Socio-Economic Benefits of Mid-band Spectrum

Regional Commonwealth in the field of Communications (RCC) (2020-2030)

Mid-band spectrum is at the heart of 5G

and is necessary for the increases in bandwidth and capacity that numerous 5G applications will require. It will play a central role in meeting the city-wide capacity demand of 5G use cases from Manufacturing IoT to smart education and healthcare.



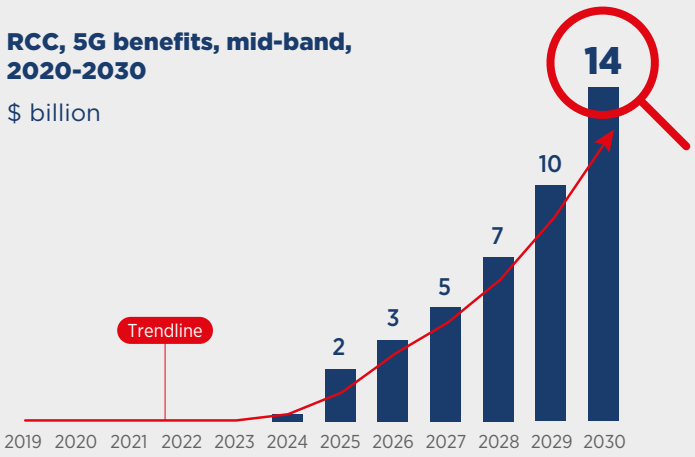
Economic Impact Drivers in RCC

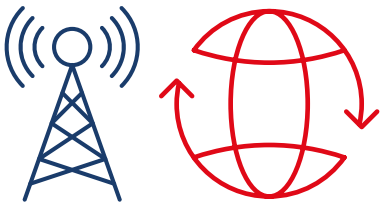
US$14bn

Russia will produce the majority of the overall economic benefit of mid-band 5G in the RCC region. These will be more keenly felt towards the end of the 2020s as 5G begins to produce significant scale.

RCC, 5G benefits, mid-band, 2020-2030

$ billion





0.76 GHz

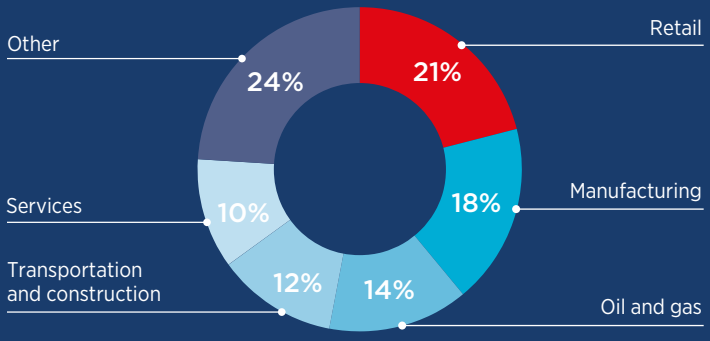
Average mid-band capacity today in RCC

2 GHz

Global average mid-band spectrum need by 2025-2030

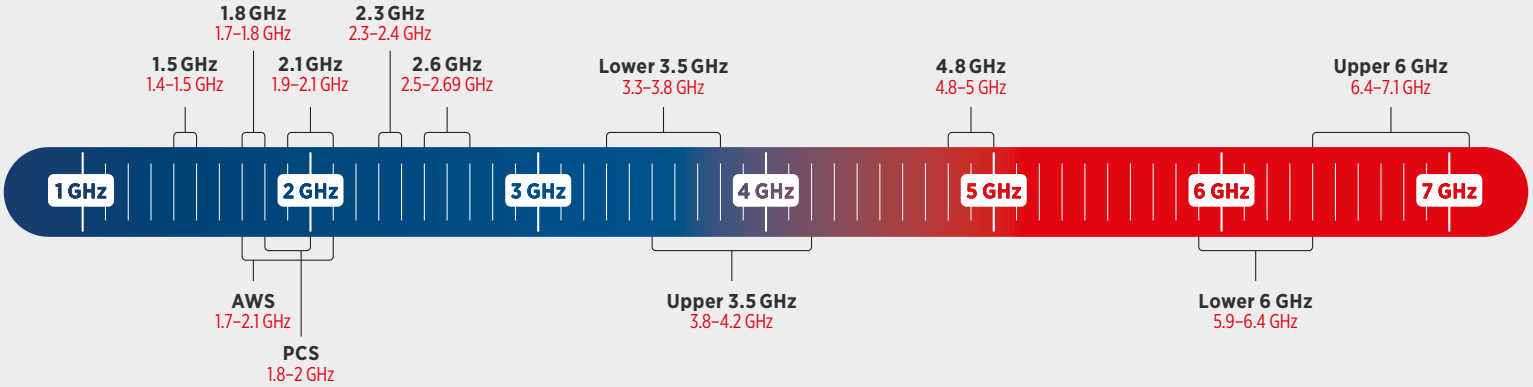
Vision 2030: Mid-Band Benefits by Sector in RCC

5G mid-band applications will mostly benefit the retail, manufacturing, oil & gas and services sectors across the RCC region.



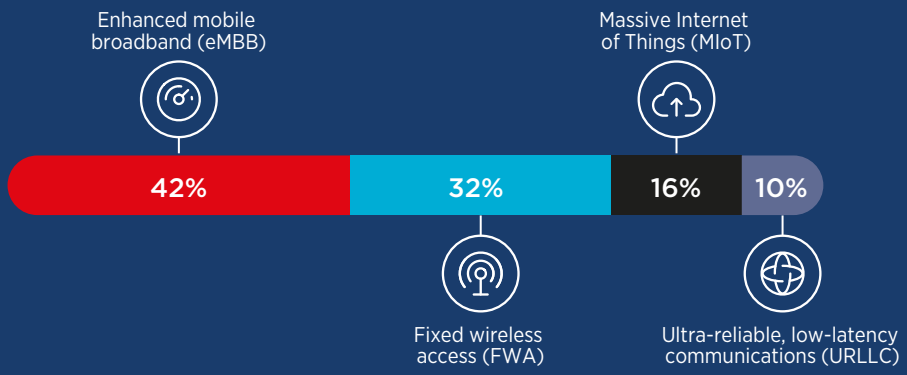
5G applications expected to improve the safety and productivity of oil and gas plants will see this sector produce positive impact through remote control of devices, smart monitoring and 5G-enabled AI, capable of reducing maintenance intervals.

Delivering 2 GHz of Mid-Band



Global Mid-Band Benefits by 5G Use Case

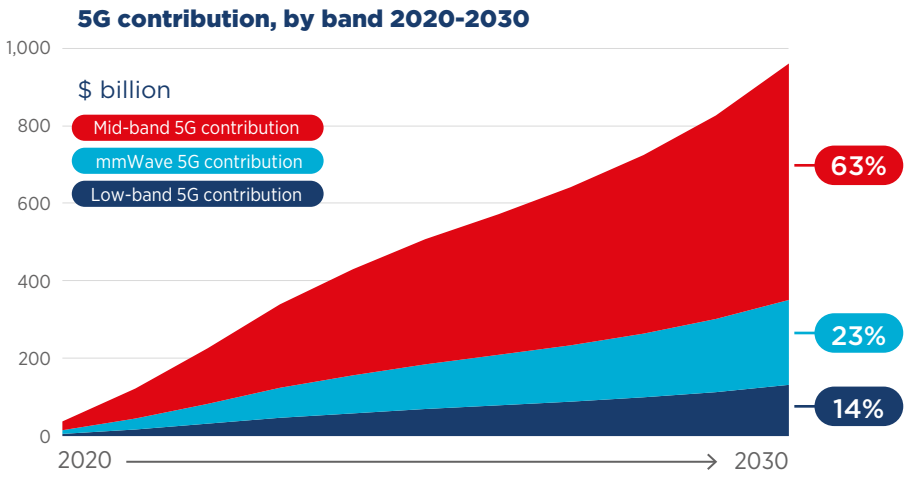
Mid-band will benefit all four main 5G use cases with its impact on each is expected to be stable in different parts of the world.



Global Breakdown: Mid-Band Drives 5G

5G is expected to yield US$960bn in additional GDP value add to the global economy - approximately 0.70% of forecast global GDP, by 2030.

The mid-band 5G contribution will represent US$610bn uplift to global GDP in 2030 – or 65% of total 5G benefits.



Economic Impact of Low Spectrum Assignment

5G relies on mid-band spectrum to realise its full potential. The global economy could lose up to 40% of the expected 5G benefits if no additional mid-band spectrum is allocated to mobile services. Global 5G benefits by 2030 could decrease from 0.68% of GDP (around US$960bn) to 0.42% of GDP (less than US$600bn) if spectrum is constrained.

5G total benefits, 2030

Optimal Scenario

$961bn

→ 0.68% of GDP

Constrained Scenario

$594bn

→ 0.42% of GDP

Read the full report here: www.gsma.com/spectrum/resources/mid-band-5G-spectrum-benefits
Read more about 5G spectrum here: www.gsma.com/spectrum/5g-spectrum-guide

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