ICT Development Index 2020 A proposal



Briefing session September 2020

Today's briefing

- Presentation of the Secretariat's proposal
- Detailed in Background document "ICT Development Index 2020: A proposal" available at <u>www.itu.int/en/ITU-D/Statistics/Pages/events/egti2020/</u>
- Questions & Answers
- Informal engagement opportunity
- Objective is to clarify the proposal and answer any questions
- Discussion and decision will take place on 14 September

Context and background

- The ICT Development Index (IDI) assesses the level of digital development of countries. The IDI was published annually between 2009 and 2017.
- In 2017, EGTI/EGH adopted a set of indicators to replace the original IDI → "revised IDI"
- Availability and data quality issues with indicators prevented the calculation and release of the revised IDI
- Since then, lack of consensus on the way forward
- Governance issue: Res. 131 does not provide guidance on how to address lack of consensus → BDT Director sought Council's guidance
- Virtual consultation of councillors in June 2020 encouraged Secretariat and Expert Group to find a solution to release an index until next physical meeting

Looking for a solution 1/2

The Secretariat considered 4 important conclusions:

- 1. In 2017, the EGTI/EGH Extraordinary Meeting adopted a revised set of 14 indicators
- 2. This revised set of 14 indicators do not allow for a robust and methodologically sound index to be produced. Secretariat cannot publish an index that does not meet quality standards
- 3. Most Member States want an index to be released as soon as possible
- 4. Based on the consultations and meetings held in Spring 2020 about a potential SDG-inspired index, the development of a entirely new framework will be a multi-year process

Looking for a solution 2/2

- As a practical and immediate solution, the Secretariat worked on a version of the IDI that addresses the issues of the revised IDI → background document "ICT Development Index 2020: A proposal"
- Proposed IDI 2020 will be presented to EGTI/EGH members for consideration on 14 September

 \rightarrow If consensus on the proposed IDI 2020 is reached during the session, ITU Secretariat will be in the position to release the index in 2020.

Proposed ICT Development Index 2020

((j)) Access sub-index

- 1.1 Households with computer %
- 1.2 Households with Internet access %
- 1.3 International bandwidth bits/s per Internet user
- 1.4 Mobile network coverage% population (weighted by technology)
- 1.5 **Fixed broadband penetration** per 100 population (weighted by speed)

Use sub-index

2.1 Internet users % population

- 2.2 **Mobile broadband penetration** Active subscriptions per 100 population
- 2.3 **Mobile-broadband Internet traffic** GB per subscription

3.1	Mean years of schooling
3.2	Secondary gross enrolment ratio
3.3	Tertiary gross enrolment ratio %

Impact

Key features of proposed IDI 2020

- Same objective as before: to assess countries' level of ICT development
- 'Fixes' the revised IDI: only necessary changes were made (see next slide). No change to methods to compute index (normalization, goalposts, weights).
- Approximately 135 economies could be covered in 2020 edition
- Basic analysis of preliminary analysis, sensitivity analysis and statistical coherence confirm soundness and feasibility

Revised IDI and IDI 2020: What is unchanged

	Revised IDI	IDI 2020 (proposal)	Changes between revised IDI and IDI 2020
Access sub-	 Households with computer 		
	 Households with Internet access 	same none	nono
index	 International bandwidth 		none
	Mobile network coverage		
	• Internet users		
Use sub-index	 Mobile broadband penetration 	same	none
	 Mobile broadband Internet traffic 		
	• Mean years of schooling		
Skills sub-index	 Secondary gross enrolment ratio 	same	None
	 Tertiary gross enrolment ratio 		

Revised IDI and IDI 2020: 4 changes

	Revised IDI	IDI 2020 (proposal)	Changes between revised IDI and IDI 2020
Access sub- index	 Fixed-broadband subscriptions by speed, as % of total fixed-broadband subscriptions 	Fixed-broadband subscriptions (weighted by speed) per 100 population	Methodological change: Indicator now normalized by population
Use sub-index	 Fixed broadband Internet traffic per fixed broadband subscription 		Indicator dropped due to quality issues.
	 Percentage of individuals who own a mobile phone 		Indicator dropped due to insufficient data availability (36 percent)
Skills sub-index	 Proportion of individuals with ICT skills 		Indicator dropped due to insufficient data availability (20 percent)

Issue: Data availability

- Issue: only 42% of data available for 14 indicators of revised IDI
- Solution:
 - Consider a 3-year period of reference, rather than only latest year
 → Data availability increases to 62%
 - Exclude indicators with less than 50% data availability
 → 2 indicators dropped: *Mobile phone ownership* (36%) and *ICT skills* (20%)
 - Include only economies with at least 50% data availability (4 or more indicators available)
 - \rightarrow preliminary total of 135 economies
- \rightarrow 87% of data available and only 13% of data points to estimate

Preliminary data availability and coverage: Europe

Number of

Economy	Sufficient data availability	indicators available (out of 8)
Albania	Yes	8
Andorra	Yes	6
Austria	Yes	8
Belgium	Yes	8
Bosnia and Herzegovina	Yes	7
Bulgaria	Yes	8
Croatia	Yes	8
Cyprus	Yes	8
Czech Republic	Yes	8
Denmark	Yes	8
Estonia	Yes	8
Finland	Yes	7
France	Yes	8
Georgia	Yes	8
Germany	Yes	7
Greece	Yes	8

Economy	Sufficient data availability	Number of indicators available (out of 8)
Hungary	Yes	7
Iceland	Yes	8
Ireland	Yes	8
Israel	Yes	6
Italy	Yes	8
Latvia	Yes	8
Liechtenstein		3
Lithuania	Yes	8
Luxembourg	Yes	5
Malta	Yes	8
Moldova	Yes	6
Monaco		4
Montenegro	Yes	7
Netherlands	Yes	7
North Macedonia	Yes	8
Norway	Yes	8

Number of

Economy	Sufficient data availability	Number of indicators available (out of 8)
Poland	Yes	7
Portugal	Yes	8
Romania	Yes	8
San Marino		3
Serbia	Yes	8
Slovakia	Yes	8
Slovenia	Yes	8
Spain	Yes	8
Sweden	Yes	7
Switzerland	Yes	7
Turkey	Yes	8
Ukraine	Yes	6
United Kingdom	Yes	7
Vatican		0

Improving data availability and quality

- Statistical capacity building activities, in-country support
- EGTI and EGH to develop statistical standards and collection methods
- Last July, ITU released the 2020 edition of the <u>Handbook for the</u> <u>Collection of Administrative Data on Telecommunications/ICT</u> and <u>Manual for Measuring ICT Access and Use by Households and</u> <u>Individuals</u>.
- Two online courses based on these publications to be launched in December 2020
- <u>Big Data for Measuring the Information Society</u>

Issue: Fixed-broadband subscriptions

- Issue: in the revised IDI, "Fixed-broadband subscriptions by speed tier as a % of total fixed-broadband subscriptions" only captures quality -not diffusion, leading to counter-intuitive results
- Solution: combine both speed (quality) and diffusion (quantity) dimensions, by taking the weighted sum of subscriptions by speed tier (thus assigning more weight to faster connections), divided by population, instead of total subscriptions.

→ "Fixed-broadband subscriptions (weighted by speed) per 100 population"

Issue: Fixed-broadband Internet traffic

- Problem: insufficient data quality.
 - Relatively new indicator, for which a refined methodology has only been finalised at the end of 2019
 - Relatively low data availability (58%)
 - Comparability across countries is problematic
 - 15% of countries saw lower traffic in 2019 than in 2018
- Solution: Indicator is excluded (despite concept relevance)

Thank you!

Questions & Answers

- Please wait for the moderator to give you the floor
- Please state your affiliation before asking your question
- You can also ask your question through the chat box