



## EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND TECHNOLOGY

Digital Decade and Connectivity  
**Radio Spectrum Policy Group**  
RSPG Secretariat

Brussels, 12 November 2025

**RSPG25-035 FINAL**

## **RADIO SPECTRUM POLICY GROUP**

### **Progress Report of the work item on 6G spectrum roadmap**

<b>RSPG work item: update to Plenary</b>	
<b>Work item</b>	<b>6G spectrum roadmap</b>
<b>Co-chairs</b>	Heidi Himmanen, Traficom, Finland, Tassos Lyratzis, EETT, Greece
<b>Rationale</b>	<p>The European Commission published in February 2024 the White Paper on “How to master Europe’s digital infrastructure needs?”, to which the RSPG provided its Opinion<sup>1</sup>. The RSPG noted that the focus should be kept on making radio spectrum available in due time to meet future needs in the EU and the RSPG underlined that any future plans for the rollout of 6G in the EU need i.e. to take into account coverage and capacity demands, competition aspects and align to national demands and specificities such as the geographic and demographic landscape.</p> <p>The RSPG recognized generally in 2016 in the context of 5G, that a spectrum roadmap, is highly anticipated both by the Member States and stakeholders, before the initial launch of a new network generation, regardless of the challenges related to this task. In accordance with the RSPG Work Programme for 2024-2025, the Group, after completing the first deliverable on 6G i.e. the RSPG Report on 6G Strategic vision, will now focus on the development of a 6G spectrum roadmap for the EU.</p> <p>The global vision and timeline for 6G development is set by the ITU-R, and currently the work on IMT2030 is in the phase of definition of relevant requirements (2024-2026). This gives the RSPG an opportunity to deliver an EU-level 6G spectrum roadmap before the next standards development phase and possible additional spectrum identification at the next WRC in 2027. The target for technology development, including on spectrum implementation, is set to enable a network launch in 2030 and implementation in the years beyond 2030. This timeline should also be supported by EU spectrum policy to enable the initial launch of 6G networks and services across the EU.</p> <p>As indicated in the Report on 6G Strategic vision, to foster the internal market for network and terminal equipment, the EU needs to indicate possible spectrum band(s) planned for both the launch of 6G and further development of 6G innovation in Europe, drawing lessons from the RSPG 5G Opinions. This should take into account the gradual and selective market adoption of the primary and pioneer bands. The 6G spectrum roadmap should build on the conclusions in the RSPG Report on 6G Strategic vision.</p> <p>The RSPG should therefore assess the following frequency bands or parts thereof, as possible spectrum band(s) for initial 6G rollout:</p> <ul style="list-style-type: none"> <li>• Frequency bands already harmonised for ECS in the EU under the Radio Spectrum Decision: <ul style="list-style-type: none"> <li>○ Low bands: 700 MHz, 800 MHz, 900 MHz</li> <li>○ Mid bands: 1500 MHz<sup>2</sup>, 1800 MHz, 2.1 GHz, 2.6 GHz, 3.6 GHz</li> <li>○ High bands: 26 GHz, 42 GHz</li> </ul> </li> <li>• 3.8-4.2 GHz, to be used for low/medium power local area network connectivity (currently under harmonisation)</li> <li>• 6425-7125 MHz (“upper 6 GHz”), which has been identified for IMT at international level, with the possibility to be also used for the implementation of wireless access systems (WAS), including radio local area networks (RLANs). The long term vision for this band currently subject to RSPG work. Recommendations of the upcoming RSPG Opinion for the upper 6 GHz should be taken into account when available</li> </ul> <p>The RSPG Report on 6G Strategic vision addresses issues beyond the mere identification of possible spectrum bands for the initial 6G rollout, including for example integration of non-terrestrial networks, spectrum sharing solutions, and authorisation regimes in 6G. Further assessment of these issues might facilitate the establishment of the 6G ecosystem and the 6G rollout in Europe.</p>

<b>Scope</b>	<p>The RSPG will develop an EU-level 6G spectrum roadmap and make recommendations where appropriate, including but not limited to i.e. possible spectrum band(s), spectrum sharing, non-terrestrial networks. This should take into account the services to be offered and the goals to be achieved by the deployment of 6G networks in accordance with the RSPG 6G strategic vision.</p> <p>The work of the subgroups on:</p> <ul style="list-style-type: none"> <li>• Long term vision for the upper 6 GHz band,</li> <li>• WRC, and</li> <li>• Assessment of future usage of the frequency band 470-694 MHz within the EU will be taken into account and contribute to this work item.</li> </ul> <p>The RSPG should pay due attention to the ongoing work in CEPT, ITU and technical standardisation developments at the European and global level.</p> <p>The RSPG would assess further issues addressed in the RSPG Report on 6G strategic vision, that it considers relevant, and make recommendations, if appropriate.</p>
<b>Planned deliverables and timing</b>	<ul style="list-style-type: none"> <li>• RSGP Opinion on 6G spectrum roadmap (RSPG 1st Opinion)</li> </ul> <p><u>Time schedule</u></p> <ul style="list-style-type: none"> <li>• Draft RSPG Opinion on 6G spectrum roadmap: February 2026</li> <li>• Final RSPG Opinion on 6G spectrum roadmap: June 2026</li> </ul>
<b>Analytical approach</b>	RSPG will continue to engage in the sharing of information and experience in support of a successful development and future roll-out of 6G in the EU.
<b>Project plan</b>	<p>Phase 1 – Discussion on the draft opinion on the 6G spectrum roadmap</p> <p>Phase 2 – Public Consultation</p> <p>Phase 3 – Review Stakeholders responses</p> <p>Phase 4 – Finalise opinion</p>
<b>Dependencies</b>	<p>RSPG WI on “Long-term vision for the upper 6 GHz band”</p> <p>RSPG WI on WRC-27</p> <p>RSPG WI on Assessment of future usage of the frequency band 470-694 MHz within the EU</p>

### Members, stakeholders and resources

<b>Members</b>	<p>Austria, Federal Ministry for Housing, Arts, Culture, Media and Sport</p> <p>Austria, Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)</p> <p>Belgium, Belgian Institute for Postal Services and Telecommunications (BIPT )</p> <p>Czechia, Czech Telecommunication Office</p> <p>Germany, German Federal Network Agency</p> <p>Germany, Federal Ministry for Digital Transformation and Government Modernisation</p> <p>Denmark, Agency for Digital Government</p> <p>EC, DG CONNECT</p> <p>ECO, European Communications Office</p> <p>Greece, Hellenic Telecommunications &amp; Post Commission (EETT)</p> <p>Spain, Ministry of Digital Transformation and Digital Infrastructures</p> <p>Finland, Finnish Transport and Communications Agency (TRAFICOM)</p> <p>France, French National Frequency Agency (ANFR)</p> <p>France, French Regulatory Authority for Electronic Communications, Postal and Print media distribution</p> <p>France, French Ministry of Economy and Finance</p> <p>Croatia, Croatian Regulatory Authority for Network Industries (HAKOM)</p> <p>Hungary, National Media and Infocommunications Authority (NMHH)</p> <p>Ireland, Department of Culture, Communications and Sport</p> <p>Ireland, Commission for Communications Regulation (ComReg)</p> <p>Italy, Ministry of Enterprises and Made in Italy</p> <p>Italy, Italian Communications Regulatory Authority (AGCOM)</p>
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	Luxembourg, Ministry of State/Department of Media, Connectivity and Digital Policy (SMC) Luxembourg, Institut Luxembourgeois de Régulation (ILR) Montenegro, Agency for Electronic Communications and Postal Services of Montenegro Malta, Malta Communications Authority (MCA) Netherlands, Ministry of Economic Affairs and Climate Change Netherlands, Dutch Authority for Digital Infrastructure Norway, Norwegian Ministry of Digitalisation and Public Governance Norway, Norwegian Communications Authority (Nkom) Poland, Ministry of Digital Affairs Poland, RSPG Chair - Polish PermRep Portugal, Portuguese National Communications Authority (ANACOM) Sweden, Swedish Post and Telecom Authority (PTS) Slovenia, Agency for Communication Networks and Services of the Republic of Slovenia Türkiye, Information and Communication Technologies Authority Ukraine, National Commission for the State Regulation of Electronic Communications Ukraine, Ukrainian State Centre of Radio Frequencies (UCRF)
Key stakeholders	Telecom operators Vertical industries Equipment suppliers Research organisations
Other resources	
Other work items	

**Work flow (internal and external milestones)**

Date	Action / deliverable	Internal Sub-group only	External Plenary, Publication
Year 2025			
02 May	Adoption by the RSPG of the new WI assigned to the subgroup: RSPG25-015 FINAL: 6G spectrum roadmap		Plenary
24 September (Webex)	First meeting of sub-group <ul style="list-style-type: none"> <li>• Presentation of the GSMA and Q&amp;A with the subgroup</li> <li>• Discussion on the draft opinion text submitted by the co-chairs</li> </ul>	Sub-group	

<b>Date</b>	<b>Action / deliverable</b>	<b>Internal</b> Sub-group only	<b>External</b> Plenary, Publication
22 October (Webex)	<p>Second meeting of sub-group</p> <ul style="list-style-type: none"> <li>• further discussion on the draft opinion text</li> </ul> <p>During the discussion, there was a proposal on studying a possible replanning of the existing FDD bands for TDD operation. The sub-group felt that this was a larger topic for which the pros and cons should be studied thoroughly. Also, it would not be the task of the sub-group to recommend an action plan for such a task. Therefore, the sub-group agreed on suggesting that this should be discussed at RSPG plenary level.</p> <p>The following study for the Dutch ministry was shared by the colleagues from the Netherlands:  <a href="https://www.rijksoverheid.nl/documenten/rapporten/2025/09/30/future-trends-in-radio-frequency">https://www.rijksoverheid.nl/documenten/rapporten/2025/09/30/future-trends-in-radio-frequency</a></p> <p>The first band proposed for this replanning was the 2.6 GHz band.</p>	Sub-group	
12 November	<p>Progress of work presented to RSPG Plenary #68,</p> <p>Annex 1 of this report contains the latest draft of the 6G spectrum roadmap opinion</p>	Co-chairs	Plenary
26 November (Webex)	<p>Third meeting of sub-group (scheduled)</p> <ul style="list-style-type: none"> <li>• further discussion on the draft opinion</li> </ul>	Sub-group	
Future dates and actions to be decided in light of work plan			