

SETTING THE SCENE:

OECD'S EXPERIENCE TOWARDS ASSESSING BROADBAND

PERFORMANCE

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The road behind sheds light on the road ahead: Background on OECD Broadband indicators



First measurements (ever) of the Internet (pricing, speeds and availability) conducted by the OECD (CISP) in 1995 and 2001, a framework later adopted (2005) by the ITU



OECD Council Recommendation on Principles for Internet Policy Making (2011): Broadband measurement as a policy direction



London workshop on Broadband metrics, June 2012: outcomes on vision to approach performance metrics (including maps)



Outcome of London WS: agreement on harmonized speed tiers (<1.5 Mbps; 1.5 Mbps; 10 Mbps; 25/30 Mbps; 100 Mbps; > 1 Gbps)



OECD Council Recommendation on Broadband Connectivity (2021): Call for granular data on broadband

Work on broadband performance since 2012:

- OECD Report on Access Network Speed Tests (2014)
- OECD flagship publications: Communications
 Outlook (2013) and the Digital Economy Outlook
 (DEO) 2015, 2020, & forthcoming (2024)
 - Third party data (Ookla, M-lab, Opensignal and Steam)
- **OECD Reports** highlighting the importance of measuring broadband performance:
 - Broadband networks of the future (2022)
 - Developments in spectrum management (<u>2022</u>)
 - Bridging digital divides in G20 countries, joint STI/CFE (2021)
 - The Operators and their Future (2019)
 - The Road to 5G Networks (2019)
 - IoT Measurement and Applications (2018)
- OECD/BEREC joint workshop on QoS and QoE, June 2020



Broadband performance measurement: Approaches?

The importance of official broadband QoS measurement

Download/upload speeds:

 Depend on how it is measured, sample selection, and differences in access (fixed and mobile broadband)

Other measures:

 Latency, jitter, web-page loading time, availability of a signal (for mobile)

With the next evolution of networks (fixed and wireless:

- QoS will depend on network densification and spectrum management
- Measures of fibre backhaul will become increasingly important
- Resilience and robustness of networks

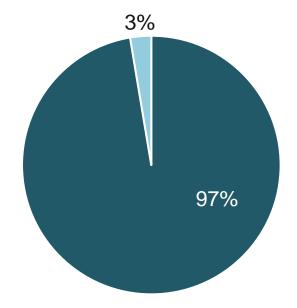




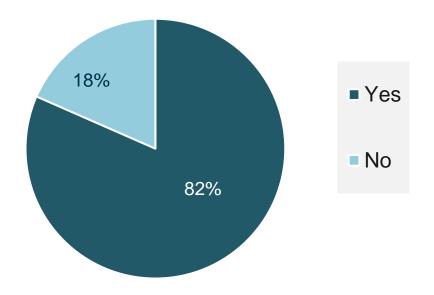
Where we stand and the road ahead

Almost all OECD countries have granular (subnational) indicators on broadband & the vast majority have broadband maps

Granular measurement of broadband indicators at subnational level?



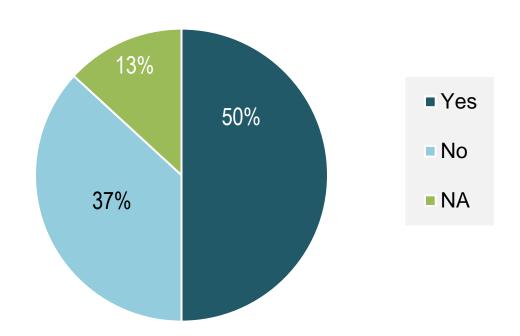
Government/regulatory-endorsed broadband mapping of ISP coverage?





Plus...half of OECD countries use "crowd sourcing" approaches to measure the quality of broadband

19 OECD countries (50%) use approaches such as "crowd-sourcing" and open data to measure the quality of broadband



Examples:

- Austria (RTR)- <u>link</u>
- Belgium (BIPT) -<u>link</u>
- Czech Republic (CTU)- <u>link</u>
- Colombia (CRC) –third party source
- France (Arcep)- <u>link</u>
- Finland (Traficom)— link
- Germany (BNetZa)
- Greece (EETT) -link
- Korea (NIA) Government tests
- Mexico (IFT) –third-party source
- Hungary (NMHH)- link
- Portugal (Anacom) <u>link</u>
- Finland (NKOM)-<u>link</u>
- Slovenia (AKOS) link
- United Kingdom (Ofcom)-third party source <u>Mobile Matters</u> - <u>Ofcom</u>
- United States (FCC) Measuring Broadband America



Going Digital Phase IV, "Pillar on Digital Divides: Improving connectivity": A two-fold approach

Two main goals of this pillar:



1) Develop a harmonised approach to measure **spatial** connectivity divides



2) Evidence-based policies to bridge connectivity divides

Horizontal work across Directorates during 2023-2024:

• Joint work STI (DEP), CFE & DCD

Planned outcomes

- i) Harmonised approach to measure territorial connectivity gaps.
- ii) Policy recommendations to help close existing divides.
- => A report deliverable on Connectivity Divides by Q4 2024 for OECD countries and key countries for OECD development cooperation



A two-fold approach:

- **I.** Informal Expert group on "Broadband Mapping & Digital Divides": 10 Countries with more around 35 experts attending (3 meetings in 2023, and 4 in 2024).
- II. Third-party sources on granular broadband indicators & policies to bridge divides to be featured in the report deliverable.



What are the steps towards harmonised subnational indicators on broadband collected by OECD countries?

- Agreeing to have a conversation on broadband mapping and learn from country experiences
- II. Identifying main hurdles (technical or other) to establishing a harmonised broadband map. For example:
 - What type of data is of interest (coverage and performance)?
 - How is the data collected by national authorities?
 - Level of aggregation of data?
- III. Focusing efforts to prepare for a proof of concept:
 - Build upon work already done & identify main definitions that may require further harmonisation
 - Which definitions (e.g. Coverage, performance)?
 - Scoping of the project:
 - Focus on fixed, mobile?
- IV. Experiment: Establishing proof of concept



For any questions, please contact:

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