GSMA

WRC-23 Agenda Items

6 GHz: 5G's Future

6 GHz IMT will expand capacity and deliver connection speeds to launch a new era of mobile productivity. The enablement effect of mobile communications on the race to net zero can be enhanced by gigabit experiences delivered with lower carbon emissions through minimal densification.

6 GHz IMT can play a vital role in sustainable social, economic and industrial development.

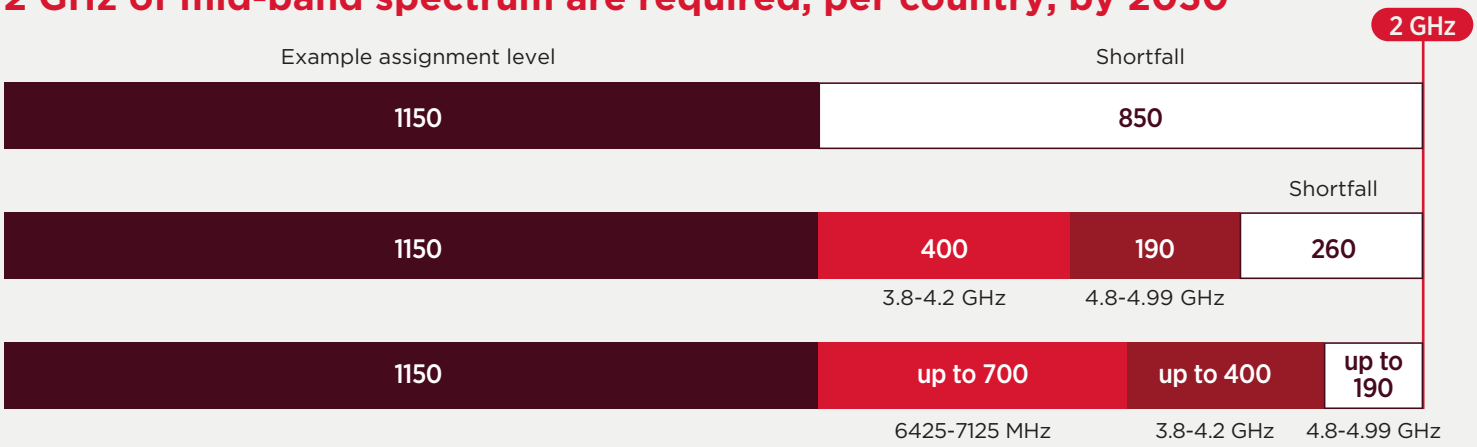
2 GHz

Average mid-band requirement by 2030 per country

$610bn

Contribution to global GDP from mid-band 5G in 2030

2 GHz of mid-band spectrum are required, per country, by 2030



Reaching this is challenging without 6 GHz capacity

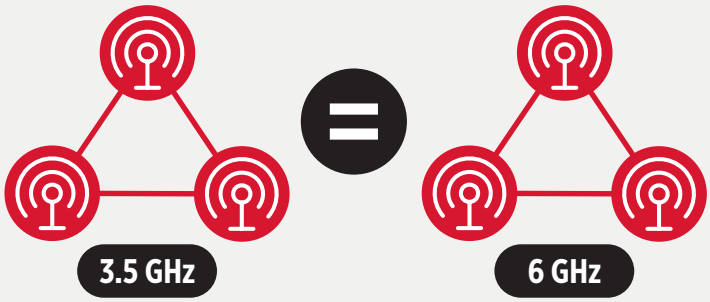
6 GHz ecosystem: no barriers exist from

- Network vendors
- Chipset developers
- Radio front-end suppliers
- Device manufacturers
- Mobile network operators

Same grid - lower carbon

6 GHz IMT can use the same grid network as 3.5 GHz 5G launches. This reduces carbon from base station manufacture and reduces grid electricity.

Technical specifications and e.i.r.p. limits are crucial to ensure 6 GHz connectivity can deliver the positive enablement effect of mobile on climate change.



6 GHz trials

Over 12 countries

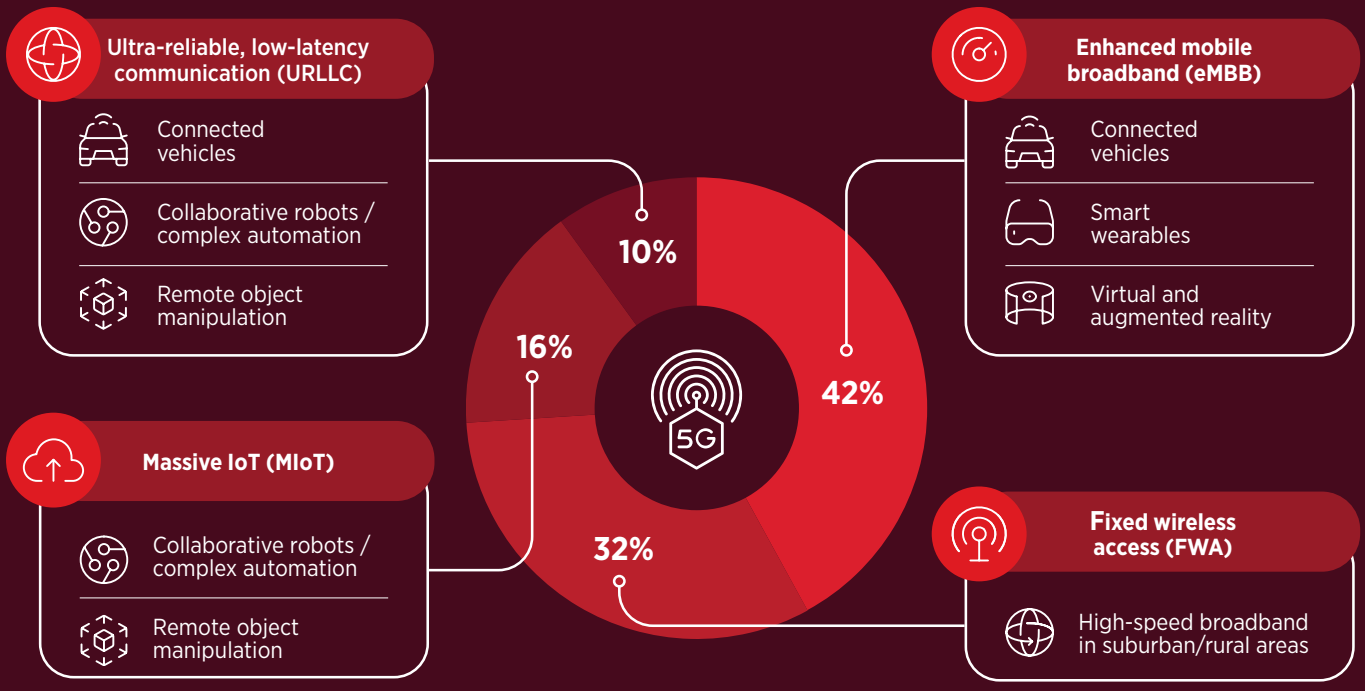
1 Gbps+ with 80 MHz channel

10 Gbps+ with 400 MHz channel

Peak trial speed of 12 Gbps

Regional breakdown of the GDP contribution (%) generated by mid-band 5G in 2030

Projected global contribution of mid-band 5G spectrum to GDP, by use case



All data and further analysis found at:
www.gsma.com/spectrum/resources/6-ghz-for-5g/

Read more about WRC-23 spectrum here: **www.gsma.com/spectrum/wrc-series/**

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