GSMA

Upper 6 GHz Readiness and the Future of Mobile

Aligning spectrum policy with industry readiness to deliver capacity, innovation, and digital inclusion

As governments seek to accelerate the development of communications infrastructure, 6 GHz mobile spectrum can form an important part of sustainable connectivity. Full-power use of the upper 6 GHz band (6.425-7.125 GHz) for macro-cell mobile networks can help digital growth across the world.

The World Radiocommunication Conference in 2023 (WRC-23) harmonised the upper 6 GHz band for mobile services and it has subsequently been included in national spectrum roadmaps. Countries accounting for more than 80% of the world's population now support mobile use of upper 6 GHz, providing the scale and certainty needed for a strong global ecosystem.

The first upper 6 GHz assignment processes have been finalised, and further awards are expected in the coming years in EMEA, APAC and the Americas. The timing of awards will be dependent on individual market demand. Trials of equipment have been carried out since 2022, reaching peak data speeds of 12 Gbps.

Upper 6 GHz capacity will support increasing customer demand and traffic growth as existing applications develop, and new use cases are deployed at scale. It can be used for the future evolution of mobile through 5G-Advanced and the launch of 6G. 6 GHz can enable the 200-400 MHz channel bandwidths that will be required in the 6G era.

The GSMA and the below stakeholders:

- **Recognise that upper 6 GHz (6.425-7.125 GHz) capacity is essential to meet growing demand and enable the future evolution of mobile connectivity.**
- **Support the full development of the upper 6 GHz band for full-power macro-cell mobile, as part of a clear, forward-looking spectrum roadmap for operators.**
- **Confirm industry readiness to deliver equipment and solutions that will enable the large-scale deployment of upper 6 GHz networks.**
- **Call for timely and market-driven assignments of the upper 6 GHz band under balanced, pro-investment conditions, ensuring it can deliver its full potential for connectivity, innovation, and economic growth.**

