featured consistently in previous RSPG Work Programmes and is now formalised through the Code. Ericsson welcomes the continued prioritization of this RSPG role in facilitating the resolution of cross border coordination between Member States and, as with the Peer Review process, and would encourage maximum transparency and stakeholder involvement.

## **Mobile technology evolution experiences and strategies**

Phasing out of 2G and 3G is a key issue for Europe. Newer technologies positively impacts the carbon footprint and energy performance, and at the same time Ericsson understands that there is a large legacy in terms of devices for which the time life expectation is long (an example is power meters in the homes using 2G). Technology can indeed help the transition and thus we would encourage stakeholders' workshops as proposed by the RSPG.

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<sup>1</sup> Decision (EU) 2021/1067

<sup>2</sup> Mandate to CEPT on technical conditions regarding the shared use of the 3.8-4.2 GHz frequency band for terrestrial wireless broadband systems providing local-area connectivity in the Union



## Digital decade 2030

Ericsson thanks the RSPG for its continuous support to the European Commission and is of the view that the RSPG could further support a 2030 policy program on the "*path to the Digital Decade*" by defining clear objectives, as example initiatives to secure a strong portfolio for 5G, the evolution of 5G as well as for 6G, and thus European harmonization. While the European Commission has recently focused on short range communications (either RLAN or local-area connectivity), we see a necessary path to secure nationwide or wide-area applications/use cases.

## The development of 6G and possible implications for spectrum needs and guidance on the rollout of future wireless broadband networks

Ericsson notes the RSPG mentioning of the start of the 6G standardization work being expected by 2025. While we share this expectation in terms of 3GPP standardization, we would like to indicate that the work on IMT-2030 has already began in ITU WP 5D.

The RSPG also notes the research initiatives considering relevant needs in sub-THz spectrum but also in spectrum bands targeted for 5G including low and mid bands. We agree that spectrum regulations should facilitate evolution of previous generations to 6G (e.g. from 4G or 5G), and we expect market to decide on the right timing. Ericsson views the sub-THz as an important spectrum range for 6G and at the same time, lower spectrum ranges are also key for technology evolution. Ericsson is thus of the view that Europe should at this point analyze spectrum from the low bands to the sub-THz range for 6G.

Europe's global leadership role in 6G research, standardisation and development is crucial. Ericsson supports the RSPG proposed activity on "a future 6G roadmap (beyond WRC-23)" hereby contributing to ensuring European leadership ambitions and a European voice in the international deliberations. This can be achieved through deliverables and the time schedule proposed by the RSPG. Ericsson would like to emphasize the importance of workshop with the industry to ensure the highest benefits to EU citizens and businesses.



## Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU

Ericsson respects the recommendations made by the RSPG in 2015<sup>3</sup> as well as the Council and European Parliament Decision, and in particular Article 4 *"Member States shall ensure availability at least until 2030 of the 470-694 MHz ('sub-700 MHz') frequency band for the terrestrial provision of broadcasting services, including free television, and for use by wireless audio PMSE on the basis of national needs, while taking into account the principle of technological neutrality."*<sup>4</sup>

Ericsson agrees with the RSPG assessment in relation to any potential outcome of WRC-23 AI1.5. Indeed, a potential co-primary mobile allocation (with Broadcasting) does not impose any obligation in the EU.

Ericsson would also like to note that the European Parliament Decision notes the "national needs" and that different countries have different level of DTT usage (current and foreseen). While we expect DTT to remain for many years beyond 2030, there are other EU countries in which DTT usage is reduced. A primary mobile allocation at WRC-23 would reflect this fact.

We note that the RSPG proposes to focus its activities building on the 2015 RSPG opinion. While we agree that this is a key part of the analysis, Ericsson would like to invite the RSPG to consider, not only the current usages (DTT, PMSE), but also to analyze the national needs by Member States in terms of Digital TV as well as Mobile coverage as an additional activity. This would help to understand how the differences European citizens could benefit the most (which may differ from country to country).

Ericsson welcomes an RSPG Opinion in the proposed time frame.

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<sup>3</sup> Document RSPG15-595 FINAL

<sup>4</sup> DECISION (EU) 2017/899 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union



## Role of Radio Spectrum Policy to help combat Climate Change

As acknowledged by 26 EU member states, Norway and Iceland, the digital transition and a smarter and greener use of technologies will help make Europe the first climate-neutral continent by 2050, a key goal of the European Green Deal. Technology can improve energy and resource efficiency, facilitate the circular economy, lead to a better allocation of resources; reduce emissions, pollution, biodiversity loss and environmental degradation. In this respect, 5G can be a key enabler supporting the green transition across all industries and public services, advancing the European Green Deal and helping achieve the region's 2050 climate neutral objectives<sup>5</sup>.

RSPG notes that the relationship between sustainability and electronic communications is also covered elsewhere and notes the BEREC ad-hoc group on Sustainability as an example and the need to follow this work. Ericsson would like to note that there is extensive ongoing work within the Commission to assess the ICT sector and propose new regulation through the Green Deal framework. Such examples are the Sustainable Products Initiative, including the overview of implementing measures of the eco-design directive and the ongoing ICT study performed by JRC and we would suggest the RSPG to follow these, in addition.

RSPG mentions two particular points raised by the Opinion:

- 1) The need for a common set of methodologies in order to understand and assess the impact of ECS wireless technologies on climate change, involving ECS stakeholders and all interested parties, and with a particular focus on the ECS radio component.
- 2) The importance of having accurate information on emissions and energy efficiency related to spectrum use on a national level (e.g. reports from network operators).

Ericsson welcomes the inclusion of stakeholders in the work to assess the impact of the ICT sector and agrees on the need for a common set of methodologies. In that respect, Ericsson would like to highlight the existing standards in this area as well as those under development (within e.g. ITU) which have been established to assess the impact of the ICT industry. Further on, ITU has published standards on

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<sup>5</sup> <https://digital-strategy.ec.europa.eu/en/news/eu-countries-commit-leading-green-digital-transformation>



trajectories aligned with the 1.5 degree Paris agreement. These standards include but are not limited to ITU L.1410/ETSI 203 199 (detailed life cycle analysis guidance and high level guidance on enabling effects of ICT), the ongoing standard for more detailed guidance on assessment of induced effects (working name L.Enablament), ITU L.1470 with 1.5C compatible trajectories for the ICT sector, ITU L.1471 Net zero guidance for the ICT sector . We would also like to highlight some of our [peer reviewed papers](#) emerging from extensive data sets collected during two decades of Life Cycle Assessment studies.

In relation to the RSPG activity, Ericsson considers that it would be beneficial to include an assessment on how efficient spectrum policies can facilitate a green digital transition of Europe, to reduce carbon emissions to achieve the “fit for 55”<sup>6</sup> and a climate neutral Europe.

Ericsson notes that the type of deliverables is to be determined and would like to suggest among them an overview of how spectrum policy could help to facilitate for a fast transition of the EU to implement 5G, in particular in relation to solutions that could help the climate change ambitions with adequate timeline based on the EU goals.

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<sup>6</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_3541](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3541)