20th Caribbean Internet Governance Forum
Georgetown, Guyana, 21-23 August 2024

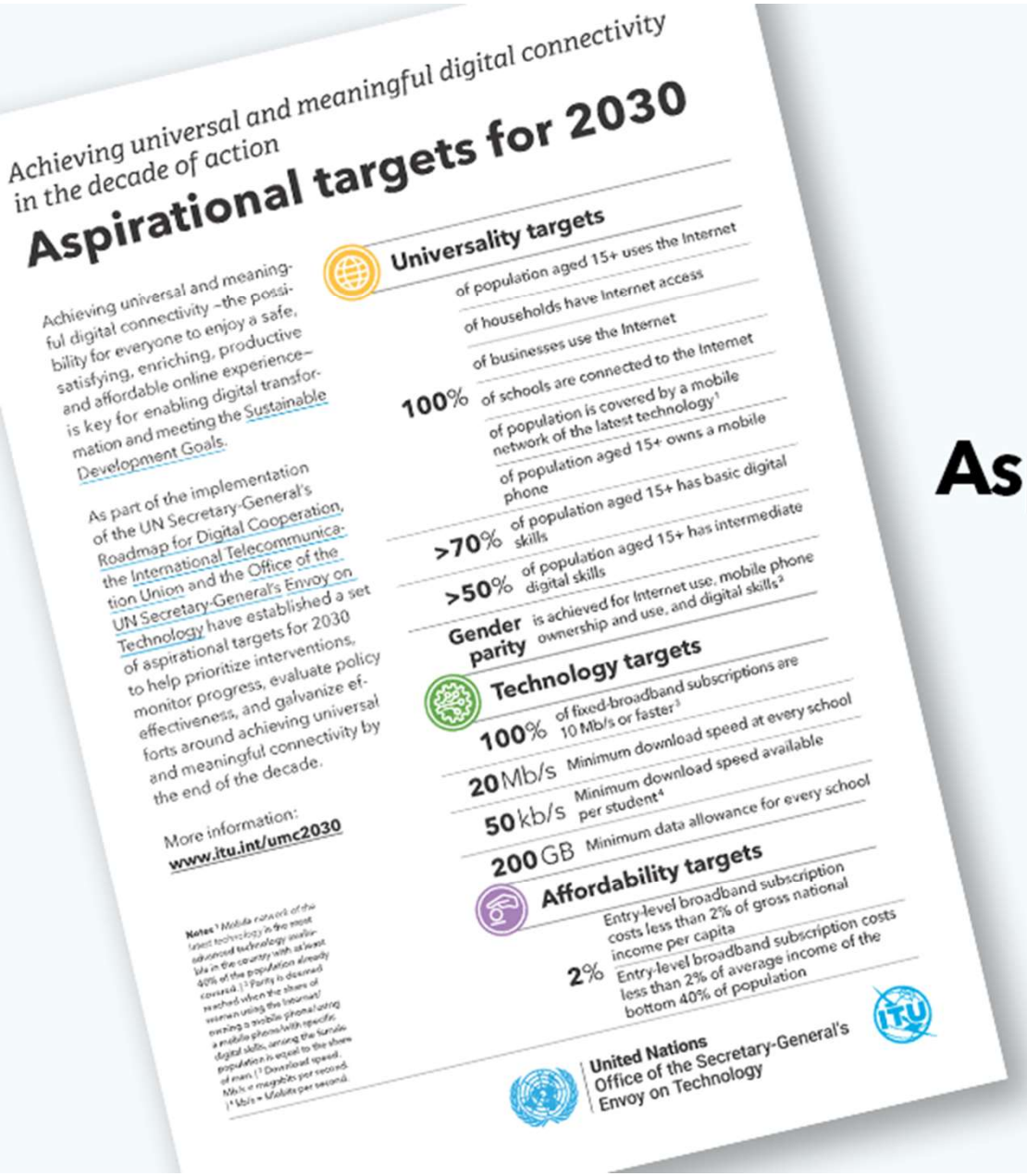
Measuring Information Society
Bridging data gaps for universal and meaningful connectivity

#UMC

Viviana Umpierrez
Statistician
ICT Data and Analytics Division
International Telecommunication Union (ITU)

Universal and Meaningful Connectivity #UMC

> The possibility for everyone to enjoy a safe, satisfying, enriching, productive, and affordable online experience.



Aspirational targets for 2030

Achieving universal and meaningful digital connectivity in the decade of action

www.itu.int/umc2030

United Nations
Office of the Secretary-General's Envoy on Technology

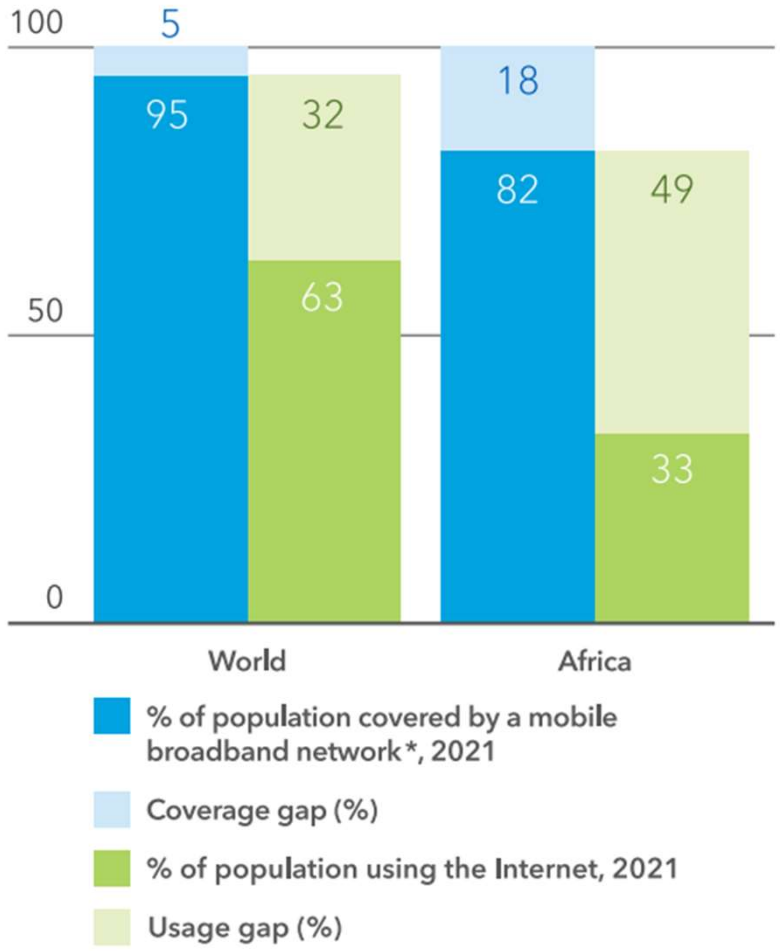
Coverage gap is much lower than usage gap

Coverage gap = people without access to a fixed or mobile broadband network

Usage gap = People that do not use the Internet while having coverage

Why don't people use the Internet?

When they use it, is it meaningful?



Note: *3G or more recent.
Source: ITU.

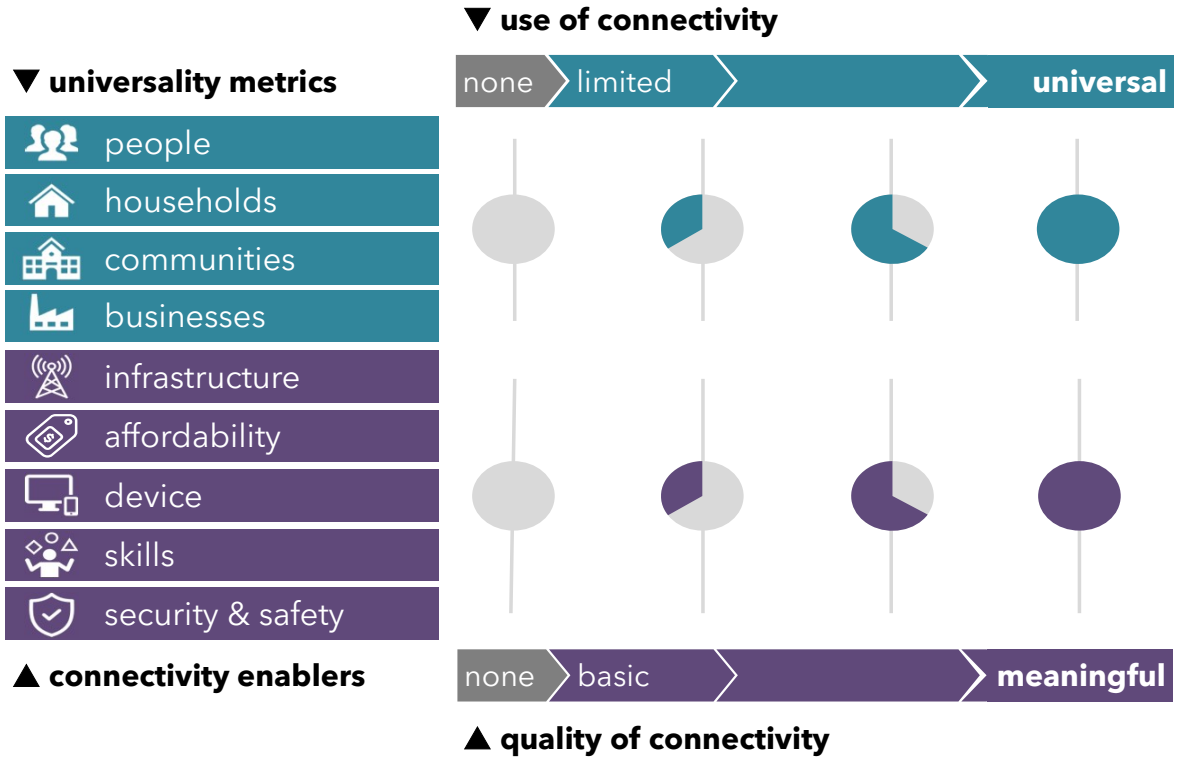
The two dimensions of connectivity

Framework for universal and meaningful connectivity

To what extent is connectivity universal and meaningful?

Out of scope

What are the **catalysts** and **levers** to improve use and quality of connectivity?



Out of scope

What are the **applications** and the **impacts** of connectivity?

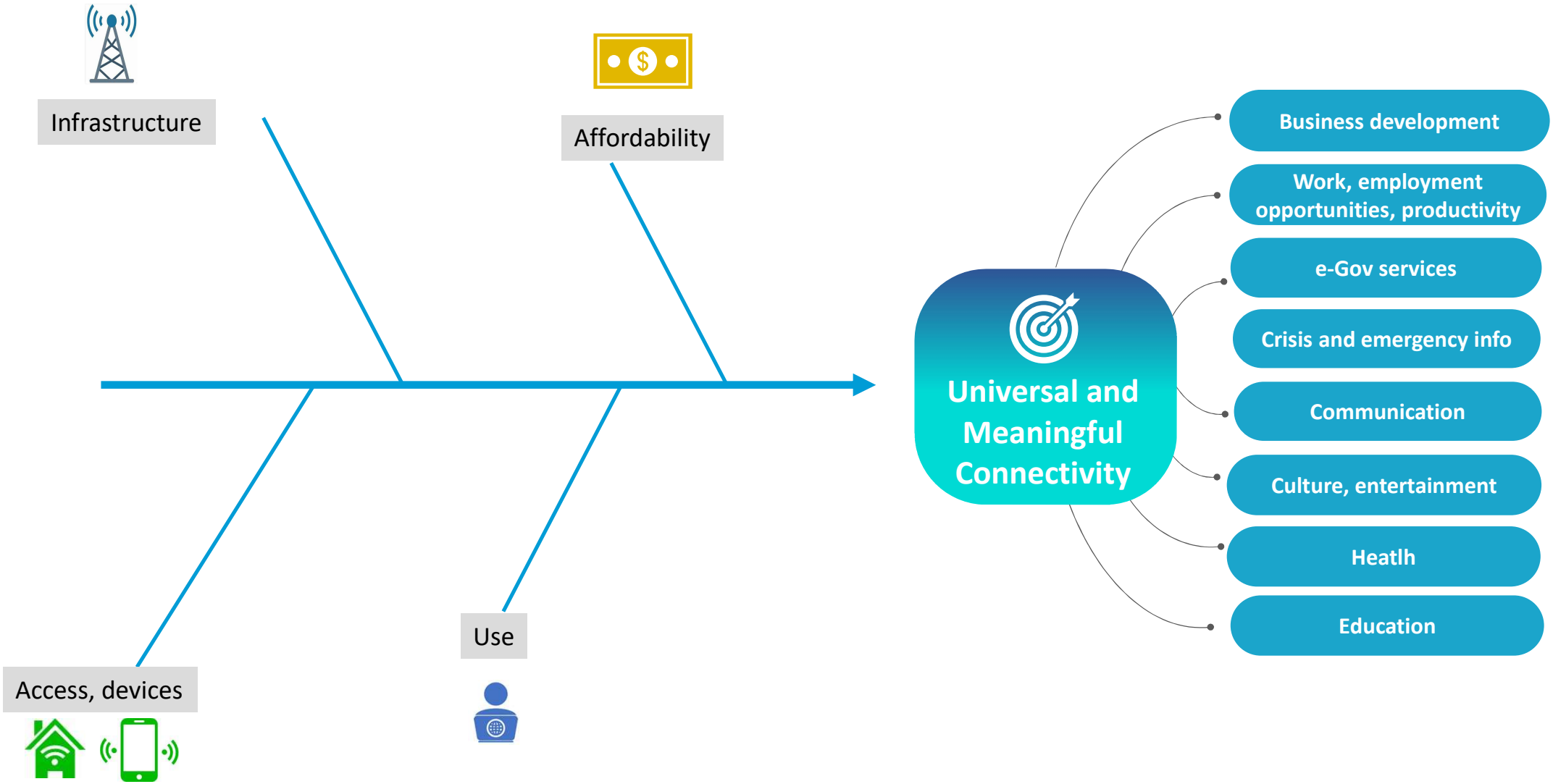
From the #UMC principle to its measurement

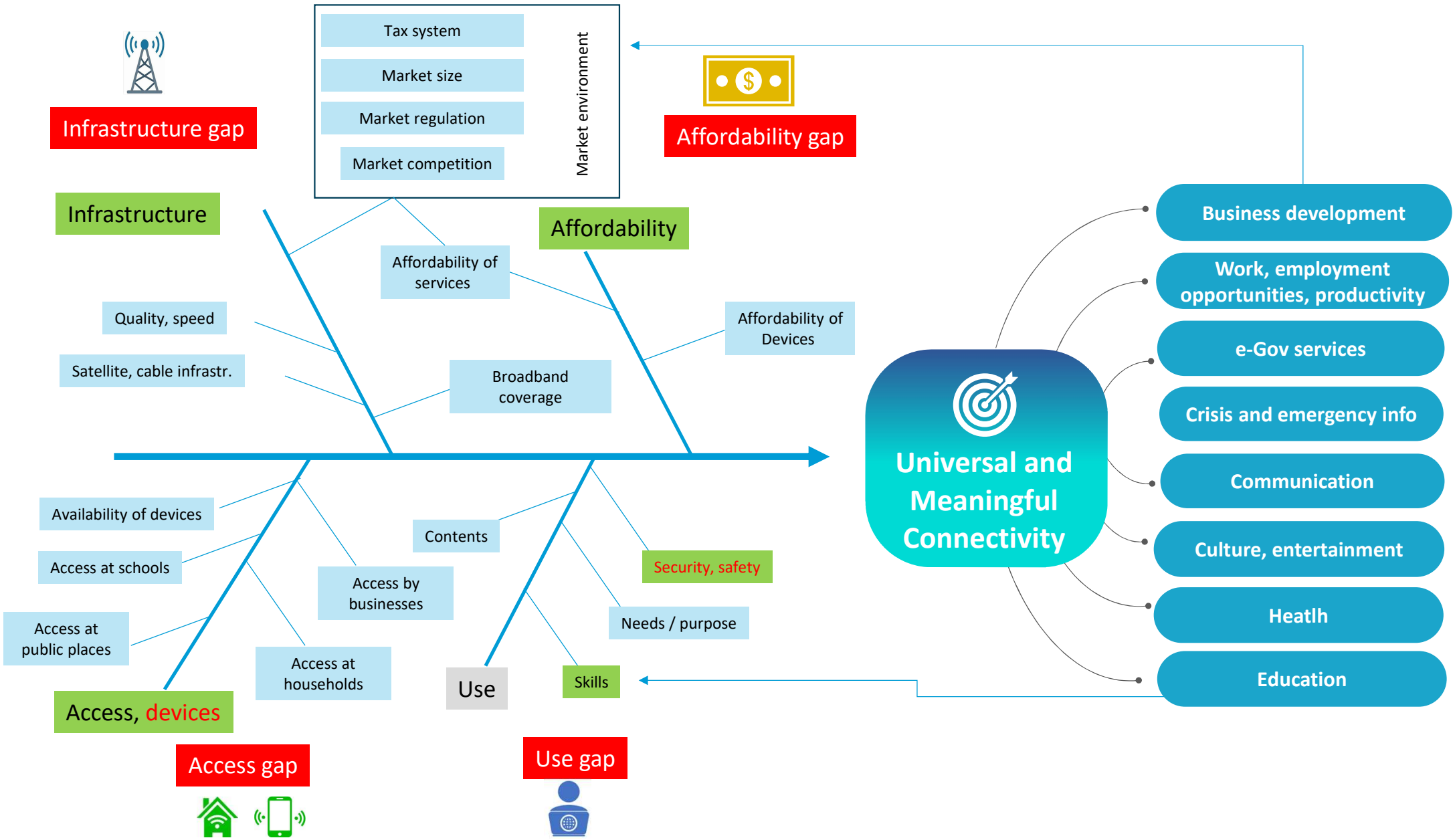
- Define the **concept** of UMC in a plain and standardized "statisticians' language":
  - Terms
  - Dimensions
  - Indicators

- Generate **statistical information and indicators** to estimate the progress towards UMC
  - Compiling what exists
  - Piloting new indicators
  - Setting standards with established practices

- Strengthen **collaboration and coordination** between producers and users of the statistical information

- Create **capacity** in **producing** and **using** statistical information about UMC


Infrastructure
Affordability
Access, devices
Use
Universal and Meaningful Connectivity
Business development
Work, employment opportunities, productivity
e-Gov services
Crisis and emergency info
Communication
Culture, entertainment
Heatlh
Education


Tax system
Market size
Market regulation
Market competition
Market environment
Infrastructure gap
Affordability gap
Infrastructure
Affordability
Affordability of services
Quality, speed
Satellite, cable infrastr.
Broadband coverage
Affordability of Devices
Universal and Meaningful Connectivity
Business development
Work, employment opportunities, productivity
e-Gov services
Crisis and emergency info
Communication
Culture, entertainment
Heatlh
Education
Availability of devices
Access at schools
Access at public places
Access by businesses
Access at households
Contents
Security, safety
Needs / purpose
Skills
Use
Access, devices
Access gap
Use gap

#UMC as a guiding policy principle

- A digital policy guided by the UMC principle may address various dimensions ("connectivity enablers"):
  - Coverage, speed, reliability in **infrastructure** underwrites the possibility of connecting and the quality of online experience
  - More **affordable services** will enable many people to come online, while those already online will be able to extend their usage
  - Improving **digital literacy (skills)** is essential. Many people do not use the Internet because they do not know what it is or how to use it, while many users fear or are unable to navigate cyberattacks, scams, fake news, or harmful content
  - Internet-enabled **devices** need to be affordable, taking into account that device sharing is limiting and that basic devices will make for a less enriching online experience
  - **Safety and security** will create trust when people go online

- And consider in its scope different users:

A new partnership to promote and measure #UMC

On 27 April 2023, **ITU** and the **European Commission** signed a three-year, €3-million global project to promote and measure **#UMC**.

The project officially started on 1 May.

Global Gateway

Funded by the European Union

Myriam Ferran, Deputy Director-General for International Partnerships, European Commission, and Dr Cosmas Luckyson Zavazava, Telecommunication Development Director at ITU, announced the project.

ITU-EC partnership to promote and measure #UMC

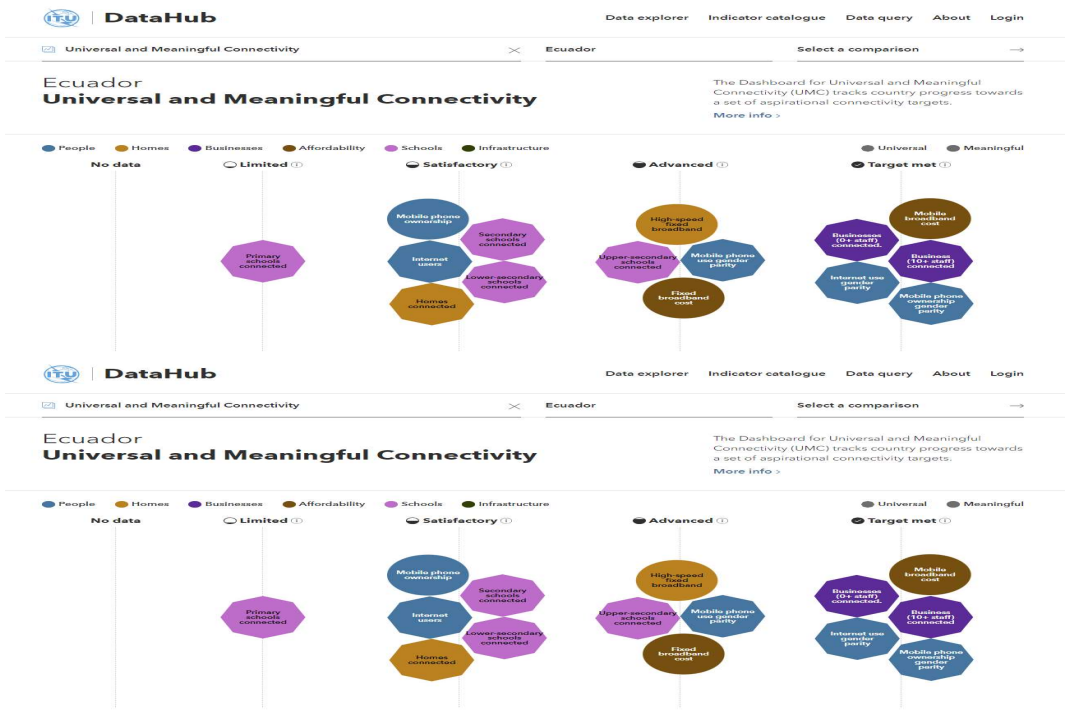
Project activities

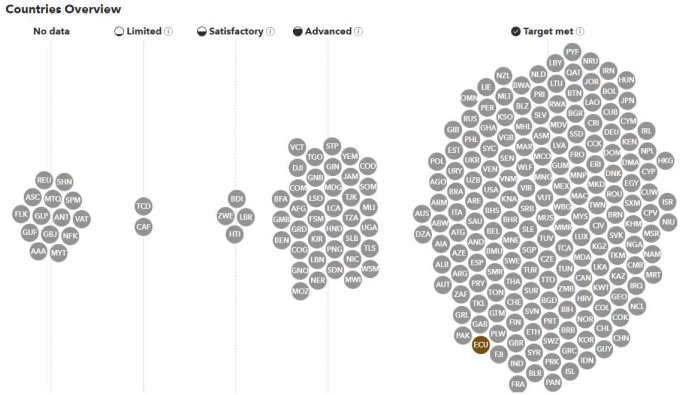
- 8 regional **workshops for users and producers** of UMC statistics
  - Streamlining UMC in national digital policies
  - Capacity building for statistical measurement of progress towards UMC targets
- UMC **data collection and dissemination**
  - Online course on the collection and use of UMC indicators (in partnership with ITU Academy)
  - Exploratory use of secondary data sources to support UMC measurement
  - UMC website, including a UMC Dashboard
- **Advocacy and information** sessions in UN system events, World Telecommunication Indicators Symposium (WTIS), G-20 and other global and regional events
  - Creation of digital communication assets, social media campaigns
- **Evidence-based research** on effective interventions towards achieving UMC
  - Global Connectivity Report
  - Regional and thematic analyses

Funded by the European Union

Global Gateway

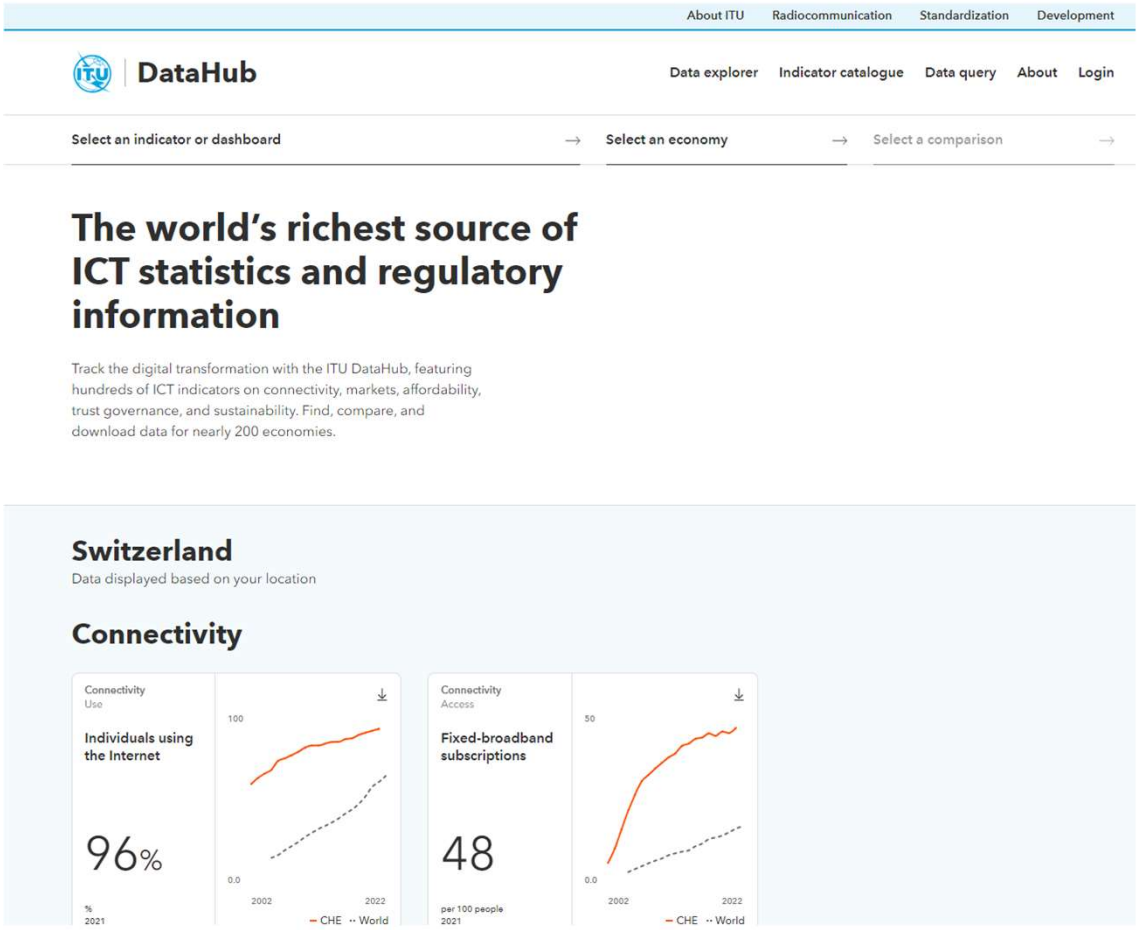
New! Universal and Meaningful Connectivity Dashboard

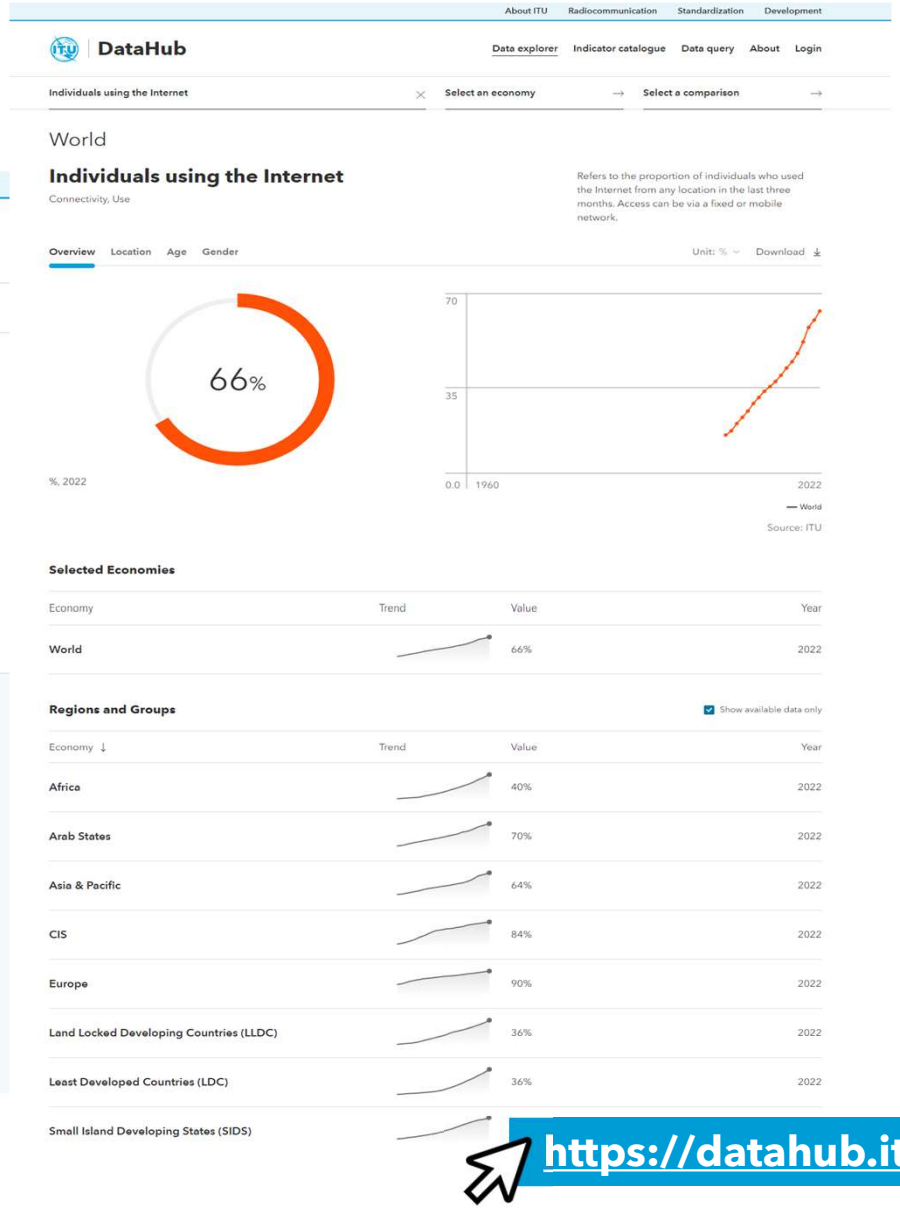




itu.int/umcdashboard
or via ITU DataHub

ITU DataHub



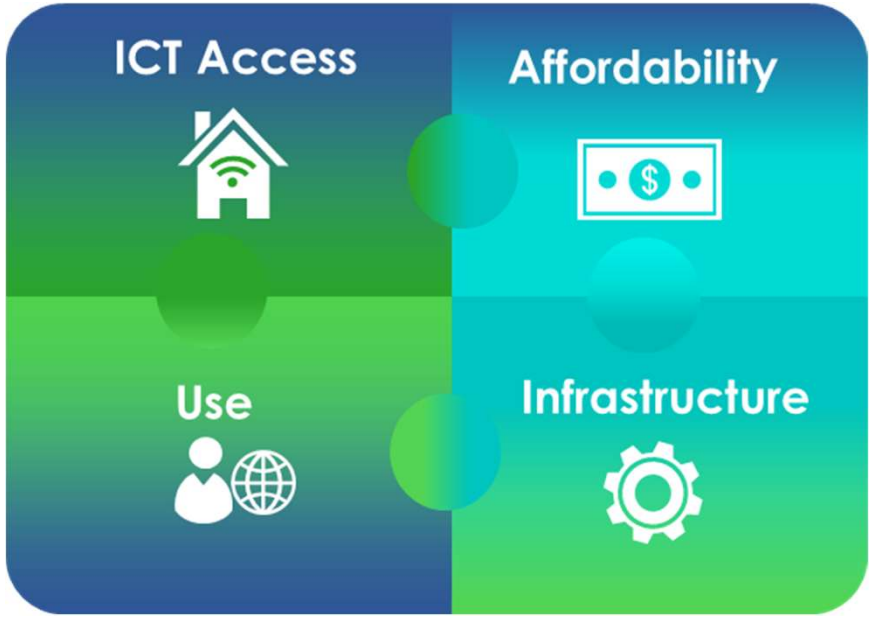


https://datahub.itu.int

Recommendations for ICT Data Collection

How to measure ICT?

Demand-side data



Supply-side data

Core ICT indicators approved by the UN Statistical Comission

ICT Data Collection - Sources

Demand-side data 	**Source** • Household Surveys • Budget/Expenditure Surveys • Labor Surveys • ICT Surveys	**Collected by** • National Statistical Office • Digital Agency	**ITU Questionnaire** • Household Short Questionnaire • Household Long Questionnaire
Supply-side data 	**Source** • Administrative Data on Telecommunications • Big Data from Telecom Operators/ISPs	**Collected by** • Ministry of Telecommunications • Regulatory Authority	**ITU Questionnaire** • World Telecommunications/ICT Indicators Short Questionnaire • World Telecommunications/ICT Long Questionnaire
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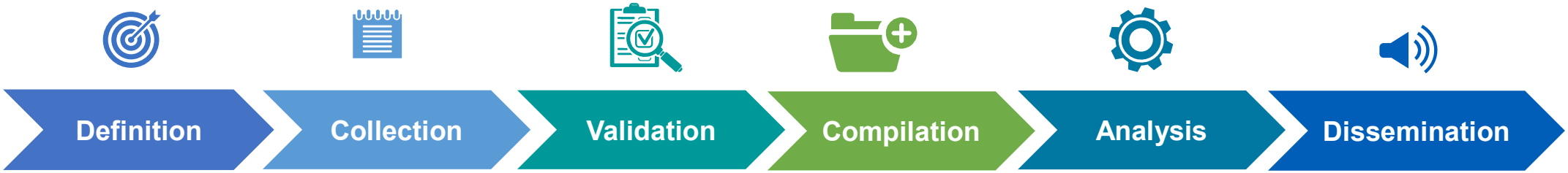
ICT Data Journey



Through the expert groups (EGTI and EGH), the set of indicators to be collected is defined and periodically updated.

Data request through questionnaires from National Statistics Offices and Government Agencies in charge of telecommunications/ICT (Ministry, Regulator Authority).

Through statistical techniques, expertise and knowledge of the sector development, we analyse the consistency of the data received. If necessary, we contact our statistical focal points to verify.

Harmonize and aggregate at country level.

Applied analysis and monitoring of the evolution of the telecommunication sector.

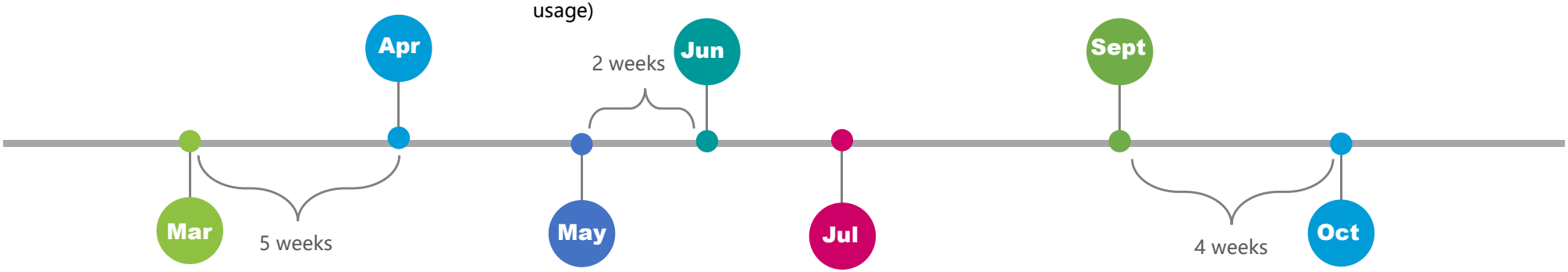
Published through digital channels and reports: ITU DataHub, Digital Development Dashboard, Facts and Figures, Global Connectivity Report.

ITU | DataHub

Data collection - Planning

IPB Questionnaire

ICT Price Basket Questionnaire
5 main sets of ICT prices (mobile cellular, mobile broadband, fixed broadband, mobile data and voice low usage, mobile data and voice high usage)



WTI Short Questionnaire

Short World Telecommunication/ICT Indicators (WTI) Questionnaire

Household Short Questionnaire

Household Short Questionnaire

ITU DataHub

Update with the Short Questionnaire data

WTI Long Questionnaire

Long World Telecommunication/ICT Indicators (WTI) Questionnaire

Household Long Questionnaire

Household Long Questionnaire

Household Short Questionnaire - Indicators

Household ICT Access	• Number of households with a computer (HH4) • Number of households with Internet access (HH6)
Internet use	• Number of individuals using the Internet, disaggregated by gender (HH7)
Mobile phone ownership	• Number of individuals who own a mobile phone, disaggregated by gender (HH18)
Digital skills	• Number of individuals using the Internet by activity (HH9) (some HH9 activities are now included as digital skills) • Number of individuals with digital skills (HH15)

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WTI Short Questionnaire - Indicators

Fixed-Telephone	• Fixed-telephone subscriptions (i112)
Fixed-Broadband	• Fixed-broadband subscriptions (i4213tfbb) • Fixed-broadband subscriptions breakdown by speed: - 256 kbit/s to less than 2 Mbit/s subscriptions (i4213_256to2) - 2 Mbit/s to less tan 10 Mbit/s susbscriptions (i4213_2to10) - equal or above 10 Mbit/s subscriptions (i4213_G10)
Mobile	• Mobile-cellular telephone subscriptions (i271) • Active mobile-broadband susbcriptions (i271mw)
Mobile Coverage	• Percentage of the population covered by: - a mobile-cellular network (i271pop) - at least a 3G mobile network (i271G) - at least an LTE/WiMAX network (i271GA) - at least a 5G mobile network (i271G5_pop)
Internet Traffic	• Fixed-broadband Internet traffic - exabytes (i135tfb) • Mobile-broadband Internet traffic - within the country (i136mwi)
Bandwidth	• International bandwidth usage, in Mbit/s (i4214u) • Lit/equipped international bandwidth capacity, in Mbit/s (i4214l)

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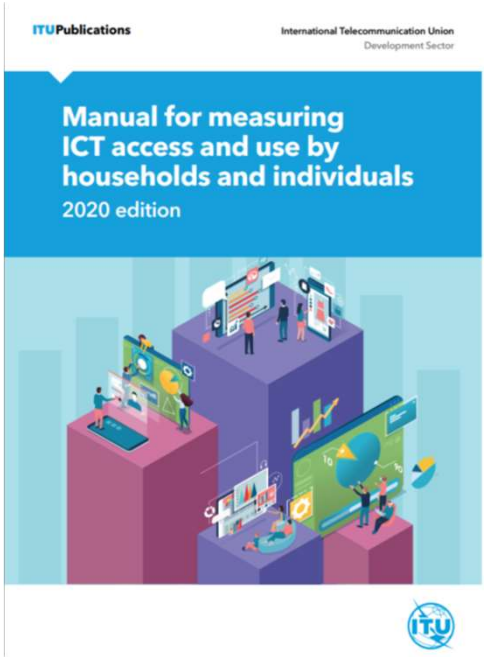
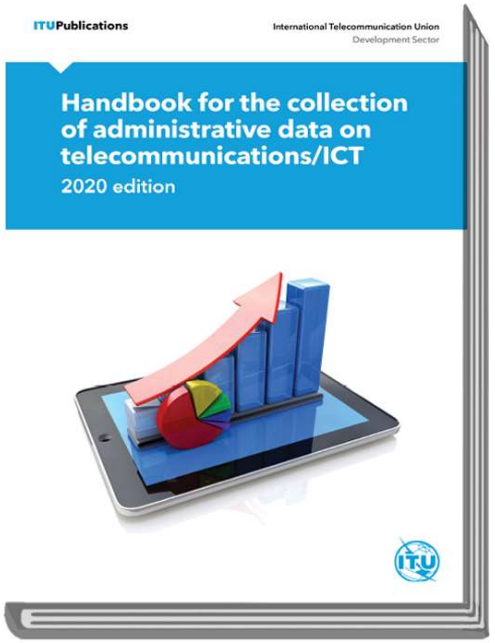
ICT Data Collection
Handbooks

Household Indicators



World Telecommunication/ICT Indicators



Available in the six official languages:
https://www.itu.int/en/ITU-D/Statistics/Pages/publications/handbook.

Resources

Expert groups (registration required)

- EGH Forum
- EGTI Forum

ITU methodological publications

- Handbook for the Collection of Administrative Data on Telecommunications/ICT
- Manual for Measuring ICT Access and Use by Households and Individuals
- Methodological guide on the use of mobile phone data

Data dissemination

- ITU DataHub
- ITU Stats website
- Measuring digital development: Facts and Figures

ITU Academy training courses

- Measuring digital development: Telecommunications/ICT indicators
- Measuring digital development: ICT access and use by households and individuals
- Mobile Phone Data – Awareness Course

Other ITU resources

- ITU data collection schedule
- ITU Big Data project

Statistical principles

- Fundamental Principles of Official Statistics
- Principles Governing International Statistical Activities

Conclusions – World Telecommunication ICT/Indicators

- It is crucial to **have more updated indicators** to understand the ICT development in the Caribbean region.
- ICT indicators must follow the **internationally harmonised methodology** for data collection following the *"Handbook for the Collection of Administrative Data on Telecommunications/ICT"*.
- In the case of WTI indicators, it is necessary to work together with telecom operators/service providers in the systematic provision of information. The **indicators requested are basic operational indicators**.
- It is important for the **Caribbean region to participate in the activities** that we carry out and to be part of the **working community on statistics** that we have in our forums, expert groups, for example.

Conclusions – Households

- It is **necessary to have updated indicators** on the **access and use of the Internet by households and individuals**.
- Work should be done on how to obtain indicators on a regular basis.
- Use of innovative sources like **mobile phone data (MPD)**.
- ICT indicators must follow the **internationally harmonised methodology** for data collection following the *"Manual for Measuring ICT Access and Use by Households and Individuals"*.
- ITU could **provide further assistance** to countries in the **collection of ICT statistics**.

Thank you for your attention!

Viviana Umpierrez
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