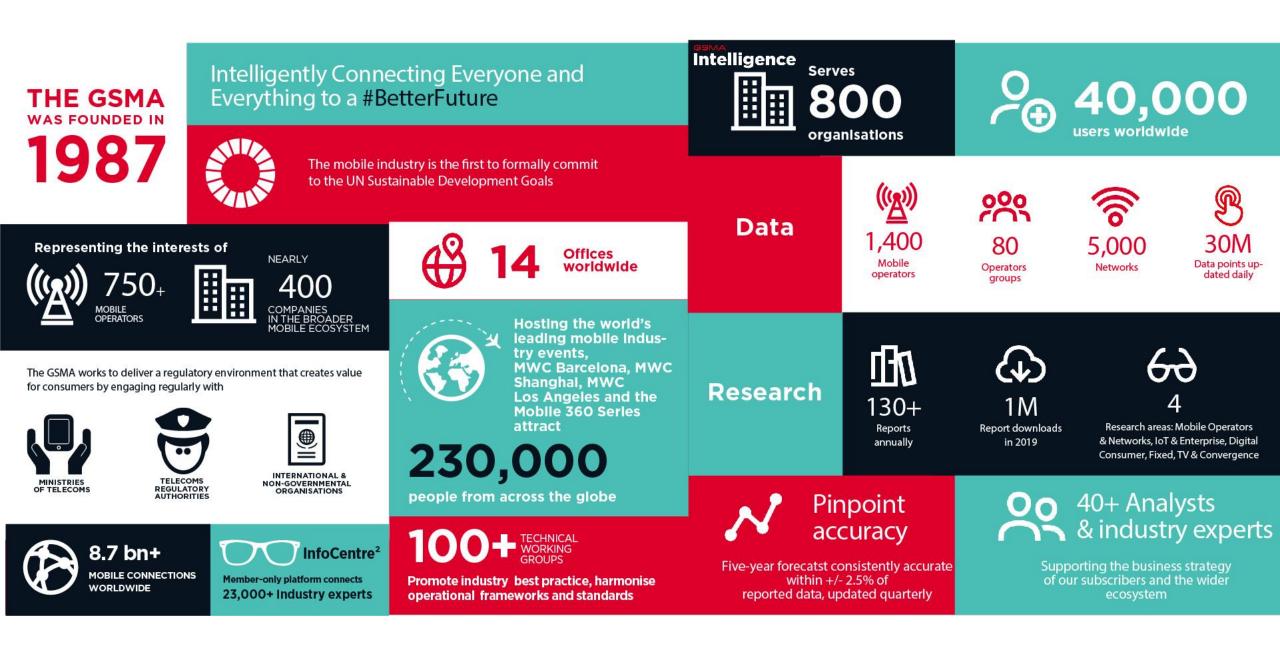
Mobile Data Affordability:

Trends and Key Considerations

Workshop on Cost models for data services and International Internet Connectivity 4 October 2023

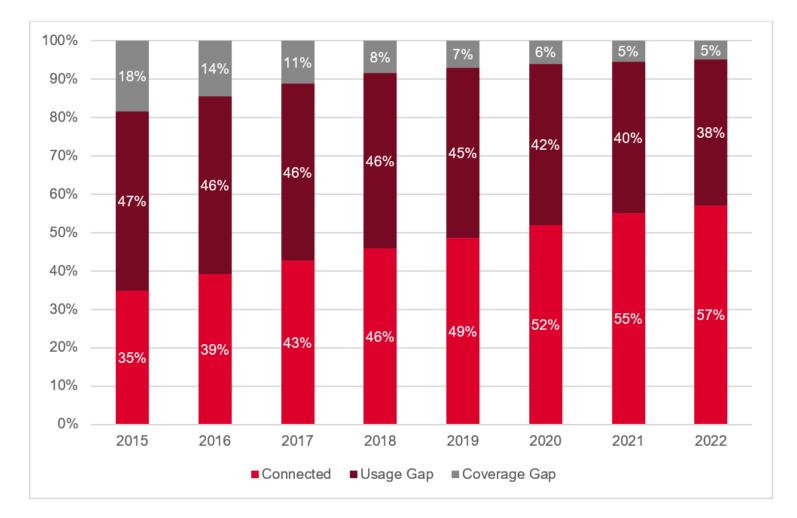


© GSMA 2023





State of Mobile Internet Connectivity 2023



- Growth rate at which people are adopting mobile internet slowed in 2022
- Figures vary by region Sub-Saharan Africa has the largest coverage and usage gaps (15% and 59% respectively)
- In LDCs, 25% of the population is now using mobile internet compared to 57% in LMICs excluding LDCs
- Affordability and literacy/digital skills remain the two greatest barriers to mobile internet adoption and use

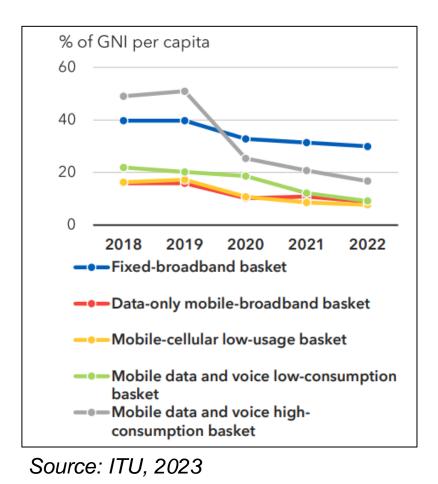
Evolution of global mobile internet connectivity 2015-2022 (Source: GSMA Intelligence)



GSMA

Trends in Mobile Data Affordability

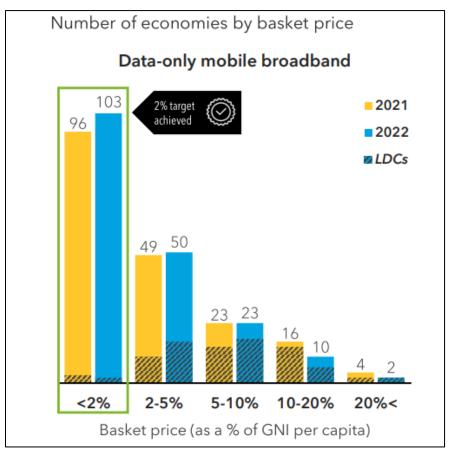
- Average mobile data prices reached all time low in 2022: 1.5% of GNI per capita (2 GB monthly allowance)
- Annual average price decline ~7% between 2018 and 2022
- In the 2018-2022 period, the affordability gap between the poorest and richest economies reduced
- In countries where data costs over 20% of GNI in 2021, GNI per capita prices dropped by an average 36%



Challenges Remain in LDCs...

- Only 2 out of 46 LDCs met the 2% target in 2022
- In the majority of LDCs, mobile-broadband Internet costs more than 5%
- Despite a 10% drop in mobile data costs in 2022, Africa remains the region with the least affordable ICT service prices
- Most of the variation in affordability across countries depends on income levels

 \rightarrow Action on the demand side is required



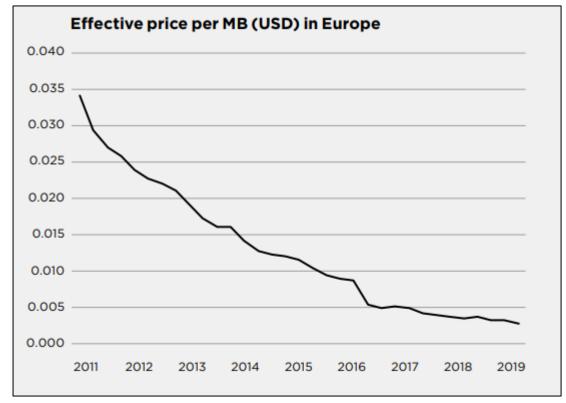
Source: ITU, 2023



Supply-side Accelerators

Investment in broadband networks enables operational efficiencies:

- Newer technologies allow to transmit larger data volumes while not increasing costs for connectivity providers
- Research shows a steady decrease in data price per MB parallel to network innovation

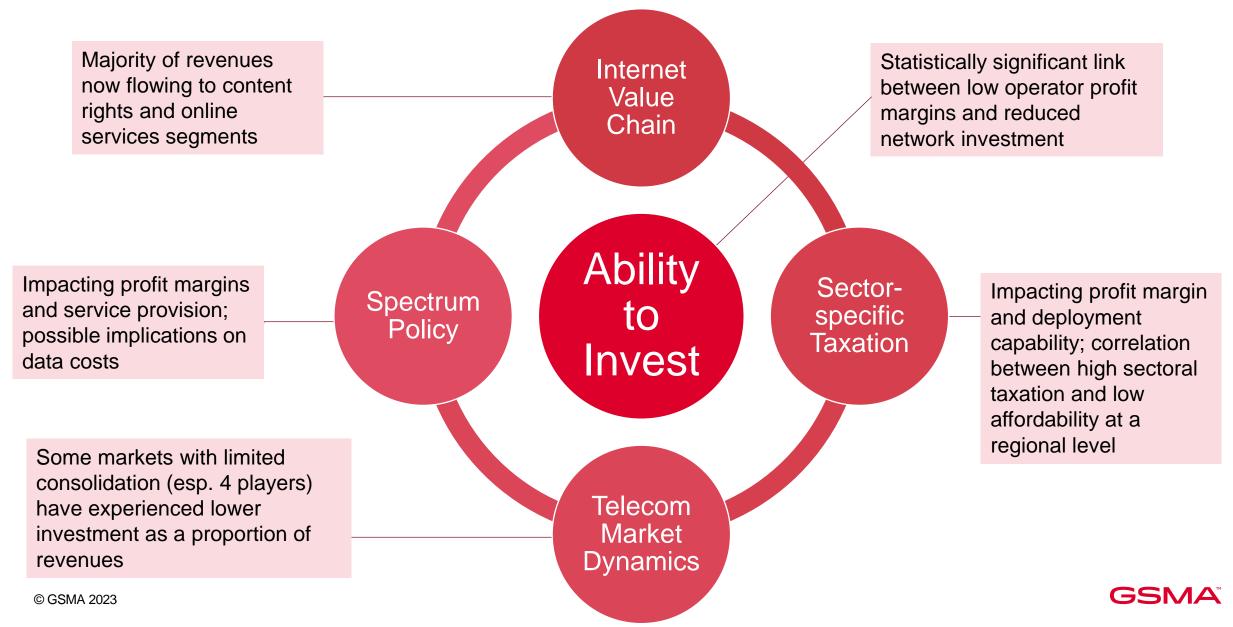


Source: GSMA, ITU, 2022



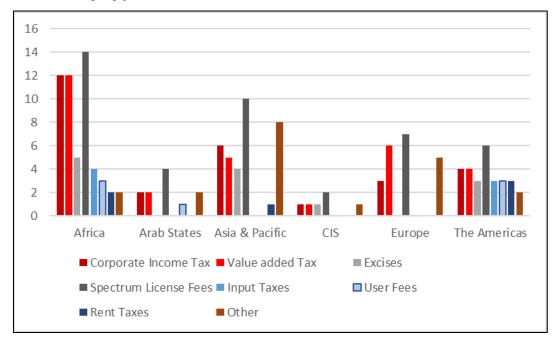


Barriers to Network Investment by Mobile Operators



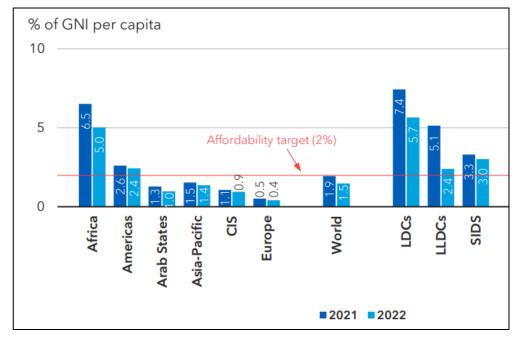
Impacts of Sector-specific Taxation

Number of countries that apply taxes specific to the ICT sector, by type of tax



Source, ITU, data for 2022

Data-only mobile-broadband basket prices

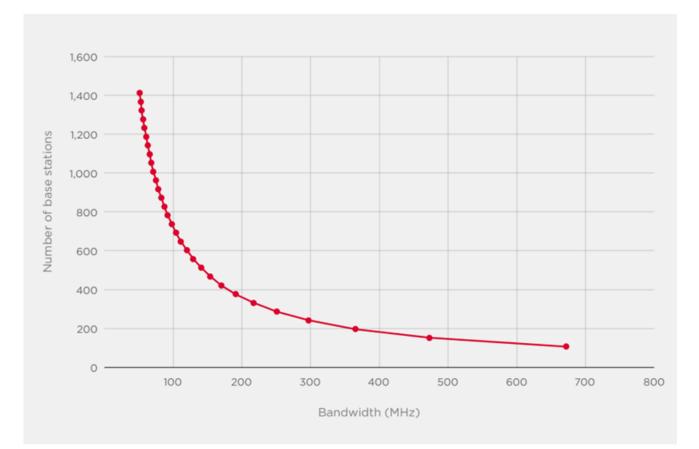


Source, ITU, 2023



Impacts of Spectrum Management

- Suboptimal assignment drives slow deployment and poorer network quality
- Greater spectrum availability:
- \rightarrow Can reduce the number of required base stations
- → Helps making the case for greater network investment



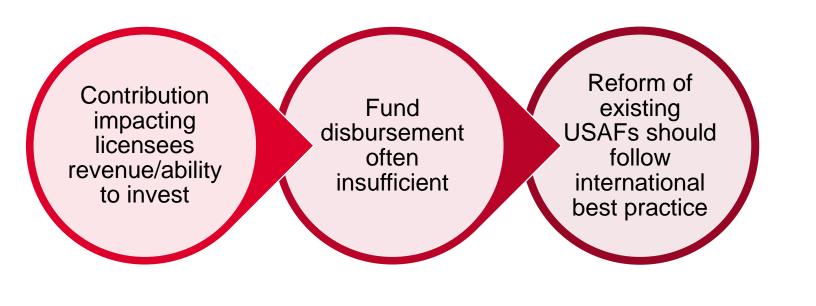
Amount of assigned spectrum versus number of base stations required

Source: GSMA, 2023





Reforming Universal Service Funds



Working Group on 21st Century Financing Models for Sustainable Broadband Development

21st Century Financing Models for Bridging Broadband Connectivity Gaps

October 2021



References

- 1. ITU, 2023, *The affordability of ICT services 2022*
- 2. GSMA, 2023, Connectivity Gaps in Latin America
- 3. Bahia, K., Castells, P., 2022, <u>The dynamic effects of competition on investment: the case of the European mobile</u> <u>communications industry</u>
- 4. GSMA, 2022, <u>Competition dynamics in mobile markets. An assessment of the effects on network investment and quality in Europe</u>
- 5. ITU/UNESCO Broadband Commission for Sustainable Development, 2021, <u>21st Century Financing Models for</u> <u>Bridging Broadband Connectivity Gaps</u>
- 6. Katz, R., Jung, J., 2022, *The impact of taxation in the telecommunications industry*
- 7. GSMA, 2023, Spectrum management in Latin America: Impacts on economic and social development
- 8. GSMA, 2022, The Socio-Economic Benefits of Mid-Band 5G Services
- 9. <u>GSMA Taxation Portal</u>





Thank you!

Luca Elmosi Director of International Relations GSMA

lelmosi@gsma.com

