



Ministerial Programme



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Programme**

Spectrum Strategy for 4G, 5G and Beyond

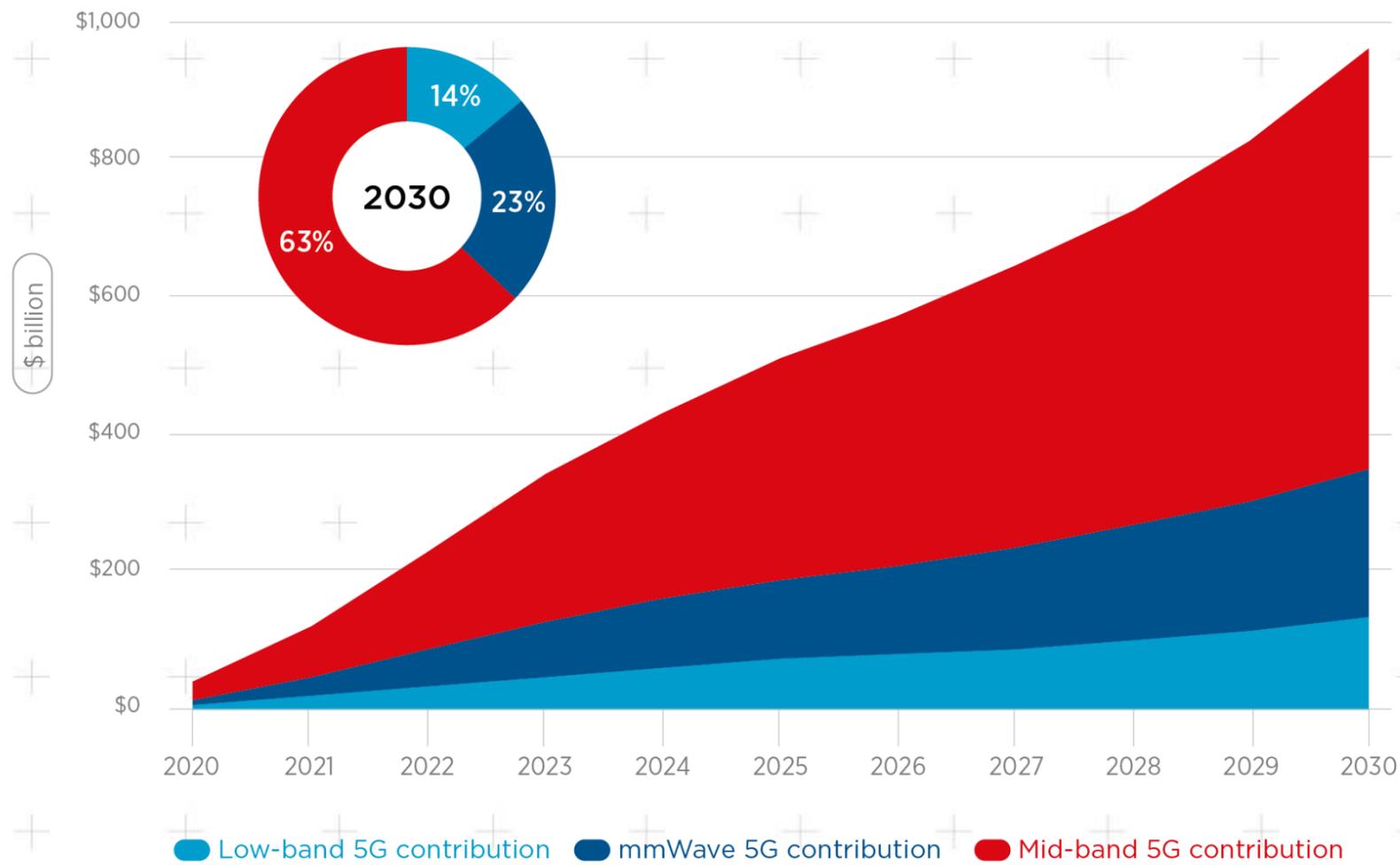
Introduction

Luciana Camargos

Head of Spectrum (A), GSMA

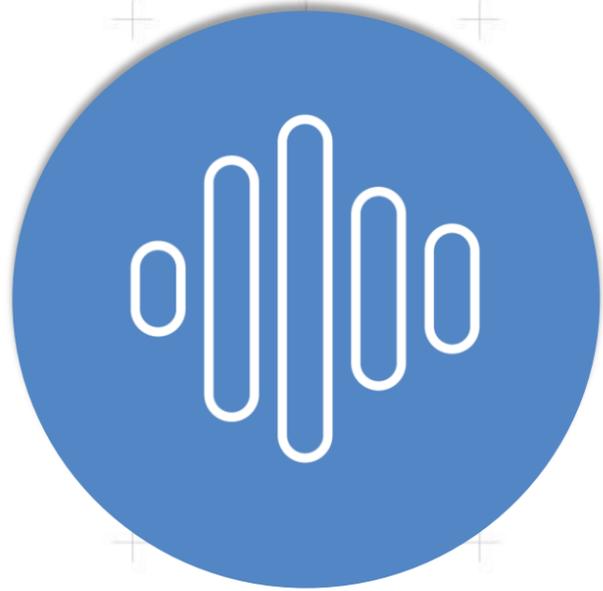
Economic Power of 5G

Annual Impact of 5G by Range 2020-2030



5G WILL IMPACT GLOBAL ECONOMY IN 2030 BY **\$961BN**

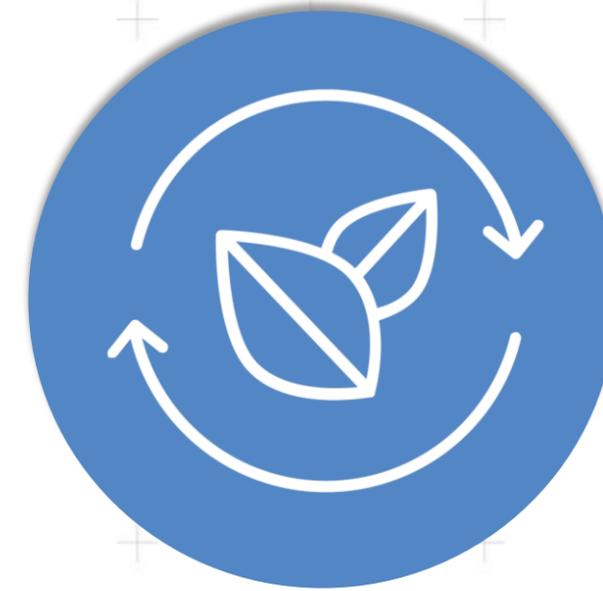
Digital Inclusion in a 5G Era



Spectrum capacity
below 1 GHz can
lower digital divide



Affordable 5G will
support achievement
of social goals and
enhance digital
inclusion



Sub-1 GHz spectrum
will support
improved capacity in
rural areas

Affordable Rural Connectivity



Additional 600 MHz
Bandwidth

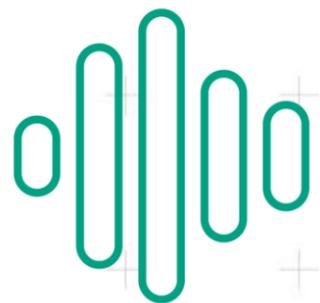
Reduction in Number
of Base Stations

2 x 10 MHz

21%

2 x 20 MHz

33%

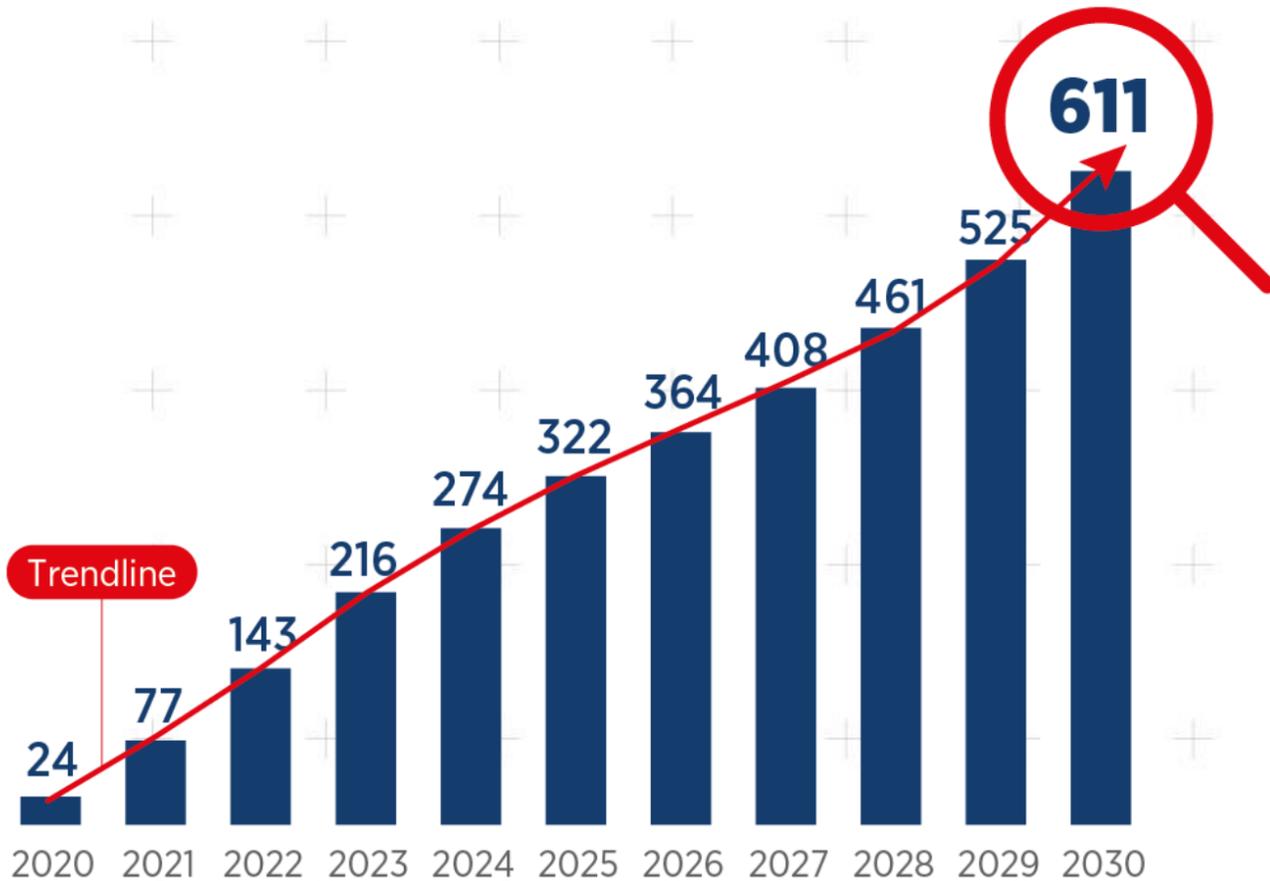


Low-Band Capacity =
Affordable Rural
Connectivity

Impact of Mid-Band Spectrum

Mid-Band Spectrum will deliver \$610bn of 5G's GDP impact in 2030 – 65% of total

Global GDP impact of mid-band
\$ Billions



Constrained Scenario:
40% loss to global GDP impact if mid-band is reduced

Optimal Scenario

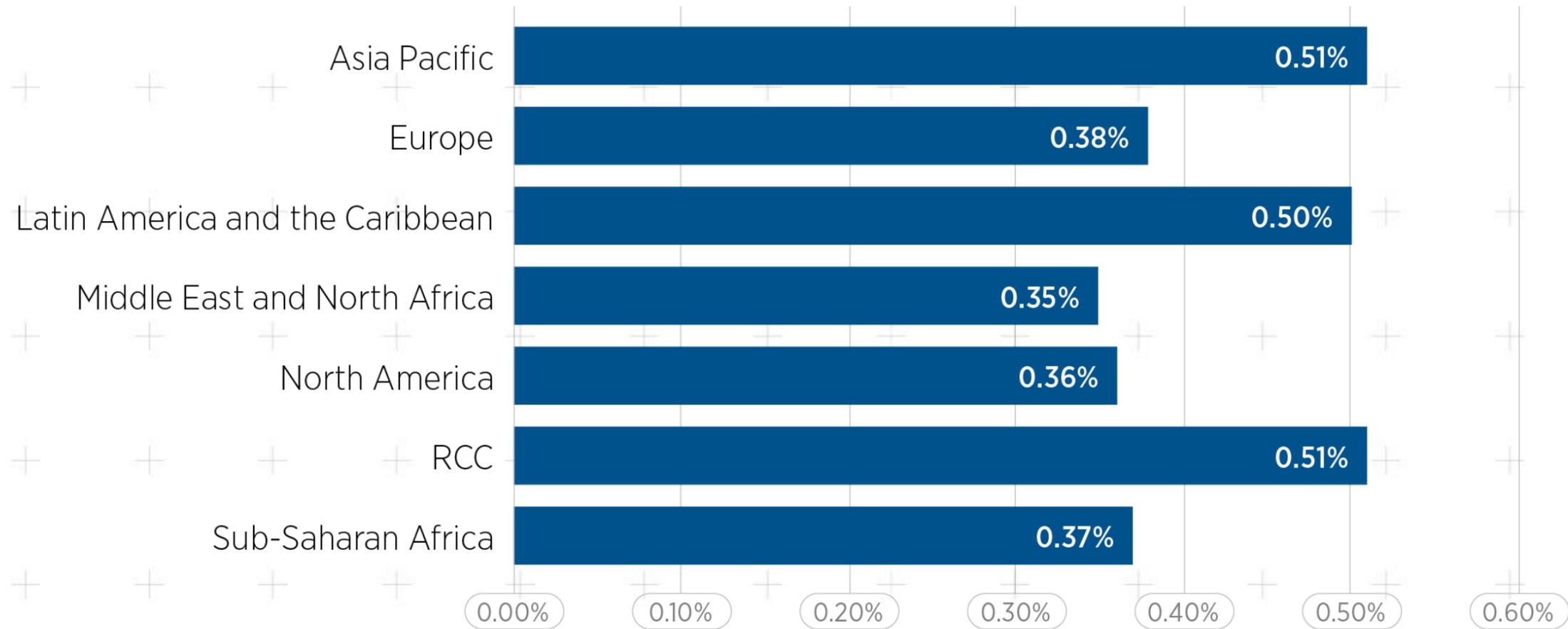
\$961bn
0.68% of GDP

Constrained Scenario

\$594bn
0.42% of GDP

5G to Enable All Markets

Regional breakdown of GDP contribution (%) of mid-band 5G in 2030



Mid-band Spectrum will deliver GDP impact in all economies



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