

UN Regional Hub for Big Data in Africa - Webinar series: Mobile Phone Data Task Team

16 November 2023

Mobile phone data for measuring the information society

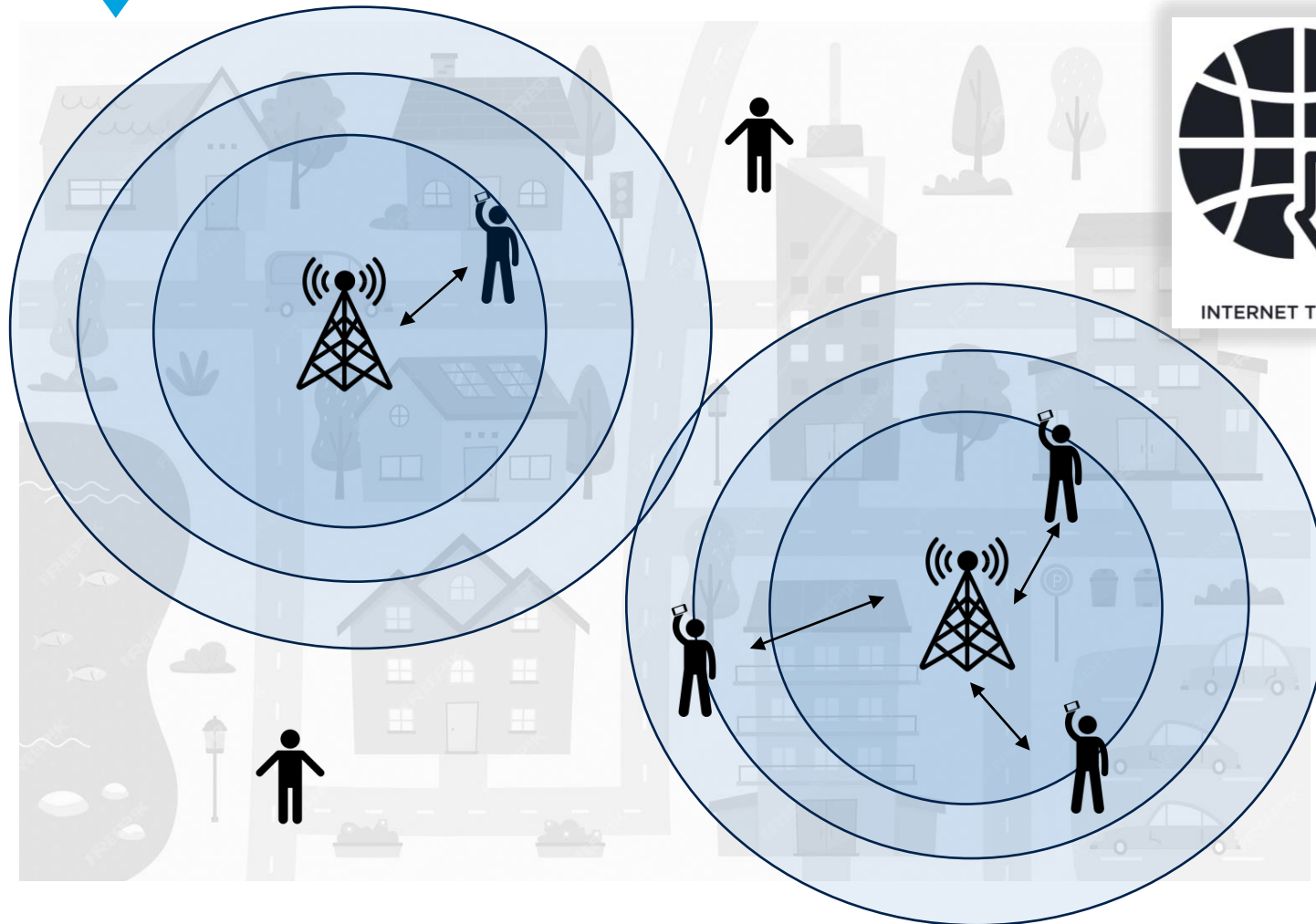
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Data Scientist

International Telecommunication Union (ITU)



Mobile phone data is information society

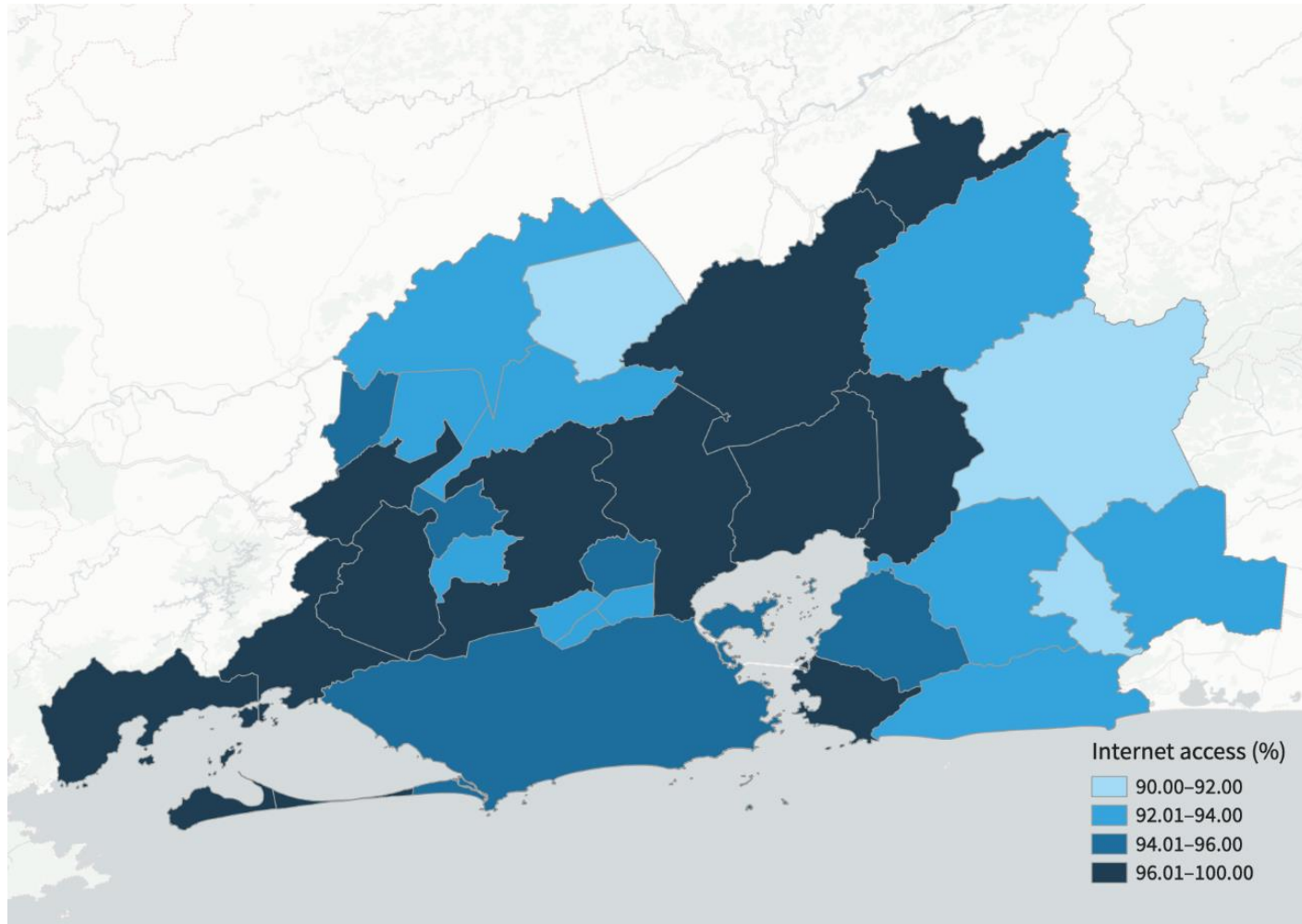


- Full access to mobile phone data could add **enormous value** information society statistics
- Mobile phone data could inform on:
 - Internet and mobile phone use
 - Coverage of mobile networks
 - Call, SMS and data traffic
- Add sub-national and time dimensions
- ITU pilots have mainly focused on two SDG ICT indicators: **Internet use** and **mobile network coverage**

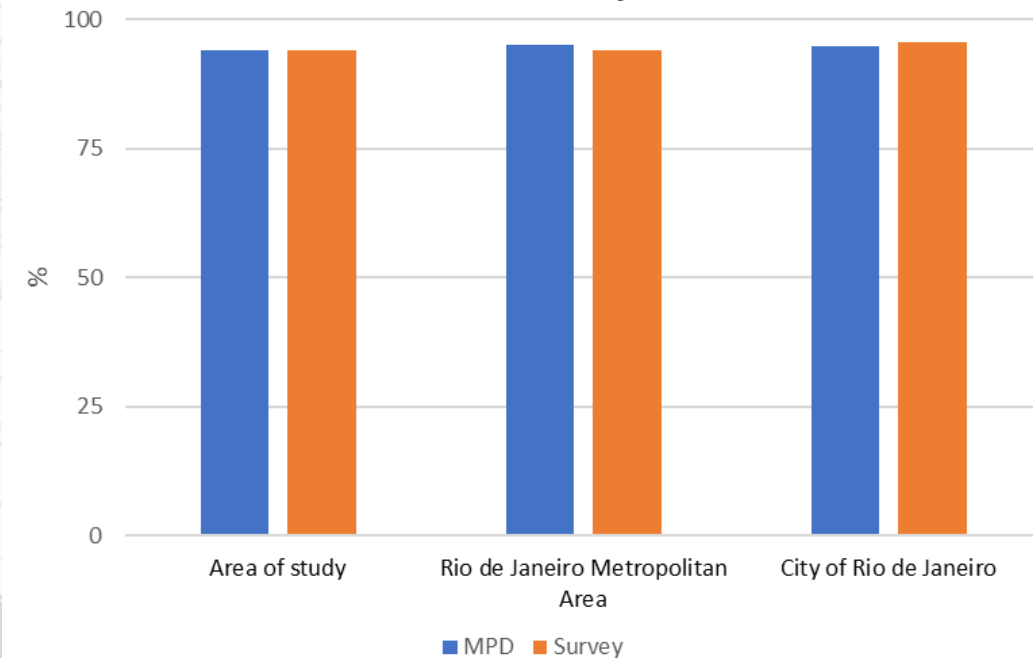
SDG indicator 17.8.1: % of population using the Internet



Percentage of the population using the Internet,
Rio de Janeiro, Brazil, 2021

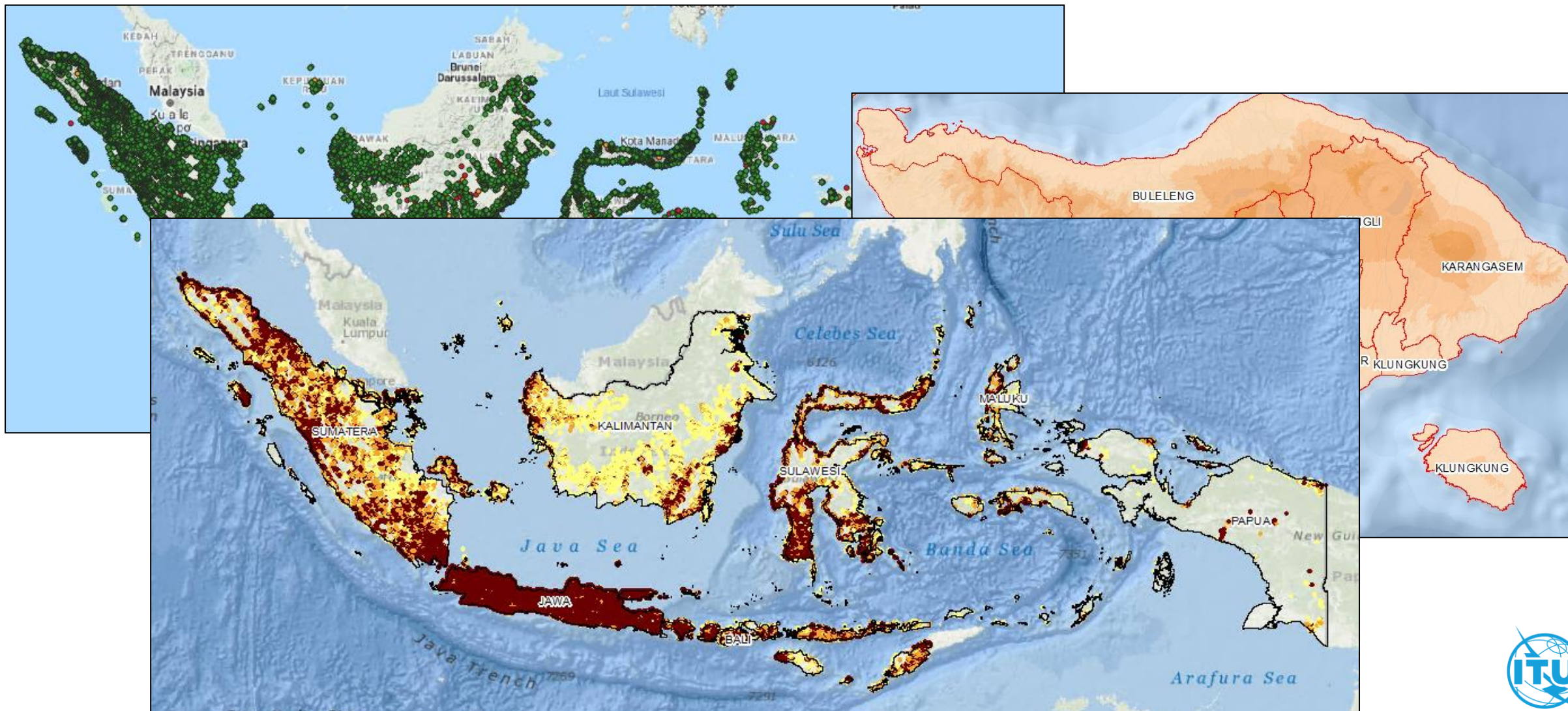


Mobile phone data in line with
household survey results



SDG indicator 9.c.1: % of population covered by a mobile network

#1/2



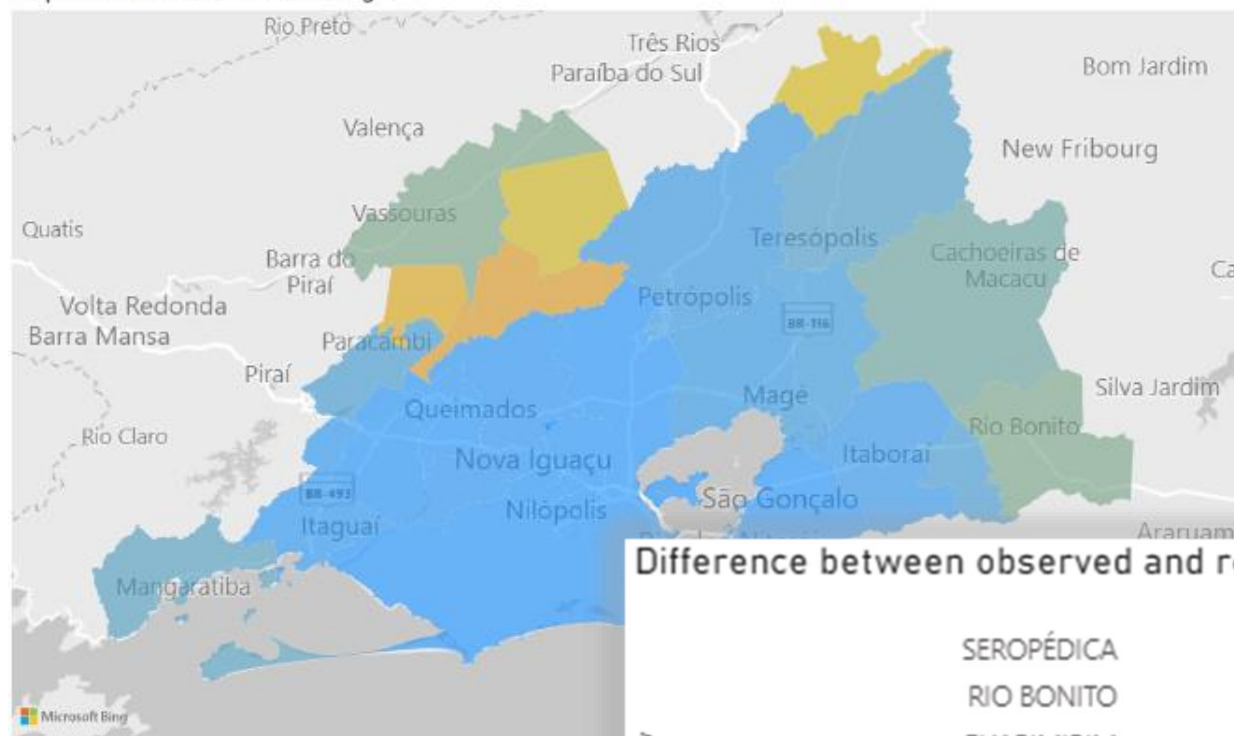
SDG indicator 9.c.1: % of population covered by a mobile network

#2/2

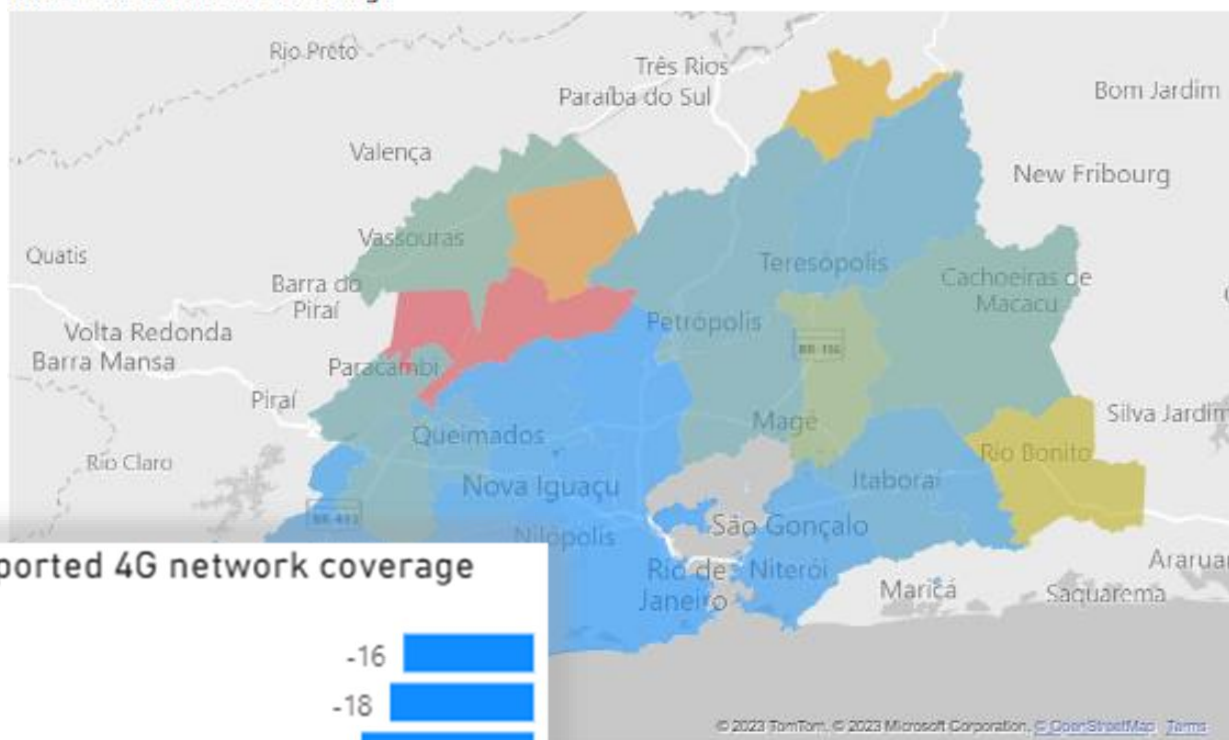


UN BigData

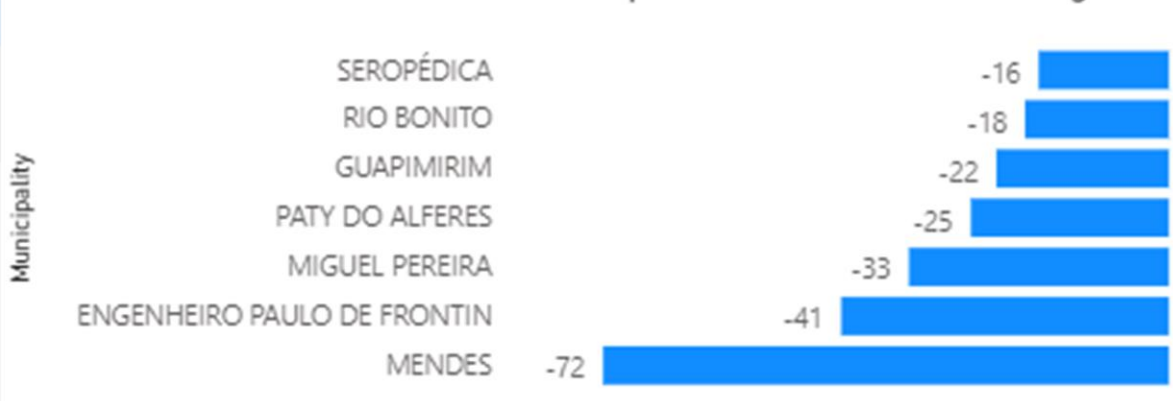
Reported 4G network coverage



Observed 4G network coverage

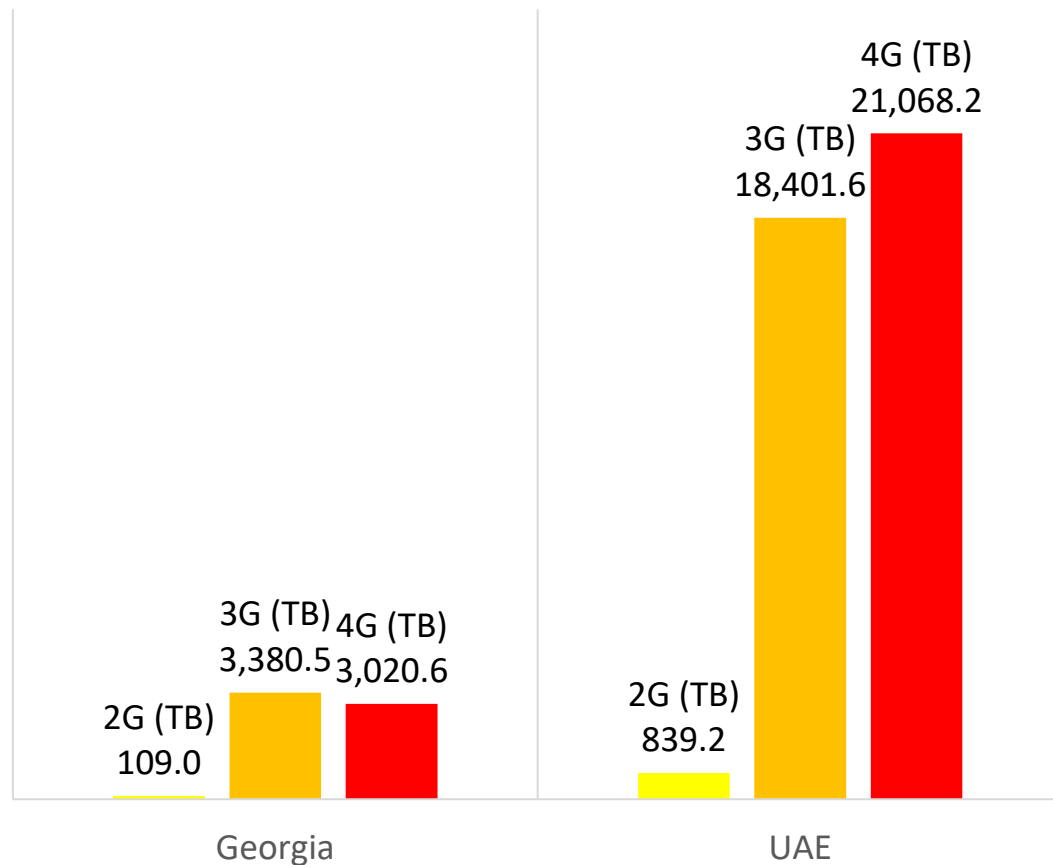


Difference between observed and reported 4G network coverage

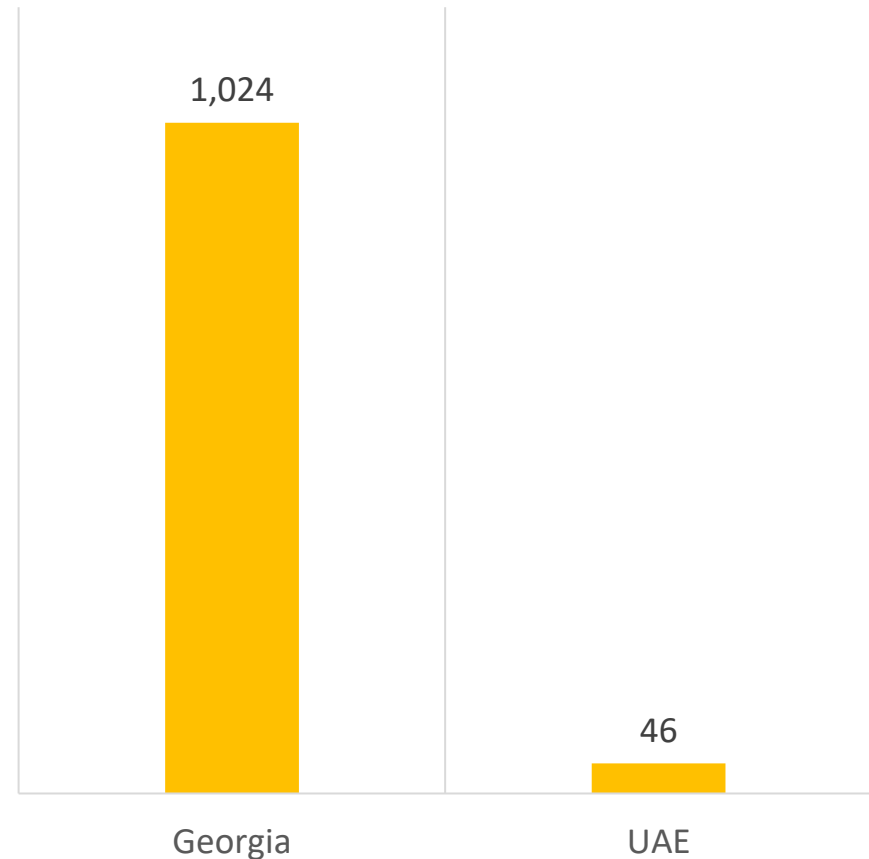


More disaggregated ICT data on traffic

Domestic mobile-cellular traffic, by technology (in TB)

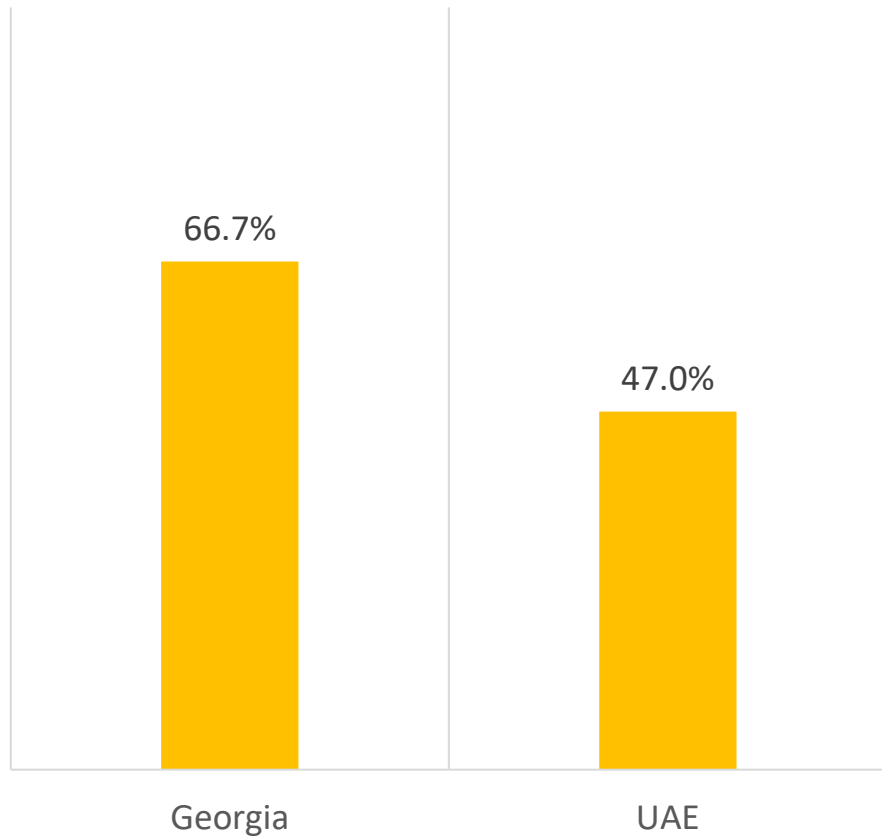


Outbound roaming mobile-cellular traffic (in TB)

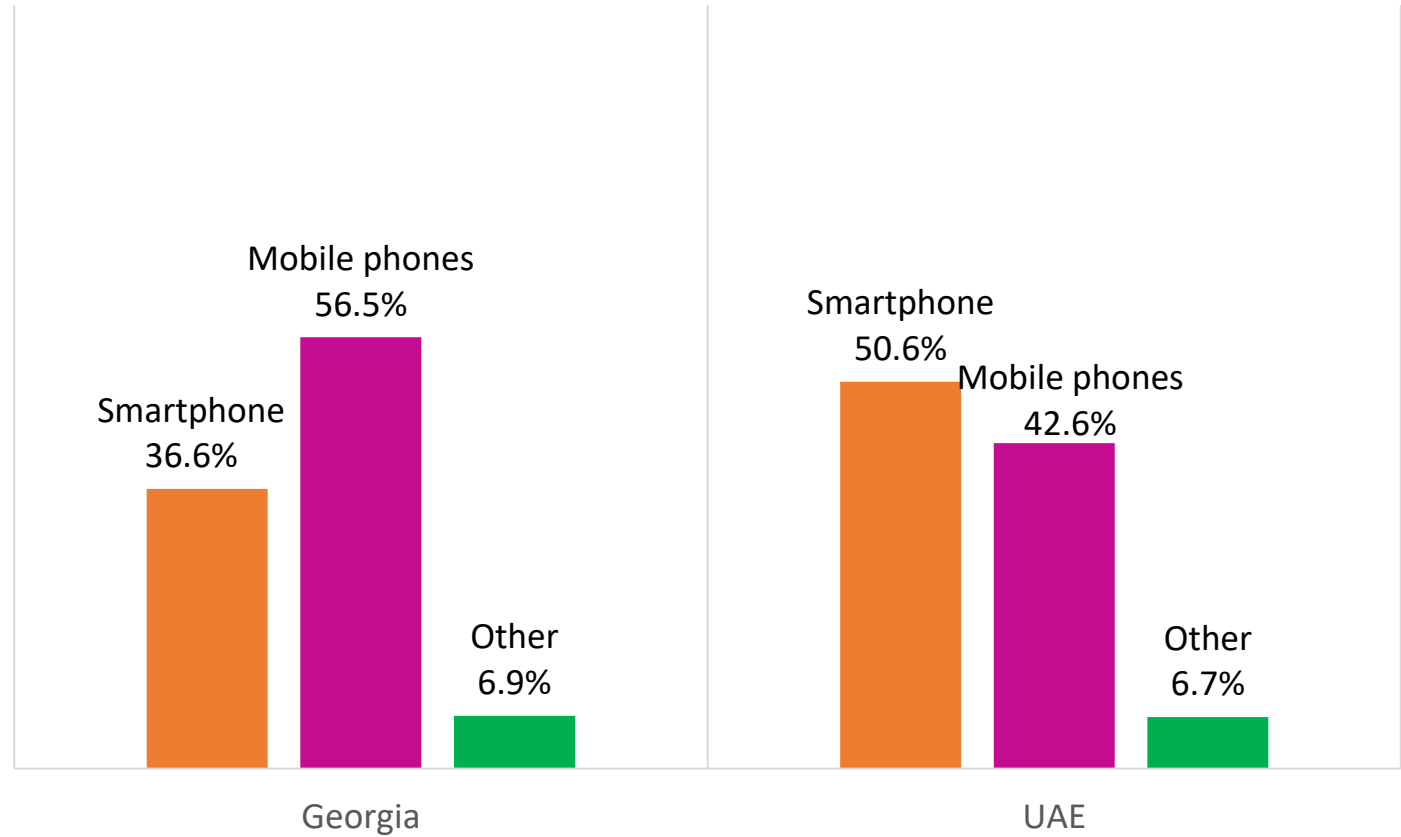


New ICT indicators made possible by mobile phone data

Daily activity of all subscriptions (2016)



Type of devices used (2016)



ITU mobile phone data pilots

- Brazil
- Colombia
- Georgia
- Indonesia
- Kenya
- Philippines
- Sweden
- United Arab Emirates



Read reports at: <https://www.itu.int/en/ITU-D/Statistics/Pages/bigdata/default.aspx>

Thank you!

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