



Transforming Africa: A continent on the move

Africa has seen exponential growth in the use of mobile phones and the Internet in recent years. Many African countries are driving innovations, for example in mobile money transfer applications — a game changer for people without a formal bank account — contributing to financial inclusion. Close to 7 per cent of households in Africa now have Internet access at home, compared to only 2 per cent in 2008. Nevertheless the digital divide persists, with only 16 per cent of people in Africa using the Internet today.

ITU's work in Africa over the past four years has focused on regional initiatives approved by the World Telecommunication Development Conference (WTDC 10) held in Hyderabad, India, in 2010. These initiatives aim to build human and institutional capacity; strengthen and harmonize policy and regulatory frameworks to integrate African telecommunication and information and communication technology (ICT) markets; develop broadband infrastructure and boost connectivity; introduce new digital broadcasting technologies; and implement the recommendations of the Connect Africa Summit.

Human and institutional capacities

In order to develop human and institutional capacities, ITU's Regional Office for Africa has focused on establishing six centres of excellence for English and French speaking countries across the continent. These centres form a network of educational nodes that provide training through both face-to-face workshops and e learning within the scope of the ITU Academy. Target audiences include government authorities, regulators, and senior managers of operators and service providers. ITU provides logistical support and high-level expertise to these centres, which have trained more than 1560 experts from Africa in around 60 different workshops. Also, more than 160 experts were trained via distance-learning courses during the period 2010–2013.

For Portuguese and Spanish speaking countries in Africa, the ITU Academy has delivered e learning workshops free of

charge through these centres on topics such as policy and regulation, business management, new technologies and services, universal access, and ICT for rural development. The first train-the-trainers distance-learning workshop was held in June 2012 in Maputo, Mozambique. It was followed by workshops in Guinea Bissau on submarine cables, in Cape Verde on Gigabit passive optical network (GPON) technologies, in Equatorial Guinea on quality of service, in Angola on terrestrial mobile services, and in Sao Tome and Principe on intercommunication business.

Policy and regulatory frameworks

Regional harmonization continues to be a driver of enabling environments. The HIPSSA project — which stands for "Support for the Harmonization of ICT Policies in Sub-Saharan Africa" — launched in Addis Ababa, Ethiopia, in December 2008, has spearheaded this harmonization. HIPSSA has been one of three regional projects under a broader global initiative which ITU in partnership with the European Commission implemented between 2008 and 2013 to address policy and regulatory challenges facing the African, Caribbean and Pacific (ACP) group of countries. Known as "Support for the Establishment of Harmonized Policies for the ICT Market in the ACP", this initiative has been one of the largest global efforts aimed at both harmonizing and updating policies and legislations to date. It focused on two main areas — cybersecurity and telecommunication — and worked together with the regional organizations and their Member States.

In the case of Africa, ownership of HIPSSA was reflected through the composition of its Steering Committee, which was made up of representatives from the regional economic organizations, the United Nations Economic Commission for Africa (UNECA), and the African Telecommunications Union (ATU). The committee was co-chaired by the African Union Commission and ITU.

HIPSSA has developed model legislation on cybercrimes, electronic transactions and data protection for countries

- ▶ of the Southern African Development Community (SADC) and of the Economic Community of West African States (ECOWAS). Under HIPSSA, technical assistance was given to all the countries that requested it to enable them to transpose these model texts into their national laws. Through the project, regional guidelines were also developed on such topics as submarine cables and universal access and service with the active participation of ECOWAS and the Communication Regulators' Association of Southern Africa (CRASA). These guidelines were then shared with the whole of Africa in workshops, as well as through specific in-country assistance.

Recognizing the role of the regional economic communities as building blocks in the harmonization process on the continent, ITU's Regional Office for Africa strengthened SADC's efforts to harmonize national regulations on quality of service by organizing a workshop on the subject in Pemba, Mozambique in September 2012. In 2013, the office studied possible measures to lower roaming charges and to implement a "roam like a local" regime in SADC countries. The results are expected to be implemented in early 2014. The office also carried out a study for the Common Market for Eastern and Southern Africa (COMESA) with a view to protecting its critical information infrastructure. A workshop for COMESA and SADC regulators, operators and stakeholders on "Consumer Protection in a Converged ICT Environment" was held in Livingstone, Zambia, in December 2013.

In a separate initiative, the Government of Burkina Faso, assisted by ITU, hosted a high-level African Forum on Best Practices in ICT in Ouagadougou in October 2013. Sponsored by Microsoft, the forum positioned the data revolution as an emerging pillar of Africa's development agenda. It brought together heads of government, ICT ministers, regulators, fixed and mobile network operators, Internet service providers, leaders of the content and knowledge industries, multilateral agencies and international civil society.

Traditional expertise in institutional reform is provided regularly to countries upon request in order to address convergence issues. To date, Burundi, Chad, Equatorial Guinea and Madagascar have requested and received such assistance.

Broadband infrastructure and connectivity

Having collected data to assess the implementation of broadband networks in Africa, ITU has designed interactive broadband maps for each country indicating optical fibre cable length, location of nodes, type of transmission network equipment, network capacity per channel, number of optical fibres within the cable, and transmission network operational status.

Individual national broadband wireless network plans, based on ITU guidelines and recommendations, have so far been developed in Burkina Faso, Burundi, Lesotho, Mali and Rwanda. These countries will benefit from an ITU-McCaw Foundation Broadband Wireless Network project. The project aims to enhance broadband wireless connectivity,

develop ICT applications, as well as provide free or low-cost digital access for schools, hospitals, and underserved populations in rural and remote areas of the selected countries. The Broadband Wireless Network is already operational in Burundi and Djibouti.

An ITU project is also improving Internet connectivity in Cape Verde and in Equatorial Guinea, with the aim of implementing national and regional Internet exchange points. Some African countries have already established national Internet exchange points, and peering has emerged as an effective way for Internet service providers to improve operational efficiency and further reduce Internet access costs.

In another project, ITU and Cisco have launched a TelePresence initiative to enable real-time consultation among African Heads of State. By replacing physical meetings, TelePresence will facilitate high-level consultation and decision-making, while saving time and energy and therefore contribution to climate change mitigation by reducing greenhouse gas emissions.

ITU cooperates with regional organizations and United Nations agencies.

ITU and the United Nations Economic Commission for Africa have jointly issued a report entitled "Impact of ICT on Employment and Poverty Reduction in Africa". The report highlights areas where governments could play a leading role, and where ICT can support governments in reducing unemployment and poverty among disadvantaged groups.

With a view to assisting the New Partnership for Africa's Development (NEPAD), an ITU expert is studying NEPAD's activities to draw up a road map for collaboration between ITU and NEPAD for the period 2014–2017.

ITU and the World Health Organization have renewed their commitment to promote and support increased use of ICT in health (e health) in Africa, leveraging the fast-growing network infrastructure in the continent. The two agencies are also collaborating in supporting Member States to adopt appropriate e health policies, in order to properly guide e health development and implementation in countries. Sub-regional workshops were held in Addis Ababa and Dakar, where 13 African countries received orientation on the use of the ITU-WHO eHealth Toolkit. It is designed to help countries develop effective national e health policies. The joint effort will continue until all African countries have fully adopted national e health policies.

ITU is also helping the African Union implement the African Observatory on Science, Technology and Innovation. The observatory will provide a platform for all African countries to collect, process and disseminate data on science, technology and innovation, including ICT. ITU has funded a feasibility study for the platform, and together with the African Union is now considering funding and implementation options, including partnerships.

The full report can be found at: <https://itunews.itu.int/En/4941-Africa-BR-Transforming-Africa.note.aspx>