

Telia Company response to RSPG consultation on draft 6G Strategic Vision

Telia Company appreciates the opportunity to provide inputs to the development of 6G strategy for EU. We have contributed to the GSMA and Connect Europe response, and a multi-operator response that highlights especially the importance of mid-bands, and we fully endorse them.

We presented in the RSPG stakeholder 6G hearing in September and brought up our views on the spectrum related demands towards 6G era. Traffic in mobile networks continues to increase, driven further by trend towards “unlimited subscriptions”, and uptake of Fixed Wireless Access. We need to be able to deliver to higher end-user expectations on data speeds, and eventually 6G capabilities and use cases. New spectrum with wide channel bandwidths of at least 200 MHz is needed to meet these demands. We also highlighted in the hearing that *“It is of outmost importance that the upper 6 GHz band (6425 – 7125 MHz) is made available for macro IMT networks – without undue power limitations”*. This supports the possibility to use the existing site grid, which is essential for sustainable and economically viable 6G deployment and service delivery to indoor, outdoor, and mobility demands. The importance to enable upper 6 GHz with full macro power levels was brought up also by other mobile operators in the hearing. Thus, we think it would be important to reflect this in the RSPG 6G strategic vision, at least in the sections which summarize views from mobile operators.

We support the RSPG plan to develop 6G spectrum roadmap for Europe. We consider it is important to focus on identifying suitable new spectrum bands to support European competitiveness and success on 6G. Operators migrate “legacy bands” to new, more efficient, technologies when it is possible from the traffic perspective – and will do so also with 6G. When developing the 6G spectrum roadmap, spectrum in different ranges should be considered:

- New spectrum in mid-bands with large channel bandwidths will be the key to address the 6G and capacity demands in urban and other high demand areas. As noted above the upper 6 GHz band will be needed for 6G success in Europe. Spectrum in adjoining 7-8 GHz range may provide opportunity to further evolve 6G services in mid-band range (pending on WRC-27 studies and decisions).
- We operate in countries with large sparsely populated areas, and additional spectrum in sub-700 MHz range will support delivering higher data speeds and 6G services in those areas.
- Spectrum in mmWave range is likely to become more relevant in 6G era than it has been so far but is still expected to serve only limited areas with very high-capacity needs (e.g. stadiums, factories, very high speed FWA). It cannot substitute mid-bands for providing the needed services cost-efficiently in wider areas.

We are happy to continue contributing to the European 6G spectrum roadmap development and are available for any questions that may arise.

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