



BT Group, Deutsche Telekom, KPN, Odido, Orange, SFR, TIM, Telefónica, Telia Company and Vodafone Response to the Draft RSPG Report on 6G Strategic Vision

The signatories of this response thank the RSPG for its recognition of the importance of 6G and the need to be proactive for supporting its deployment and development in Europe. We support the RSPG to finalize the 6G strategic vision and to *launch a 6G spectrum roadmap during its next working period (2026-2027) in order to identify which frequency band(s) should be made available for the launch of 6G and its future development.*

In this respect we strongly request RSPG to identify the upper 6GHz band (6425-7125 MHz) for macro-cellular base station deployment without undue power limitations, as this band represents the only feasible spectrum opportunity to evolve 5G and launch 6G in Europe.

European spectrum policy and the high-level policy goals of the Union are important to ensure Europe does not lag behind other regions in technology leadership and deployment. The RSPG vision on 6G should carefully account for recent policy initiatives from the European Commission and, in particular, the recent reports by Enrico Letta and Mario Draghi which call for urgent actions to ensure European competitiveness and investments through spectrum policy.

As with previous introductions of new mobile access technologies, new spectrum will be required to deliver the full capabilities and service benefits of 6G. Furthermore, mobile network traffic forecasts indicate the need for additional capacity for existing services towards the end of the decade¹. Therefore, existing spectrum in low and mid-bands will not be sufficient, even though a continuous migration of legacy spectrum bands towards new, and more efficient (spectrum and energy) technologies is always applied as traffic evolves.

The upper 6 GHz band (6425-7125 MHz), already identified for IMT at WRC-23 across Region 1 and specific countries in other regions, is the only opportunity for cost-effective macro-cellular network deployments² (if made available without undue power limitations) to address the evolution of 5G and deployment of 6G in Europe. Larger channels of 200 MHz or more provide the best foundation for cost-efficient provisioning of network capacity for existing and new services, bringing benefits to European customers and businesses, both from a competitiveness and environmental perspective.

¹ See questionnaire on long-term vision for the upper 6 GHz band, ETNO, GSMA, Telefónica and Vodafone Group responses.

² Enabling contiguous coverage outdoor and indoor while re-using existing grid (3.5 GHz).

There are limitations to densification, as the RSPG acknowledges. Due to environmental, economic, technical, and practical limitations, operators will not be able to massively densify networks to cope with traffic demand and new use cases. To ensure the initial deployment of 6G in Europe, new spectrum will be needed. Therefore, it is of extreme importance to finalize the harmonisation of 6425-7125 MHz for WBB ECS as scheduled, enabling macro-cellular network deployments without undue power limitations.

Spectrum within the range 7125-8400 MHz should not be disregarded in the context of WRC-27 studies while respecting and considering existing incumbent services. This range would be important to evolve 6G and its capabilities.

While high capacity and highly demanding use cases happen mainly in urban areas covered by mid-bands, wider and more sparsely populated areas also need to be considered. Therefore, the UHF band (470-698 MHz) will also be important for 6G, enabling ubiquitous connectivity and digital equality.

Other specific points raised in the draft RSPG Report.

- In terms of local connectivity and verticals' needs, we have to highlight that spectrum is being harmonized in the 3.8-4.2 GHz band, and opportunities also exist within the mmWave harmonized bands, as per some Member States' decisions. In our view, these needs have been addressed, and future needs will require a demand assessment, noting that specific local and vertical demands are also served as capabilities delivered using public mobile networks.
- Sharing with different technologies is being investigated as part of the 6G technology vision, but we believe that *"An adoption of an EU mandatory regulatory requirement in the ETSI"* will not automatically imply to find solutions for inter-service sharing. Regarding intra-service sharing among new spectrum users, it should be justified by thorough demand and socioeconomic assessments, and the EU should analyze the complexity, cost and benefits of each individual solution before an EU mandatory requirement to ETSI.
- Spectrum in mmWave bands cannot replace or be considered a substitute for wide-area spectrum, due to the smaller coverage reach with these bands, but can serve specific areas with very high demand (e.g. smart factories, wireless fibre Fixed Wireless Access, connected stadiums and events, transport hubs).

To conclude, the signatory companies encourage the RSPG to finalize its 6G strategic vision and to launch a 6G spectrum roadmap during its 2026-2027 working period, identifying the band 6425-7125 MHz for WBB ECS and enabling macro-cellular networks deployments without undue power limitations to support the evolution of 5G and 6G launch. Further to this, the RSPG should consider the UHF band (470-698 MHz) for wider area 6G availability, as well as the 7125-8400 MHz range in the context of WRC-27 studies for the longer-term evolution of 6G.