

Socio-Economic Benefits of Mid-band Spectrum

Global (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.







The contribution to global GDP from mid-band 5G in 2030

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



Delivering 2 GHz of Mid-Band Spectrum



Global Breakdown: Mid-Band Drives 5G

In 2030, 5G is expected to generate \$960 billion in GDP on a global basis - 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.



What Happens Without Additional Mid-Band Spectrum



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 in 2030 could decrease from 0.68% of GDP (around \$960bn) to 0.42% of GDP (less than \$600bn) if spectrum is constrained.

5G total benefits, 2030

Optimal Scenario



Constrained Scenario \$594bn → 0.42% of GDP

