



5G Spectrum Needs: Vision 2030

Webinar

30/06/2022

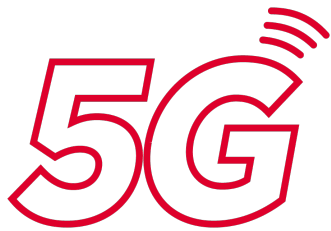


Welcome Remarks

Luciana Camargos, Head of Spectrum, GSMA

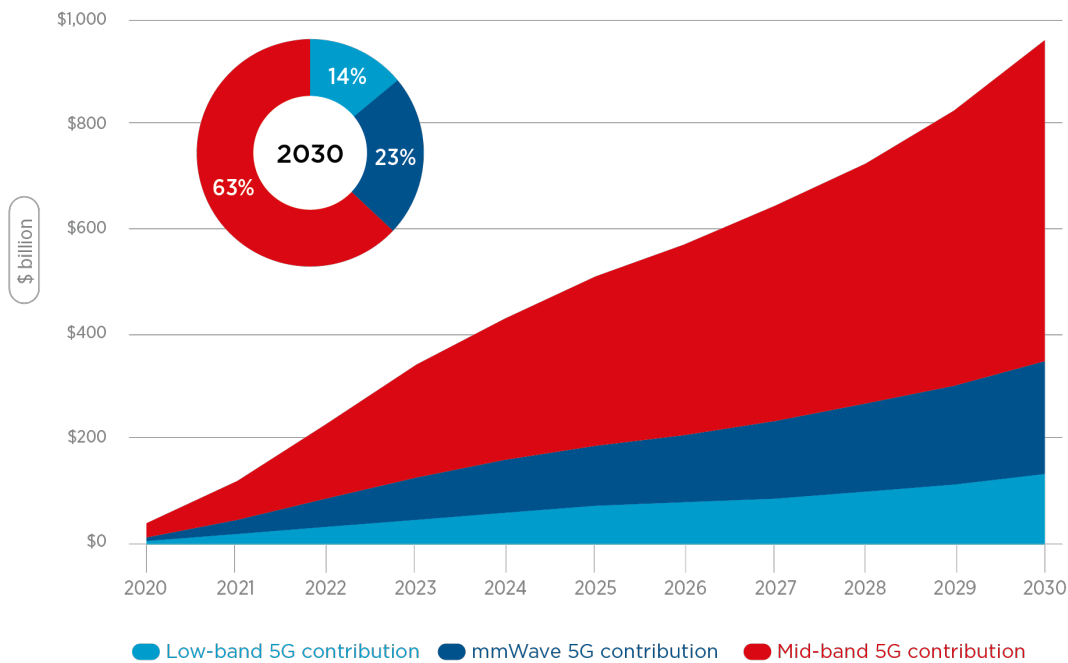


Economic Power of 5G

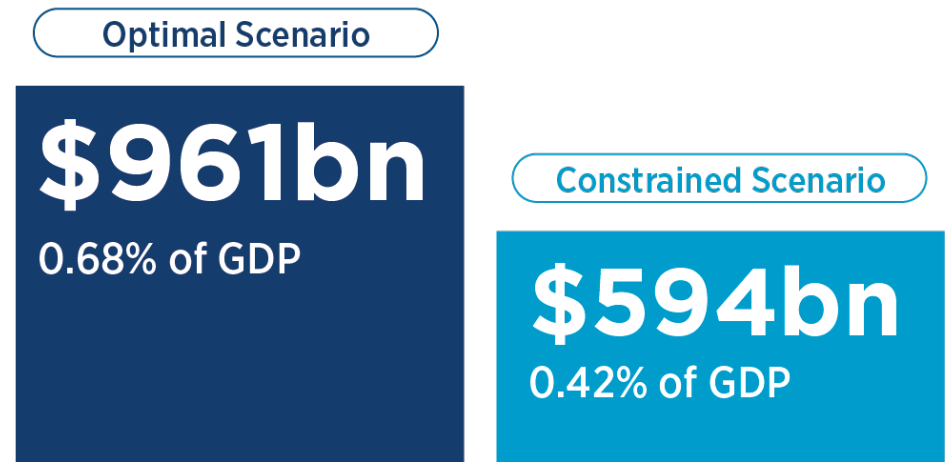


CAN IMPACT GLOBAL ECONOMY IN 2030 BY

\$961BN...



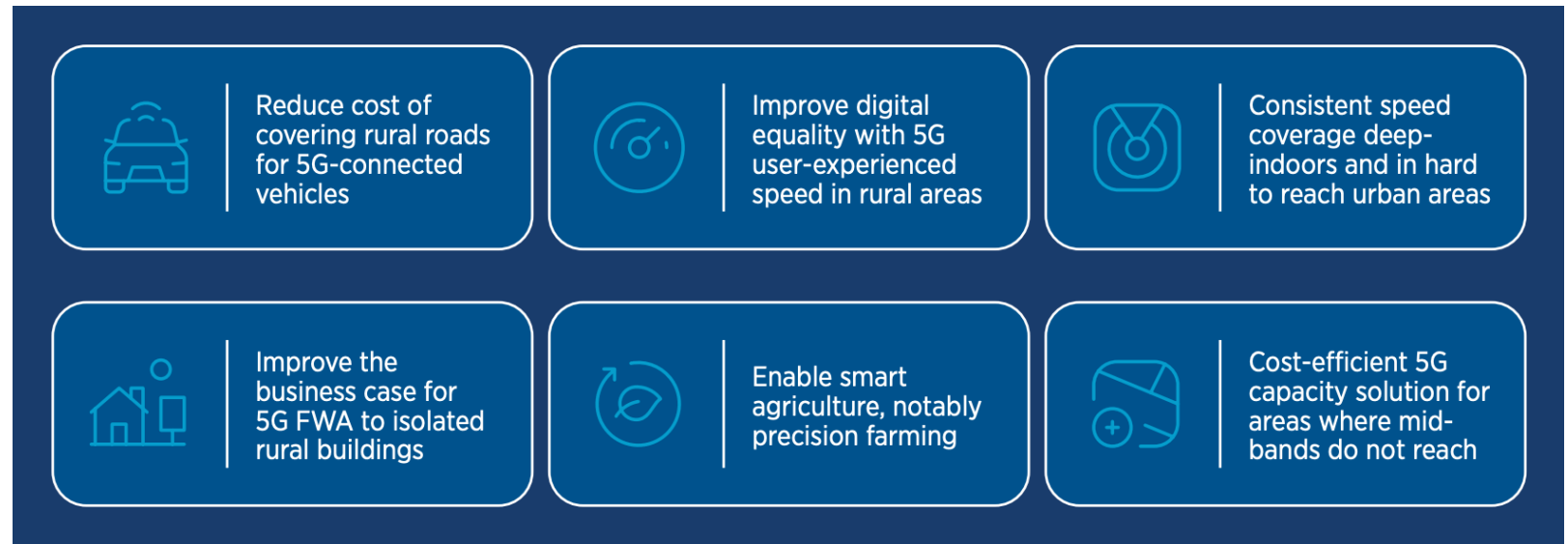
... BUT SPECTRUM CONSTRAINTS RESTRICT VALUE









The Socio-Economic Benefits of Mid-band 5G GSMA Intelligence 2022

LOW-BAND NEEDS

Low-band spectrum is the cornerstone of digital equality and a driver of broad and affordable connectivity. It is a crucial national asset that can build bridges towards digital inclusion.



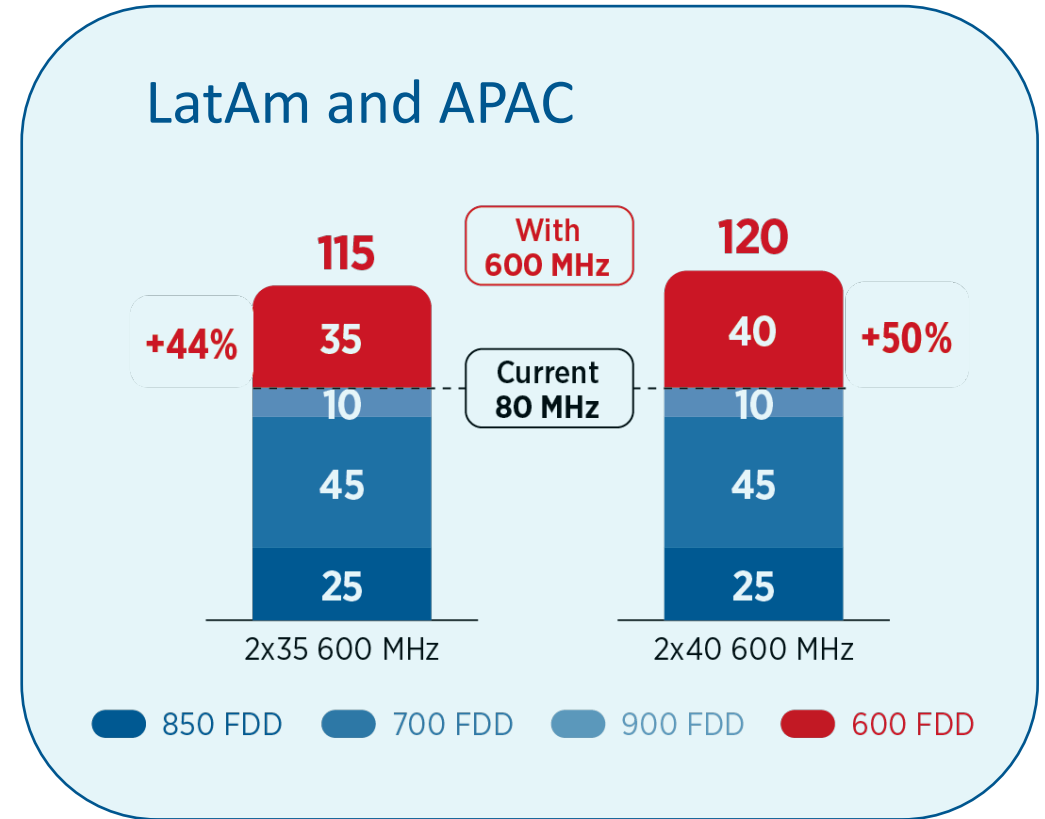
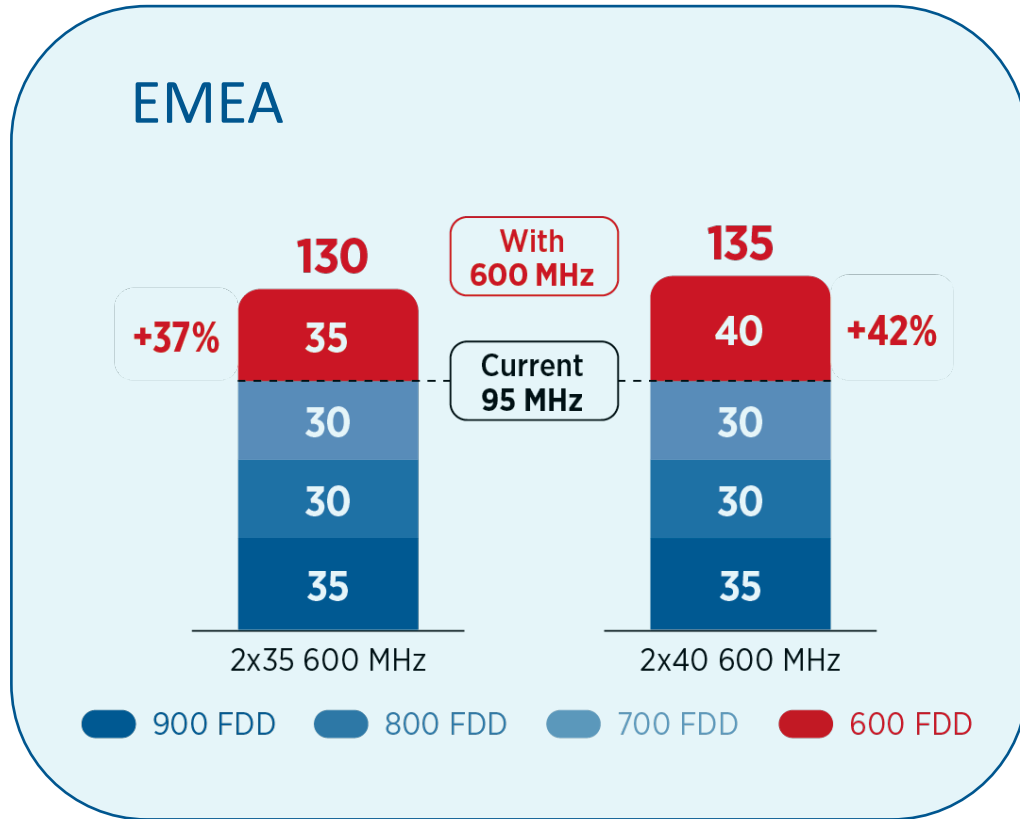
-  Reduce cost of covering rural roads for 5G-connected vehicles
-  Improve digital equality with 5G user-experienced speed in rural areas
-  Consistent speed coverage deep-indoors and in hard to reach urban areas
-  Improve the business case for 5G FWA to isolated rural buildings
-  Enable smart agriculture, notably precision farming
-  Cost-efficient 5G capacity solution for areas where mid-bands do not reach

<https://www.gsma.com/spectrum/wp-content/uploads/2022/06/5G-Low-Band-Spectrum.pdf>



600 MHz Development

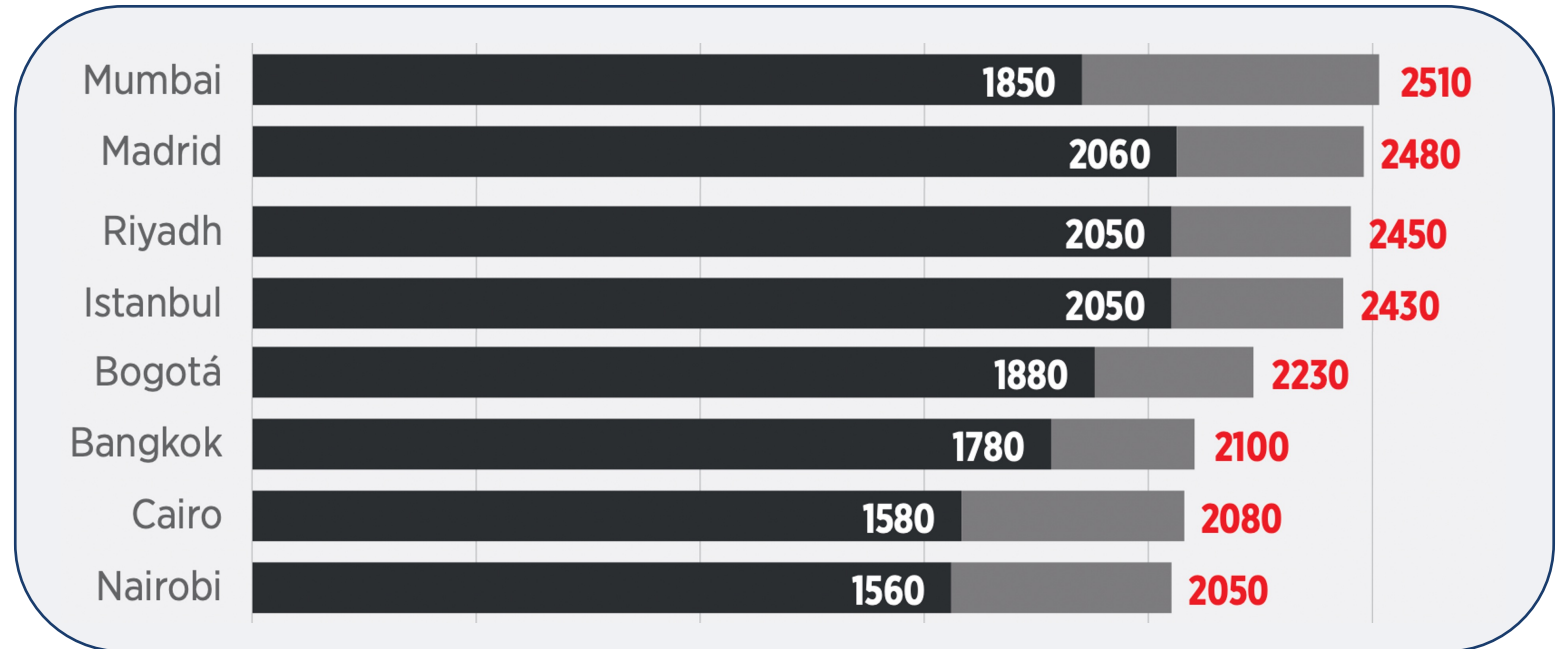
Direct impact of additional capacity on download speed



2 GHz of mid-band

spectrum is needed for 5G in each market

MID-BAND NEEDS

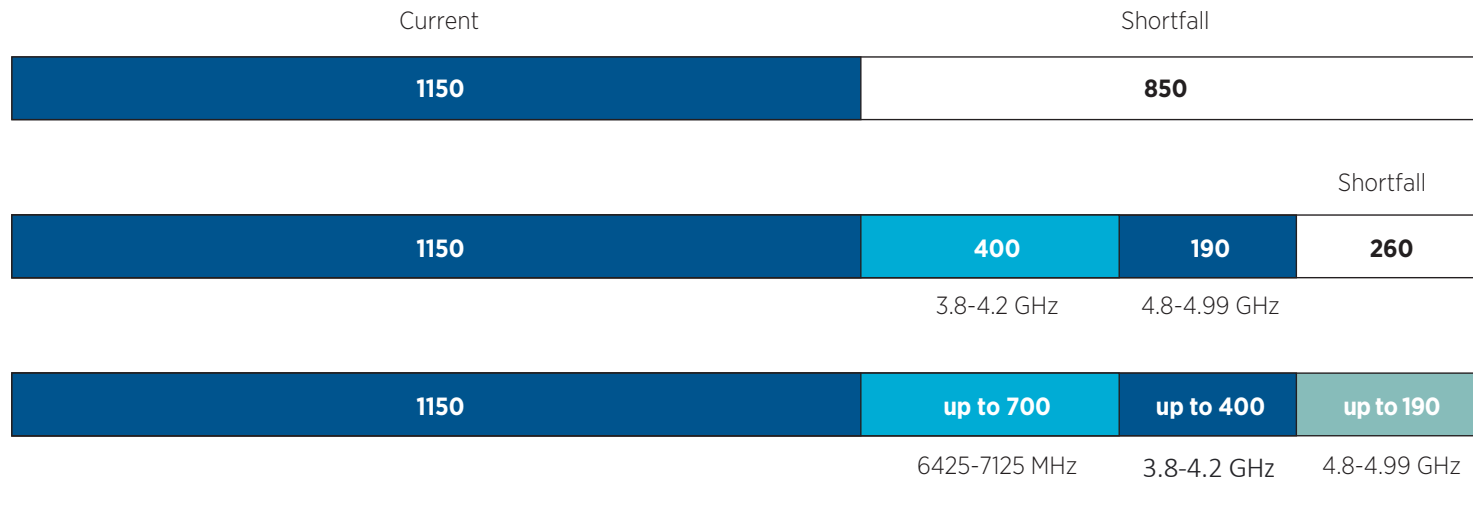


1. On a global basis, an average of 2 GHz of mid-band spectrum will be required for 5G
2. Cities require similar amounts everywhere in the world
3. With less spectrum, IMT-2020 requirements are under risk or 5x more base stations are needed
4. Agenda Item 1.1, 1.2 and 1.3 will all help raise harmonised mid-band capacity



Mid-band Options

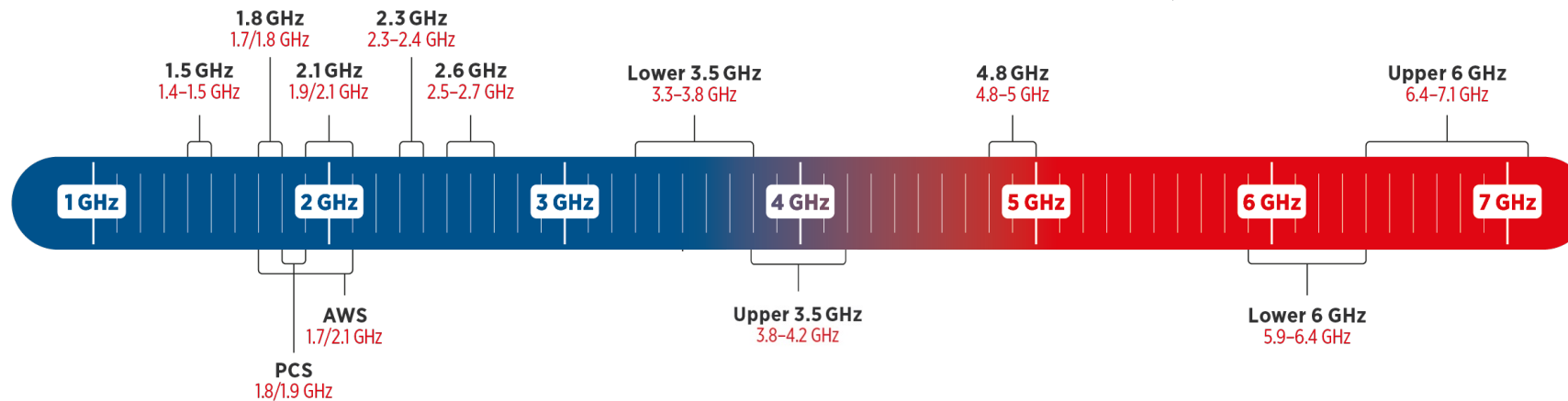
2 GHz



2 GHz

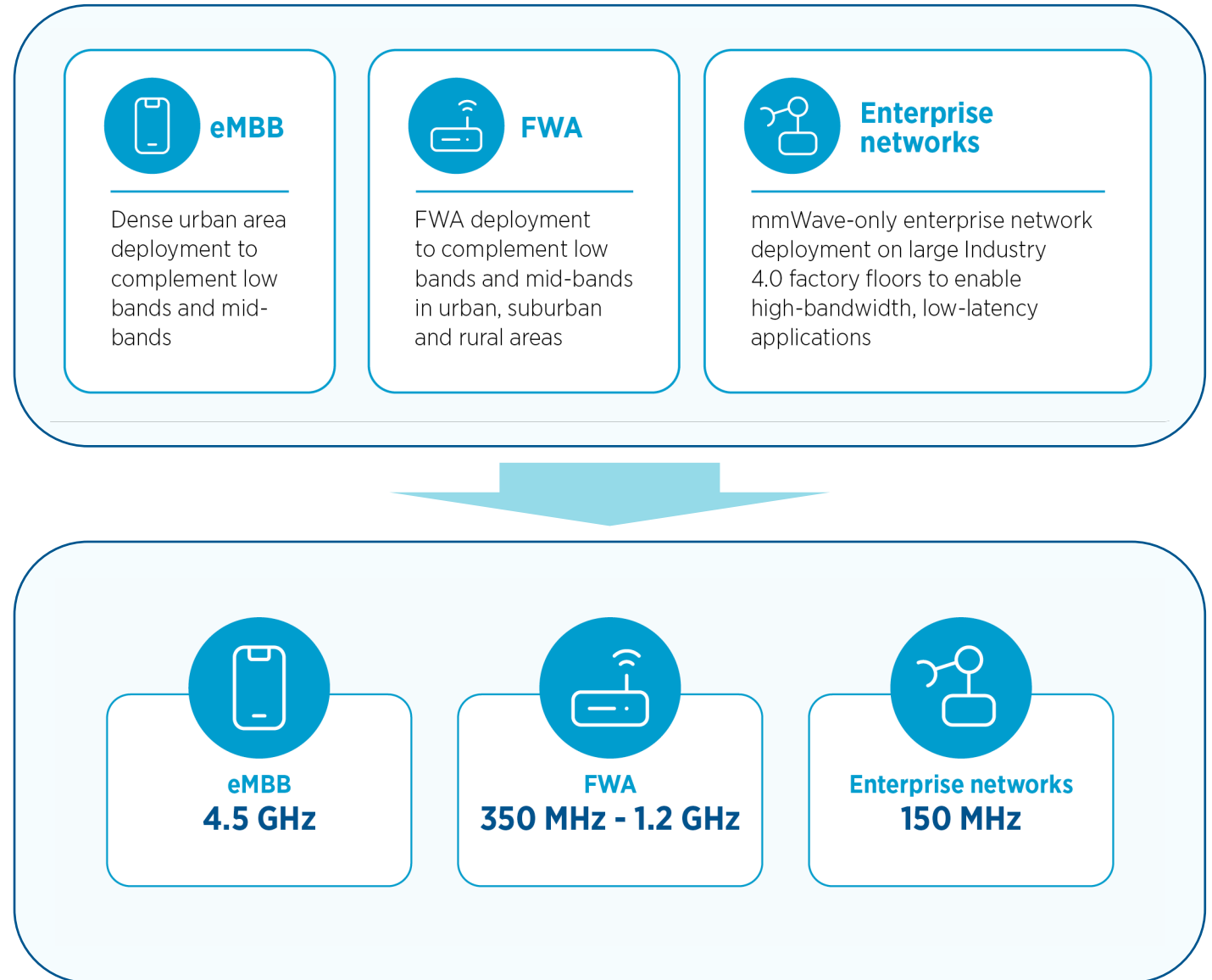
of mid-band is required for 5G by 2030.

This is challenging to achieve without 6 GHz.

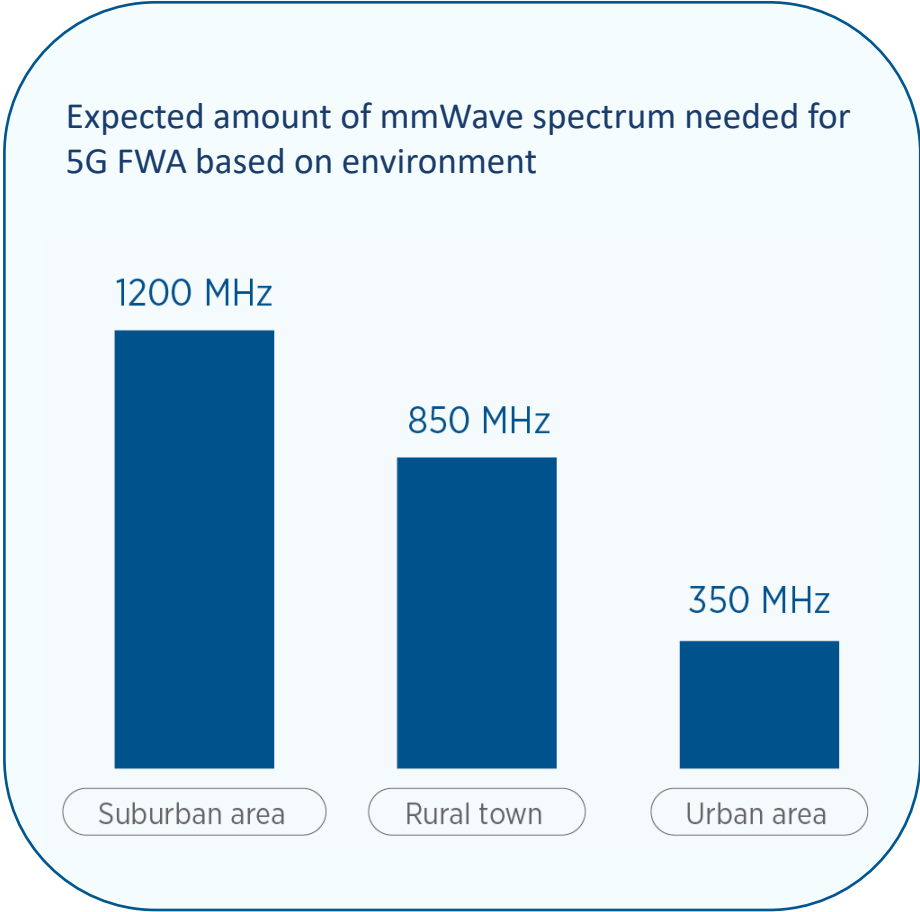
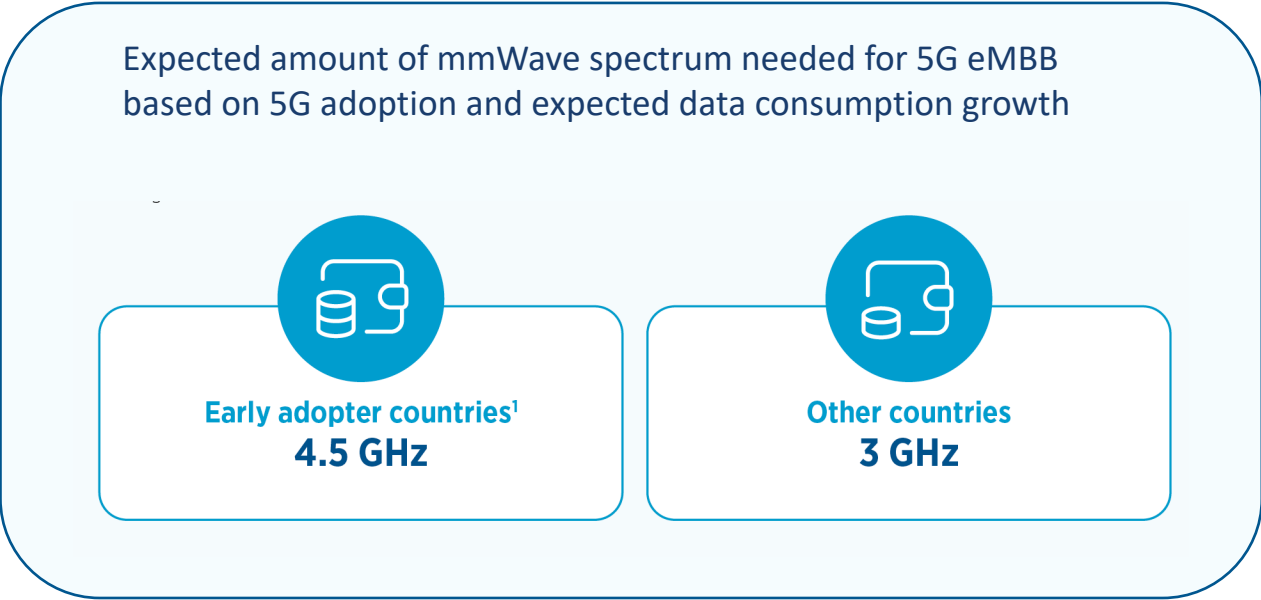


5 GHz of mmWave

spectrum is required per market for eMBB, FWA and enterprise



Elements Impacting mmWave Needs



5G can deliver economic growth, social development and industrial agility... but will require timely access to spectrum in low-, mid- and high-bands.



Panel

Luiz Felipe Zoghbi, Senior Spectrum Policy Manager, GSMA



Panellists



Dr. Mercedes Aramendía

President

URSEC, Uruguay



Eric Fournier

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