Measuring the Information Society Report 2017

Volume 1





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978-92-61-24511-5 (Paper version) 978-92-61-24521-4 (Electronic version) 978-92-61-24531-3 (EPUB version) 978-92-61-24541-2 (Mobi version) It is my pleasure to present to you the latest edition of the *Measuring the Information Society Report*. This annual report presents a global and regional overview of the latest developments regarding information and communication technologies (ICTs), based on internationally comparable data and agreed methodologies. It aims to provide ITU Member States with an objective assessment of countries' ICT performance by highlighting areas of success stories and areas that need further improvement.

The release of this report comes after the successful conclusion of the World Telecommunication Development Conference (WTDC), held in Buenos Aires, Argentina, where we adopted a Strategic Plan and Action Plan that will provide future direction and guidance to the ITU Telecommunication Development Sector (ITU-D), including its work on statistics.



Based on ITU data collections, the report gives an overview of the long-term telecommunication/ICT trends. Analysis shows an overall upward trend in the availability of communication services, driven by rapid growth in broadband, with a growing predominance of mobile over fixed services. Globally, the number of mobile-cellar subscriptions grew from 2005 to 2017 from 33.9 per 100 inhabitants to an estimated 103.5. In the least developed countries (LDCs), the growth has been more impressive, increasing from 5.0 in 2005 to an estimated 70.4 in 2017.

These trends are brought further into evidence by the ICT Development Index (IDI). The IDI is a powerful tool for monitoring progress towards a global information society and is a core feature of this report. The latest IDI ranks the performance of 176 economies with regard to ICT infrastructure, use and skills, allowing for comparisons to be made between countries and over time. The most important aspect of the IDI is that countries should track their own year on year progress and make policy adjustments to grow their countries' telecommunication/ICT sector.

This year's Index shows that there has been continued improvement in IDI performance by the great majority of countries. The average value for all economies in the Index rose by 0.18 points between IDI 2016 and IDI 2017, reaching 5.11 points, the first time that it has exceeded the halfway point along its scale. Improvements have been most significant among countries in the middle of the IDI rankings, many of which are middle-income developing countries, testifying to the fact that these countries are catching up with the top performers when it comes to ICT development. But LDCs as well improved their average IDI value, by 0.15 points during the year, close to the overall average growth recorded. Mobile broadband is the driving force behind this trend, bringing online previously unconnected individuals and catering for the ubiquitous data needs of the ICT ecosystem. Worldwide, active mobile-broadband subscriptions increased from 11.5 per 100 inhabitants to 56.4 in only 7 years. Here as well, growth in LDCs was even stronger, from 0.4 in 2010 to 22.3 in 2017, offering hope that they are on a path to catch up with the rest of the world.

Recent developments in ICT markets have led to the adoption of proposals for change in the composition of the Index. A revised set of indicators will be introduced from IDI 2018 which should add further insights into the performance of individual countries and the relative performance of countries at different development levels.

Over and above reporting on the overall telecommunication/ICT progress achieved, the IDI also shows that the digital divide between more and less connected countries remains a challenge which needs to be addressed if inclusive information societies are to contribute to the achievement of the Sustainable Development Goals (SDGs). Digital divides are also evident within countries, for example between urban and rural areas and between age groups. In many countries, urban residents and young people are more likely to be online than rural dwellers and the elderly. Women are less likely than men to make use of the Internet in most countries, but are more under-represented online in developing countries, particularly in LDCs, than in developed countries.

This year's report also features a chapter presenting IDI findings at regional level and compares different regions. Given that there is a strong correlation between economic development and IDI performance, there are considerable differences between geographic regions in the levels of ICT development reflected by the IDI, and significant variation in the experiences of individual countries within each region.

Drawing conclusions from the report, it is clear that the area of ICTs is very dynamic and that another digital revolution is approaching- one which will transform business, government and society. Four key developments are at the heart of this revolution: the Internet of Things (IoT), cloud computing, big data analytics, and artificial intelligence (AI). These are described in greater detail in the last chapter of the report.

All these trends are interrelated. Fully harnessing the economic and social benefits of these developments requires efficient and affordable physical infrastructures and services, more advanced user skills, and internationally comparable benchmarks and indicators supported by enabling public policies. Promising ICT applications in areas such as manufacturing, precision agriculture, government, education, health care, smart cities, and smart transportation, will contribute to accelerating the attainment of the SDGs. Reliable and meaningful measures of the deployment and use of advanced ICTs are critical. This topic will undoubtedly be dealt with further in future editions of the *Measuring the Information Society Report*.

For the first time, this year's report features country profiles highlighting the ICT market structure and the latest developments in 192 economies worldwide. Each profile includes an overview of the policy and regulatory initiatives undertaken, as well as the current status of network roll-out and service uptake. These profiles are presented in Volume 2 of the Measuring Information Society Report. The profiles seek to highlight the achievements by each country and I am confident that these profiles will also help in identifying good practices as well as future challenges specific to each country.

It is my hope that this report will not only be of value to actors within the ITU membership (policy-makers, regulators, the ICT industry, academia) but to others also working towards the building of an inclusive global information society.

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