

## Thematic review of SDGs at HLPF 2019

### Input on cross-cutting issues of information and communication technologies (ICTs) for development By the Partnership on Measuring ICT for Development<sup>1</sup>

As relates to Goals 4, 8, 10, 13, 16, and 17.

#### a) Assessment of the situation regarding the theme of "empowering people and ensuring inclusiveness and equality"

- The 2030 Agenda recognizes that "The spread of information and communication technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies". Despite the cross-cutting nature of ICT, only two of the goals under review at HLPF 2019 explicitly mention them: Goal 4 (target 4.b) and Goal 17 (target 17.8). ICTs need to be considered as enablers of all the goals and should be monitored accordingly.
- More than half of the world's population is now online. At the end of 2018, 51.2 per cent of individuals, or 3.9 billion people, were using the Internet. This represents an important step towards a more inclusive global information society. In developed countries, four out of five people are online, reaching saturation levels. In developing countries, though, there is still ample of room for growth, with 45 per cent of individuals using the Internet. In the world's 47 least-developed countries (LDCs), Internet uptake remains relatively low with four out of five individuals (80 per cent) not yet using the Internet.
- Mobile access to basic telecommunication services is becoming ever more predominant. While fixed-telephone subscriptions continue their long-term decline, mobile-cellular telephone subscriptions continue to grow. Although the number of mobile-cellular telephone subscriptions is already greater than the global population, the same is not true in all regions. It can be expected therefore that developing countries, and especially LDCs, will slowly catch up with the rest of the world.
- Broadband access continues to demonstrate sustained growth. Fixed-broadband subscriptions are continuously increasing, without a slowdown in growth rates. Furthermore, almost all fixed-broadband subscriptions had download speeds of at least 2 Mbit/s, with a very substantial part having advertised speeds of more than 10 Mbit/s. In LDCs, there is still a significant pocket of subscriptions for the lowest speed tier ( $\geq 256$  kbit/s to  $< 2$  Mbit/s), although that proportion is

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<sup>1</sup> The Partnership is currently made up of 14 partners organizations: International Telecommunication Union (ITU), Organization for Economic Co-Operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics, United Nations Department of Economic and Social Affairs (UNDESA), The World Bank, United Nations University Institute for the Advanced Study of Sustainability (UNU-IASS), UN Economic Commission for Africa (ECA), UN Economic and Social Commission for Asia and the Pacific (ESCAP), UN Economic and Social Commission for Western Asia (ESCWA), EUROSTAT, UNEP Secretariat of the Basel Convention (SBC), International Labour Organization (ILO).

decreasing rapidly. The growth in active mobile-broadband subscriptions has been much stronger, with penetration rates increasing from 4.0 subscriptions per 100 inhabitants in 2007 to 69.3 in 2018.

- Almost the whole world population now lives within range of a mobile-cellular network signal. In addition, most people can access the Internet through a 3G or higher-quality network. This evolution of the mobile network, however, is going faster than the growth in the percentage of the population using the Internet.
- Despite the growth in overall connectivity, there is a persistent digital divide between developed and developing countries in terms of access to and use of ICT as tools for sustainable development. In addition, there are divides between regions and within countries in terms of ICT access and use by parts of the population.
- In this context, more and better statistics on access to and use of ICT can inform policies to reduce the digital divide. Gender-disaggregated ICT statistics, e-waste statistics, statistics on use of ICT by disabled and marginalized communities, on the use of ICT by government for access to information and services, and statistics on ICT in education and health all require further development in order to adequately monitor progress in how people are empowered and included in the realization of the SDGs and targets under review.

#### b) Identification of gaps, areas requiring urgent attention, risks and challenges

Lack of ICT skills is an important impediment for people to access the Internet. Data show that as activities get more complex, fewer people undertake these activities. More importantly, computer users in developed countries seem to possess more ICT skills than users in developing countries, pointing to a serious constraint on the development potential of developing countries and LDCs.

There is an increased need for “soft” skills beyond technical and navigational skills. A breadth of skills – including technical operational, information management, social and content-creation skills – will be fundamental for achieving positive and avoiding negative outcomes. Furthermore, algorithms, the proliferation of bots, and a shift to the Internet of Things and Artificial Intelligence, augment the need for critical information and advanced content-creation skills. With the increased complexity of ICT systems, and an exponential increase in the amount of data being collected, transferable digital skills and lifelong learning are indispensable.

ITU data and other cross-nationally comparative data sources show that there are considerable gaps across the board in the skills needed at all levels. Scarce data suggest developing countries are particularly disadvantaged when it comes to digital skills. There is a lack of data collected on skills in developing regions, but the available data suggest that inequalities reflect other inequalities between the different regions of the world, particularly in relation to basic skills. The patterns for standard skills are less clear.

There are clear gaps in data collection for certain countries and groups, and a limited range of methodological tools is used to collect these data. There is an urgent need for the development of measures across the range of operational, information management, social and content-creation skills.

Survey measures used in most internationally comparative studies have severe shortcomings. They lack variety (measure only a narrow range of operational skills), comparability (have not been tested to be fit for cross-cultural comparisons), adaptability (are not transferable, as they are associated with specific platforms or activities rather than a core “curriculum” of future proof skills) and equity (have not been validated as comparable assessment tools for different subgroups across highly diverse populations).

c) Valuable lessons learned on "empowering people and ensuring inclusiveness and equality"

- The Partnership on Measuring ICT for Development has noted that the SDG monitoring framework is not enough to measure the contribution of ICT to sustainable development.
- ICT use in developing countries is affected by a myriad of issues such as low levels of ICT literacy, lack of relevant applications and content, and lack of trust. Digitalization is also fundamentally changing the ways in which economic growth and employment (Goal 8), climate change (Goal 13) and access to justice (Goal 16) impact inclusiveness as empowerment, as ICTs can reduce inequalities or exacerbate them.
- Indicators to measure the contribution of ICTs to these aspects of sustainable development should be considered in addition to the indicators in the SDG monitoring framework. For example, improved statistics on access to and use of the Internet by individuals and enterprises (in particular micro and SMEs), can help policy makers monitor access to services and resources that support goals and targets such as innovation (Goal 8.3), financial inclusion (Goal 8.10), and enabling exports (Goal 17.11). Indicators to measure the participation of developing countries in the digital economy also need to be developed.
- The Partnership on Measuring ICT for Development Task Group on ICT for the SDGs is working on a thematic list of ICT indicators that could be used to measure ICT availability and use in sectors relevant to the SDGs that are not covered in the global SDG indicators framework. The Task Group will further aim at improving availability of disaggregated data, for the indicators that will be defined in the thematic list, in addition to the ICT indicators included in the SDG measurement framework. The Task Group is open to all members of the Partnership and other interested agencies and stakeholders, and will work between 2017 and 2020 and can be extended until 2030, to capture the changes in the overall SDG discussions.

d) Emerging issues likely to affect the realization of "empowering people and ensuring inclusiveness and equality"

- To supplement national statistical systems, countries will need to leverage new data sources and the private sector, including data generated by machines, artificial intelligence, data flows and the Internet of things, to ensure that relevant information on ICT indicators included in the SDGs are produced and made available. For example, mobile phone data can uncover poverty trends in developing countries and thus help shape poverty alleviation measures.

- The use of big data will also entail addressing data protection, privacy and security, as well as protocols for data-sharing between private sources and national statisticians.
- ICTs are increasingly used in the delivery of services that are critical within the context of the 2030 Agenda. Failure to acknowledge the transformative power of ICTs would not only lead to the widening of digital divides but could also aggravate inequalities in all development domains.

e) Areas where political guidance by the HLPF is required

- The Agenda 2030 needs high-quality, timely and disaggregated data to enable policymakers to make the right decisions for sustainable development. The HLPF might wish to encourage countries to recognize, monitor, and share best practices on how ICTs are key enablers of the various sustainable development goals.
- The HLPF might wish to encourage countries to consider producing the Partnership's core indicators when measuring progress in the implementation of specific goals and targets.
- The HLPF might wish to refer countries to the thematic list of ICT indicators to measure progress towards the SDGs that was prepared by the Partnership on Measuring ICT for Development. The Partnership on Measuring ICT for Development can continue to support the development of official ICT statistics and indicators that will enable follow-up of SDG implementation.

f) Policy recommendations on ways to accelerate progress in "empowering people and ensuring inclusiveness and equality"

- To measure the extent to which ICT access and use help empower people and ensure inclusiveness and equality, more indicators need to be considered to reflect affordability, the population groups and economic sectors that are using them and for what purpose, and the barriers or concerns they face.
- Developing countries currently lack enough good quality data to plan, monitor, and evaluate ICT for SDG policies. To increase the availability and quality of these data, efforts to strengthen the capacity of national statistical systems in producing ICT statistics must be increased. The need for official ICT statistics is more pressing as the 2030 deadline approaches.
- Measuring ICT for development will require considerable effort on the part of national statistical offices and international organizations. National coordination and close cooperation will be essential between key stakeholders involved in the production and use of ICT statistics.
- In addition, development partners might need to expand their support to technical assistance, in particular financing the production (data collection) of baseline ICT statistics and training the producers and users of such statistics (policymakers, regulatory authorities on telecommunications and the private sector).
- The dynamic nature of technology necessitates the regular revision of related indicators. The Partnership on Measuring ICT for Development should continue to review and update its list of ICT indicators, cooperate in developing new indicators and related methodology and contribute to the statistical development of countries by offering capacity-building assistance.