

EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND TECHNOLOGY

Digital Decade and Connectivity Radio Spectrum Policy Group RSPG Secretariat

Brussels, 13 November 2024

**RSPG24-029 FINAL** 

## **RADIO SPECTRUM POLICY GROUP**

Progress Report of the work item on 6G strategic vision

<b>RSPG</b> work item: update to Plenary				
Work item	6G strategic vision			
Rapporteur/s	Heidi Himmanen, Traficom, Finland, Tassos Lyratzis, EETT, Greece			
Rationale	The RSPG in its Opinion on "The development of 6G and possible implications for spectrum needs and guidance on the rollout of future wireless broadband networks" recognized, that a proactive position is essential for supporting the development and deployment of 6G in Europe. This includes further work by RSPG on early recognition of spectrum needs, so that the initial launch and operation of 6G networks/services can start in 2030. This work contributes to this target by providing strategic guidance on the spectrum component of 6G taking into due consideration further development of 5G prior 2030 including densification of networks, introduction of additional spectrum at national level, initiatives in mmW bands (i.e. 26 GHz, 42 GHz). Also, this work intends to address the long-term spectrum availability and the implementation strategies for 6G that could be considered taking into account the European influence on the international environment. Furthermore, the RSPG noted the need to assess spectrum requirements for an introduction of 6G in the EU including evaluation of coverage and capacity needs for 6G use cases and usages scenarios. This should respond to capacity/coverage needs, eco-systems including for terminals, timing for making available spectrum, etc. and need for a coordinated and common timing in order to provide availability of harmonized spectrum in Europe taking into account the challenge of launching 6G at a time where most terminals will not be 6G-compatible. RSPG intends to further assess the impacts of technology neutrality within harmonized bands, national mobile operators' strategy on the timing of launch of 6G, taking into account the challenge of launching 6G at a time where most terminals will not be 6G-compatible. RSPG intends to further assess the impacts of technology neutrality within harmonized bands, national mobile operators' strategy on the timing of launch of 6G, taking into account the test as competition and market demand, availability of spectrum resources, expiration dates of			
Scope	The RSPG intends to take a proactive position to support European Commission to set an attractive policy framework for the initial launch, development and deployment of 6G in the EU. This work focuses on early recognition of spectrum needs, including evaluating the coverage and capacity needs for 6G use cases and usages scenarios, so that the initial mass market launch and operation of 6G networks/services can start in 2030. This early recognition of spectrum needs should be based on a proper evaluation of coverage and capacity needs for 6G use cases and usages scenarios, also considering Non-Terrestrial and licence exempt use. The RSPG should take into account input from all active stakeholders (research institutes, manufacturers, MNOs, spectrum users' associations, etc.), to develop the Report/Opinion as appropriate. The RSPG work on upper 6 GHz should be considered.			

initial considerations on the 6G spectrum vision.         • After finalizing the main deliverable, i.e. Report/Opinion as appropriate on 6G strategic vision, RSPG will continue to be engaged in the 6G developments in order to prepare, as soon as deemed appropriate a 6G spectrum roadmap.         • RSPG Workshops with the stakeholders: as appropriate Time schedule         • Draft Report/Opinion as appropriate on 6G strategic vision: November 2024         • Final Report/Opinion as appropriate on 6G strategic vision: February 2025         Analytical approach       RSPG will continue to engage in the sharing of information and experience in support a successful development and future roll-out of 6G in the EU.         Project plan       Phase 1 – Information gathering (including stakeholder engagement) Phase 2 – Analysis and assessment Phase 2 – Analysis and assessment Phase 3 – Review conclusions (including stakeholder engagement) Phase 4 – Conclude and report         Dependencies       RSPG WI on "Long-term vision for the upper 6 GHz band"         Members, stak-holders and resources       Members, stakeholder sudder green provide and report         Members, stakeholders and resources       Czechi Regreen provide prov		•				
a successful development and future roll-out of 6G in the EU.         Project plan       Phase 1 – Information gathering (including stakeholder engagement) Phase 2 – Analysis and assessment Phase 3 – Review conclusions (including stakeholder engagement) Phase 4 – Conclude and report         Dependencies       RSPG WI on "Long-term vision for the upper 6 GHz band"         Members, stakeholders and resources       Ministry of Finance BMF Austria, Telecommunications Regulatory Authority RTR Belgium, BIPT Czechia, Czech Telecommunication Office Germany, German Federal Network Agency Germany, German Federal Network Agency Germany, German Federal Ministry for Digital and Transport Denmark, Agency for Data Supply and Infrastructure EC, DG CONNECT ECO, European Communications Affairs and Digital Transformation Finland, Finnish Transport and Communications Agency (TRAFICOM) France, French National Frequency Agency (ANFR)         France, French National Frequency Agency (ANFR)         France, French Ministry of Economy and Finance Croatia, Croatian Regulatory Authority for Network Industries (HAKOM) Hungary, National Media and Infocommunications Authority (NMHH) Ireland, Department of the Environment, Climate and Communications Italy, Ministry of Enterprises and Made in Italy	and timing Analytical approach		<ul> <li>evaluation coverage and capacity needs for 6G use cases and usages scenarios with initial considerations on the 6G spectrum vision.</li> <li>After finalizing the main deliverable, i.e. Report/Opinion as appropriate on 6G strategic vision, RSPG will continue to be engaged in the 6G developments in order to prepare, as soon as deemed appropriate a 6G spectrum roadmap.</li> <li>RSPG Workshops with the stakeholders: as appropriate <u>Time schedule</u></li> <li>Draft Report/Opinion as appropriate on 6G strategic vision: November 2024</li> </ul>			
Phase 2 – Analysis and assessment         Phase 3 – Review conclusions (including stakeholder engagement)         Phase 4 – Conclude and report         Dependencies       RSPG WI on "Long-term vision for the upper 6 GHz band"         Members, stakeholders and resources         Members       Austria,         Austria,       Ministry of Finance BMF         Austria,       Telecommunications Regulatory Authority RTR         Belgium,       BIPT         Czechia,       Czech Telecommunication Office         Germany,       German Federal Ministry for Digital and Transport         Denmark,       Agency for Data Supply and Infrastructure         EC,       DG CONNECT         ECO,       European Communications Affairs and Digital Transformation         Finland,       Finnish Transport and Communications Agency (TRAFICOM)         France,       French National Frequency Agency (ANFR)         France,       French National Frequency Agency (ANFR)         France,       French Ministry of Economy and Finance         Croatia,       Croatian Regulatory Authority for Network Industries (HAKOM)         Hungary,       National Media and Infocommunications Authority (NMHH)         Ireland,       Department of the Environment, Climate and Communications         Iralav,       Ministry of Enterprises and Made in I			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.			
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Key stakeholders	Telecom operators Vertical industries Equipment suppliers Research organisations
Other resources	
Other work items	

## Work flow (internal and external milestones)

Date	Action / deliverable	<b>Internal</b> Sub-group only	<b>External</b> Plenary, Publication				
Year 2024							
22 April (Webex)	<ul> <li>First meeting of sub-group</li> <li>discussions on scope and plan following new <i>RSPG</i></li> <li><i>Work Programme</i> and new work item on <i>6G strategic</i></li> <li><i>vision</i></li> <li>proposal for table of contents and layout of deliverable presented by the co-chairs</li> </ul>	Sub-group					
16 May (Webex)	Second meeting of sub-group - further discussions on the draft content and MS contributions. - planning for a workshop / hearing with stakeholders in September 2024 (online).	Sub-group					
18 June	Progress of work presented to RSPG Plenary #64	Co-chairs	Plenary				
16 September (Webex)	Third meeting of sub-group - 6G strategic vision hearing plan discussion - revision of the draft report	Sub-group					
27 September (Webex)	RSPG 6G strategic vision hearing - presentation of the 6G strategic vision work item to stakeholders - presentations on the topics of interest by stakeholders - discussion and conclusion by all participants	Sub-group					
1 October (Webex)	Fourth meeting of sub-group - further discussions on the draft content of the report, including information from stakeholders as presented during the hearing and MS contributions.	Sub-group					
29 October (Webex)	Fifth meeting of sub-group - Final discussions on the report before submitting to the RSPG plenary for approval and Public Consultation	Sub-group					
13 November	Progress of work presented to RSPG Plenary #65 Draft report submitted for approval for Public Consultation	Co-chairs	Plenary				
	Future dates and actions to be decided in light	of work plan					