Socio-Economic Benefits of Mid-band Spectrum

Latin America and the Caribbean (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.

LAC GDP Impact in 2030

$41bn

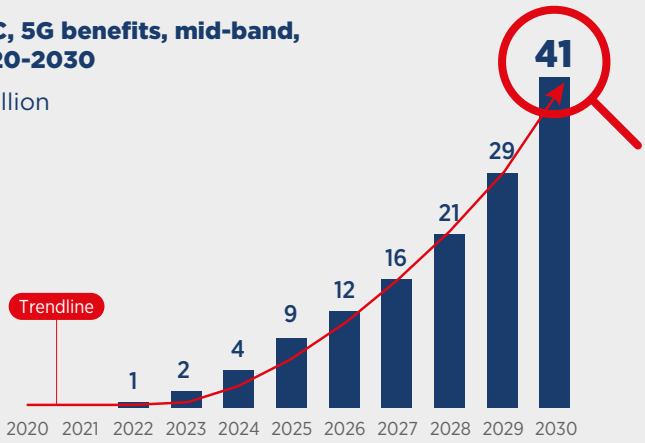
0.50%

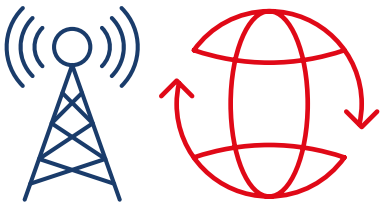
GDP Share

LAC growth is expected to be dominated by major markets such as Brazil, which will benefit from about 43% of the economic impact of mid-band 5G in the region, delivered by its 2021 spectrum auction. 5G take-up will accelerate in the second half of the decade in LAC.

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

$ billion





0.87 GHz

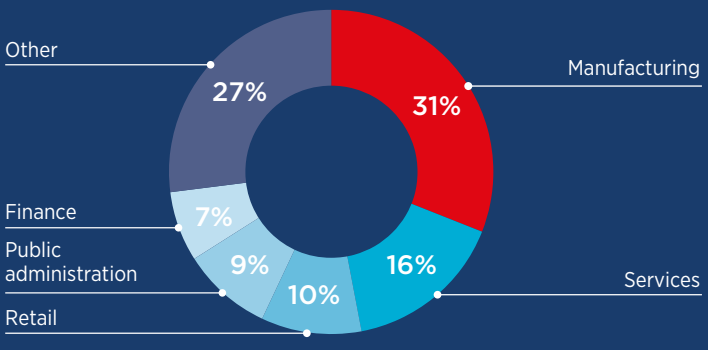
Average mid-band capacity today in LAC

2 GHz

Global average mid-band spectrum need by 2025-2030

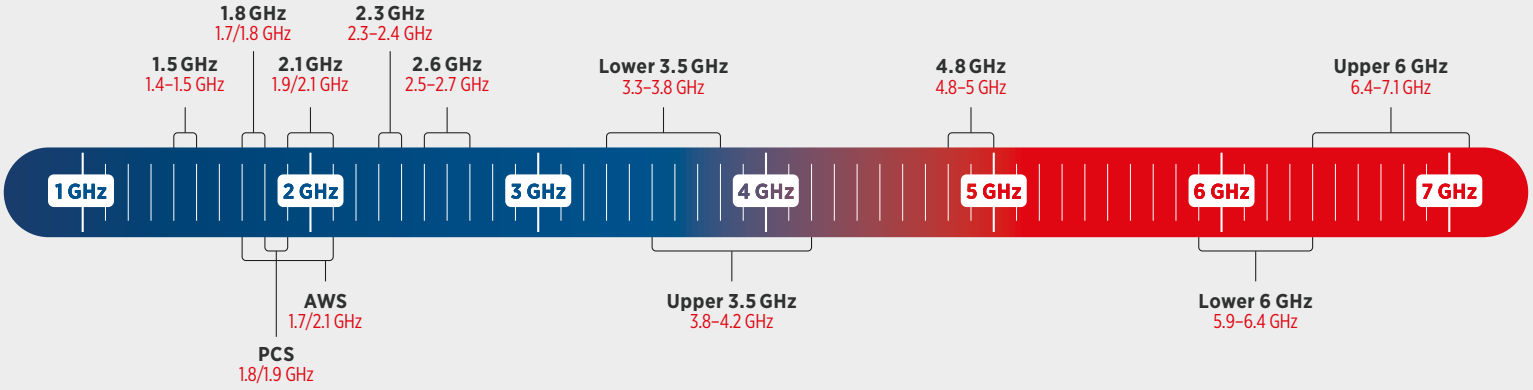
Vision 2030: Mid-Band Benefits by Sector in LAC

5G associated mid-band applications will mostly be used to benefit the manufacturing, services, retail and finance sectors in the region.



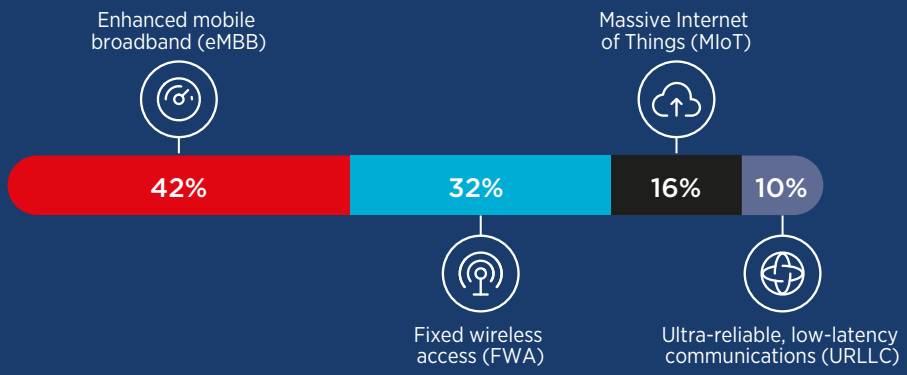
While manufacturing dominates, the retail sector will account for a significant proportion of benefits in LAC due to applications such as VR/AR and smart devices, which are expected to increase productivity in retail outlets and create new revenue streams.

Delivering 2 GHz of Mid-Band



Global Mid-Band Benefits by 5G Use Case

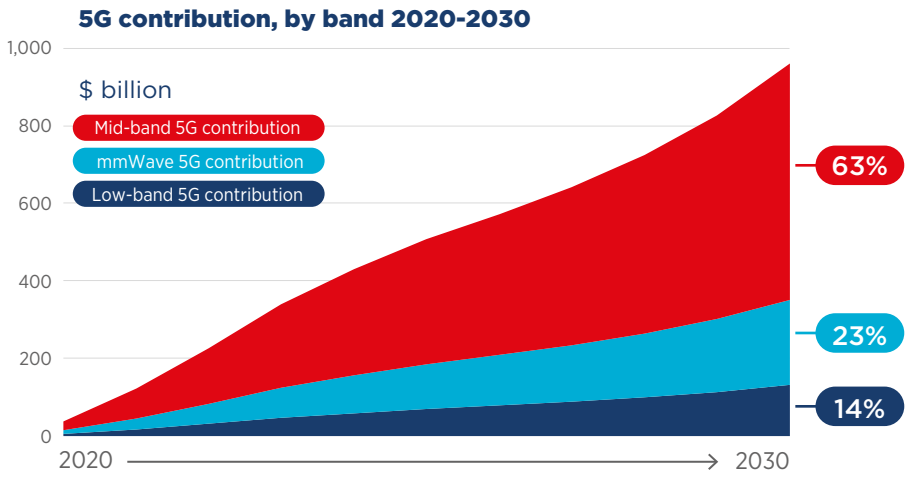
Mid-band will benefit all four main 5G use cases with its impact on each is expected to be stable in different parts of the world.



Global Breakdown: Mid-Band Drives 5G

5G is expected to yield $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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