Socio-Economic Benefits of Mid-band Spectrum

Middle East and North Africa (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.

MENA GDP Impact in 2030

$16bn

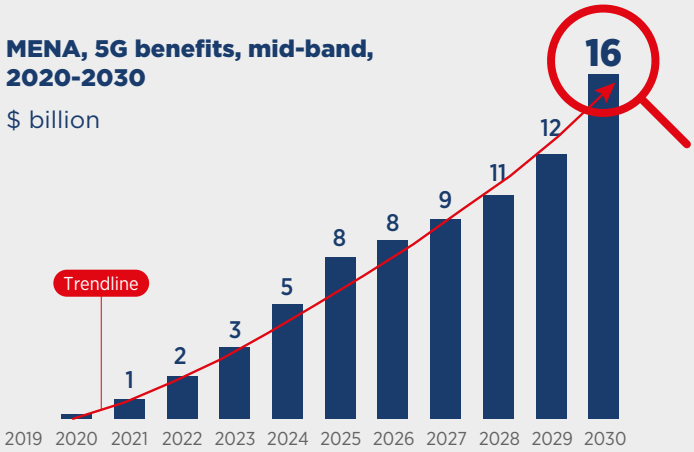
0.35%

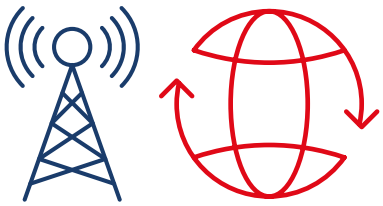
GDP Share

Steady growth across the study period is driven by MENA's diverse economies. The Gulf region's drive for 5G development will push early adoption while other countries will accelerate later in the 2020s.

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

$ billion





1.15 GHz

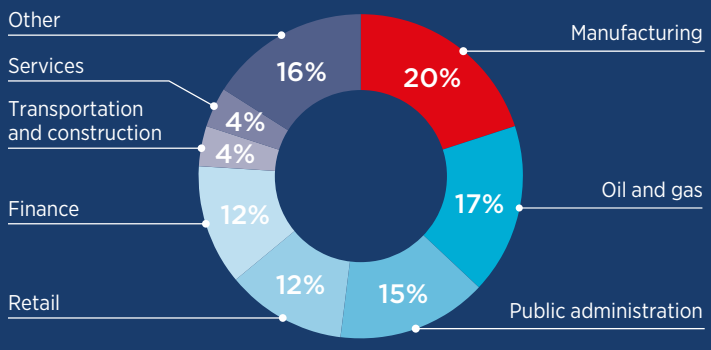
Average mid-band capacity today in MENA

2 GHz

Global average mid-band spectrum need by 2025-2030

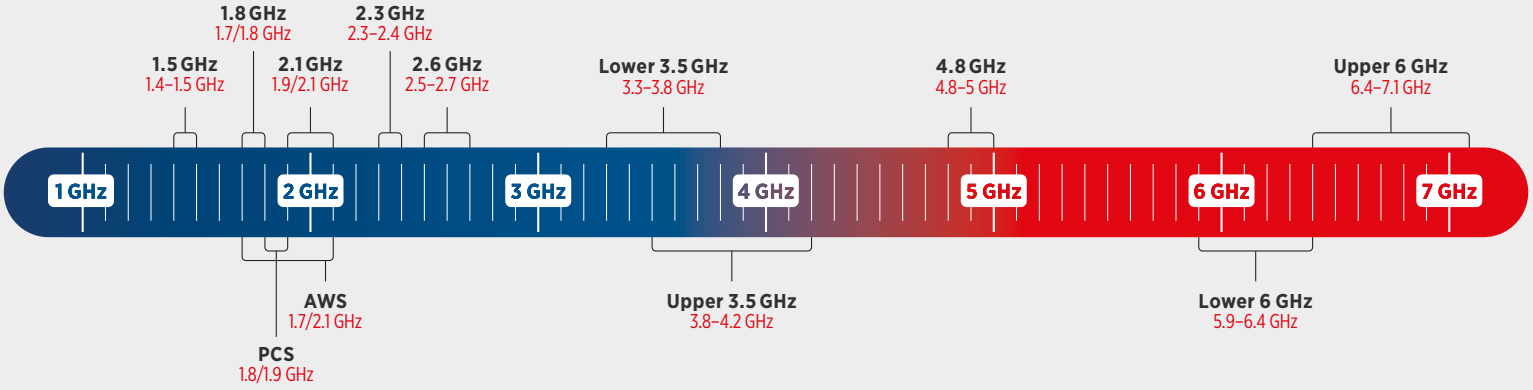
Vision 2030: Mid-Band Benefits by Sector in MENA

In terms of economic sector contribution, 5G mid-band is expected to drive significant benefits in manufacturing, public administration, oil & gas and services.



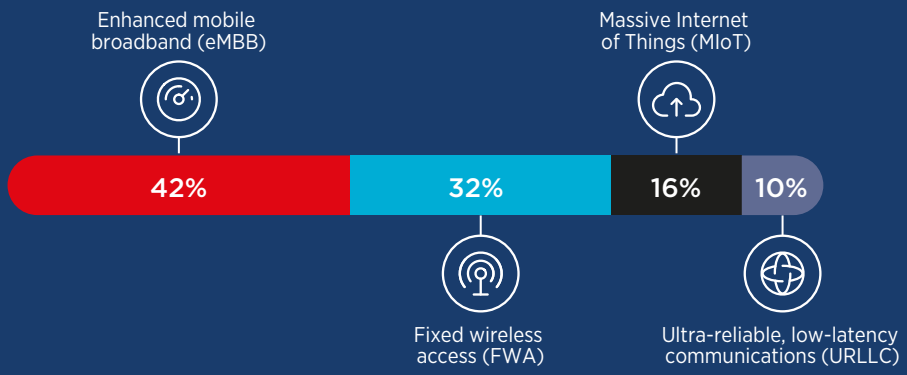
Public administration will produce 15% of the GDP impact of mid-band 5G in MENA. Smart city projects across the region are expected to herald an era of digital transformation with fully automated ecosystems powered by 5G smart city grids, e-government and autonomous vehicles.

Delivering 2 GHz of Mid-Band



Global Mid-Band Benefits by 5G Use Case

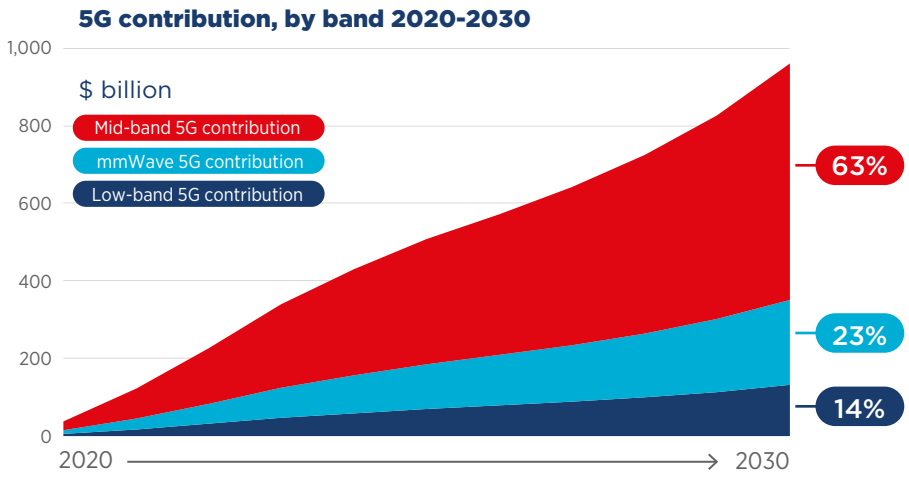
Mid-band will benefit all four main 5G use cases with its impact on each is expected to be stable in different parts of the world.



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, in 2030.

The mid-band 5G contribution will represent $610bn uplift to global GDP 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 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

$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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