Socio-Economic Benefits of Mid-band Spectrum

Asia Pacific (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.



APAC GDP Impact in 2030

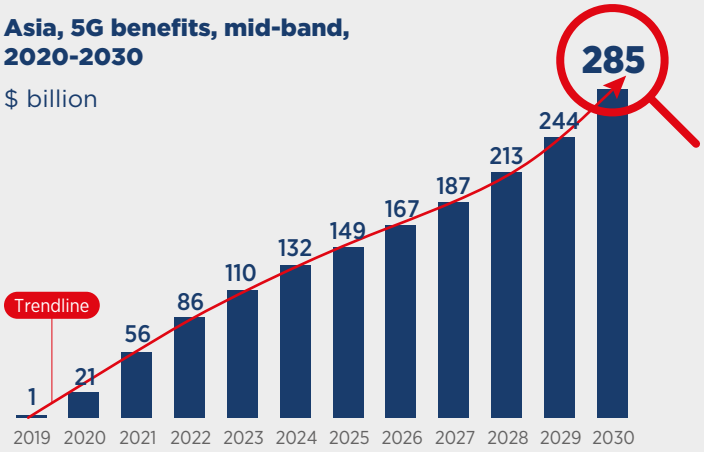
$285bn

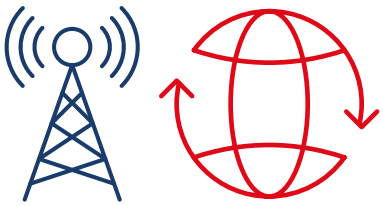
0.51%
GDP growth

The economies in East Asia and the Pacific region are expected to be the first to see an impact from 5G rollouts on GDP. Another wave of growth is expected in the second half of the decade as penetration increases in Southern and South East Asia.

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

$ billion



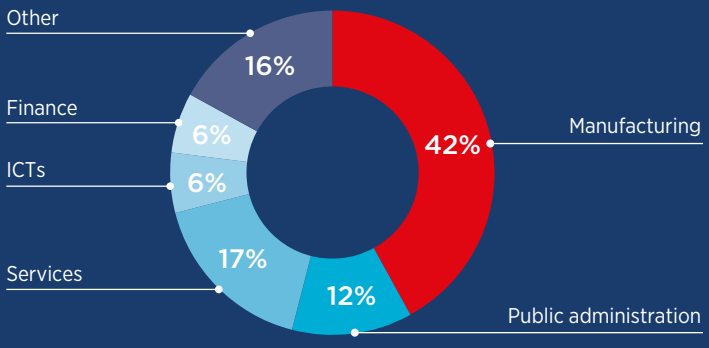


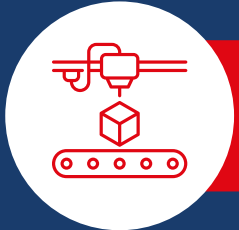
0.85 GHz
Average mid-band capacity today in APAC

2 GHz
Global average mid-band spectrum need by 2025-2030

Vision 2030: Mid-Band Benefits by Sector in Asia

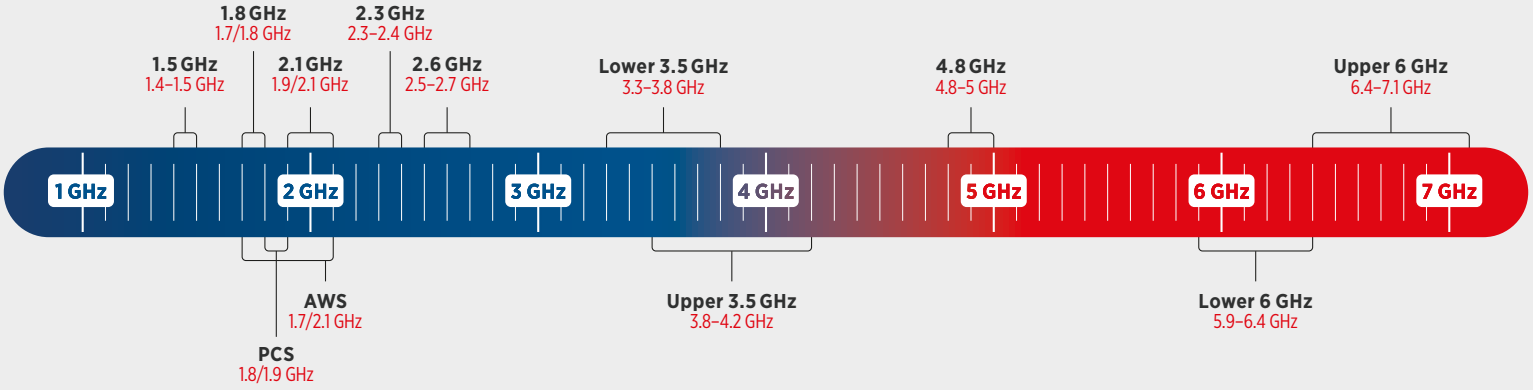
5G associated mid-band applications will mostly be used to benefit the manufacturing, public administration / services, ICT and finance services in a similar manner across the Asia-Pacific region.





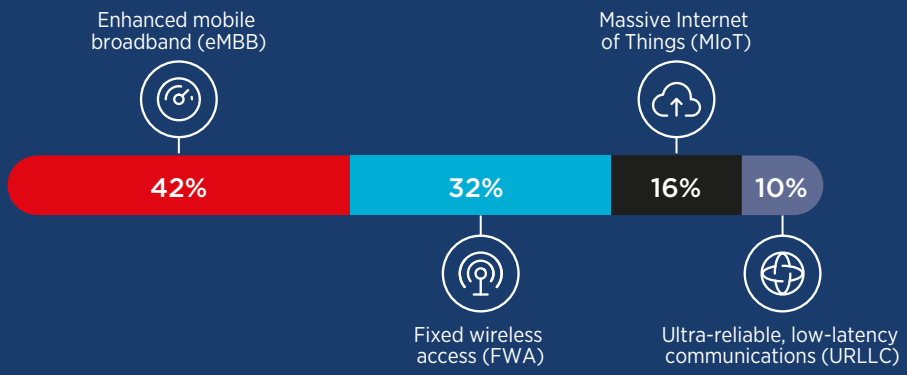
The manufacturing sector in this region in particular is expected to benefit from 5G, as the region presents a rich environment of high-tech manufacturing companies that will rapidly integrate new 5G applications in their business.

Delivering 2 GHz of Mid-Band



Global Mid-Band Benefits by 5G Use Case

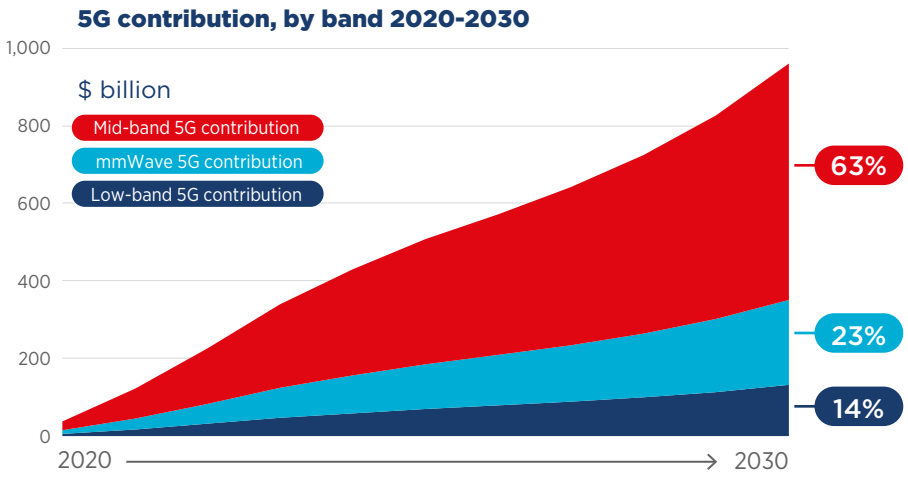
Mid-band will benefit all four main 5G use cases with its impact on each is expected to be stable in different parts of the world.



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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