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**Submissions from entities in the United Nations system and elsewhere on
their efforts in 2015 to implement the outcome of the WSIS**

Submission by

United Nations Economic Commission for Africa (ECA)

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 18th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

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Implementing the WSIS outcomes in Africa - WSIS + 10

October 2015

1. Executive summary

For more than a decade, information and communication technologies (ICT) have been attributed a key driver to socio-economic transformation and increase efficiency, provide access to new markets or services, create new opportunities for income generation and give poor people a voice. Today overall, the Internet economy contributes 5% to 9% to total economic growth in developing markets the Internet's economic benefits are increasingly shifting to the developing world. African countries have begun to recognize that, without investment in ICT, the continent will stay on the periphery of the global knowledge economy. In this context, a number of African countries have undertaken considerable legal and institutional reforms to improve access to the benefits of international connectivity and enhance ICT infrastructure, to provide more affordable handsets and promote growth in mobile, internet and data services. In this regard, in 2015, Ten years after the World Summit on the Information Society (WSIS), the Economic Commission for Africa (ECA) in collaboration with other UN agencies, international and regional organizations has been engaged in reviewing the implementation of the WSIS in Africa (WSIS +10). To this end, ECA undertook a comprehensive review of WSIS+10 and beyond: “Outcomes and Perspectives for Africa” and organized the Regional Review Meeting from 14 to 16 April 2015.

African countries have made and continued to make progress toward the Geneva Action Lines and the Tunis Agenda and ICT has become an important contributor to gross domestic product and job creation. Governments played a key role in putting in place national ICT policies and made significant investments to implement policies and expand access to ICT infrastructure and services. The phenomenal development of mobile technology in Africa already has positive impacts such as high mobile telephony penetration (over 70%) and a significant increase in the proportion of Africans with access to Internet. The rate of growth in mobile penetration was fastest in Africa, where the number of mobile users has increased by 13 per cent per year since 2010, more than twice as fast as the global average.

Trust and confidence in the use of ICT are important determinants of the uptake of ICTs and critical for fullest exploitation of its potential. In this regard, Governments have also improved legal and regulatory environment with the increasing uptake of ICTs across the social and economic sectors. For instance, several countries have enacted cyber-security laws including the transposition at the national level of the AU Convention on cyber-security and personal data protection adopted by African governments in 2014 to harmonize cyber-security legislations.

The work of the UNECA to support the WSIS objectives is carried out at a sub-programme level. ECA continue to promote the use of ICTs for achieving sustained growth and inclusive development and played a key role in the growth of the African Internet Governance space. ECA also undertakes policy research on ICTs, innovation and science & technology fields, producing evidence-based policy briefs to African policy and decision-makers, and focusing on virtual discussions, face-to-face events and data collection. Based on its recent work, ECA is finalizing a policy brief on ‘improving access to broadband in Africa in support its transformation agenda’ which will be circulated at the end of the year.

The following sections describe some of the most successful activities in relation to ECA’s direct involvement and participation with other stakeholders in selected follow-up WSIS action lines and implementation at regional level.

2. Analytical overview of Trends in the implementation of the WSIS outcomes

The overall assessment of the WSIS implementation review in Africa report by ECA shows that over the last decade, African countries have made and continue to make progress toward fulfilling the Tunis Commitment.

Most have put in place dynamic Information Society policies and there has been considerable growth and expansion of ICT skills/expertise and markets. At the regional level, through the RECs, progress was made on the harmonization of policy, legal and regulatory environment and formulation and implementation of sub-regional e-strategies.

As a result of several years of policy actions by African governments with support of their partners and private sector, the number of undersea fibre-optic cables landing in Africa has increased from 2 active cables in 2001 to 16 by the end of 2014. Satellite coverage is also improving with international, predominantly private-sector companies, deploying more capacity over Africa.

Growth in ICT usage and uptake has exceeded all expectations, particularly in the development of the mobile-cellular market. The number of people in sub-Saharan Africa with cell phones is increasing by five per cent every year. Ericson estimates that mobile phones will increase to 930 million by the end of 2019¹, almost one per African.

Africa’s mobile market is forecast to almost quadruple in value to \$234 billion between 2013 and 2020. The report, “Sub-Saharan Africa Mobile Economy 2015”, developed by GSMA Intelligence, reveals that mobile contributes over 5.7% per cent of the region’s GDP, higher than any other comparable region globally. This is forecast to rise to over 8% by 2020. Mobile operators directly contributed US\$31 billion, representing 1.7 per cent of

¹Ericsson, “Mobile Mobility Report Annex: Sub-Saharan Africa”, June 2014
<http://www.ericsson.com/res/docs/2014/emr-june2014-regional-appendices-ssa.pdf>

GDP. Expenditure in the sector is also forecast to increase to US\$ 160 billion by 2016. In 2014, the mobile ecosystem directly supported 4.4 million jobs and contributed approximately US\$15 billion via general taxation to public funding in the region. By 2020, mobile is set to double its economic effect, employing 6.6 million people and contributing \$42 billion.

There has been continued growth in adoption and use of information and Communications technologies (ICTs) in the continent. Smart phones are widely available and most mobile phone handsets have AM/FM radios to which people listen, while smart phones provide access to multimedia content.

ICTs application and services are widespread. In almost all countries, e-government applications are being implemented. A number of e-commerce platforms (e.g. Konga, Wakanow, Jumia in Nigeria) have emerged. There is increased use of ICTs in the financial sector leading to much lower costs and greater competition in financial services providing customers increased access to better services (through for e.g. online banking, ATM services, m-banking, etc.). In 2015, African mobile money transfers are expected to exceed US\$200 billion, equating to approximately 18 per cent of the continent's GDP²

Across the continent, there is significant progress in the role of the media in building inclusive information society with greater penetration of old technologies (Radio, TV) and increased adoption of new media outlets such social media technologies and the internet. The national ICT policies of most African countries pay emphasis on the ethical dimensions of the use of ICTs despite challenges in terms such as piracy and violations of intellectual property rights including misuse of ICTs.

In addition, the capacity of African countries in ICT has grown tremendously since 2005 in terms of ICT skills, institution building and education in ICTs. Many countries have developed ICT in education policies and integrated ICT in education and training at all levels. Already, African youth and urban dwellers are hyper-connected.

While considerable improvements have been achieved in Africa there are still areas where improvement is needed in order to be able to take advantage of the full potential of ICT. The cost of acquiring and/or accessing up-to-date information resources remains very high as indicated by the low level of households with Internet access at 7% in 2014 compared to Europe with the highest at 77%. The public sector remains dominant in the governance and promotion of ICTs in many countries. Despite several initiatives to respect cultural identity, promote linguistic and other diversities, and local content through national ICT policies, progress on this Action line and its targets remains very low.

Internet access and penetration is still very weak in Africa. Access for all is important, but particularly for groups at risk, such as people living with disability, or people who are already marginalized, such as women in low income groups and rural people all over the

²<http://www.euroasiaindustry.com/article/africa-s-digital-revolution>

continent. A critical challenge to policy makers and other ICT4D stakeholders is to promote public ICT access facilities such as libraries, telecenters, post offices, etc. There also is a significant challenge in adequately planning and financing the use of ICT in development programs.

Africa has an overwhelming need to develop its communications infrastructure and increase broadband access. Cross-border links and rural connectivity need to be vastly expanded in parallel with the deployment of applications to take advantage of connectivity for productive use. Broadband-enabled services have the potential to create economic and empowerment opportunities and improve the quality of life of millions of people across the continent. Indeed, some of the applications that are having the greatest impact on people and businesses are closely linked to broadband penetration.

Recent use of information and communication technologies (ICTs) in support of terrorism attacks throughout Africa introduces an additional dimension to the cyber-security issue. Securing the cyberspace has become a priority in national security. Consequently, Africa needs to build confidence and security in the use of ICT resources at the national and regional levels and to protect the fundamental rights of the users including their data privacy and free access to information. Most of the African countries have not been able to put in place the necessary security measures and institutions to protect users in the cyberspace due to lack of finance and awareness.

3. Overview of ECA's key activities

3.1 Regional Review Meeting – WSIS+10 and Beyond: Outcomes and Perspectives for Africa

ECA organized the Regional Review Meeting on 'WSIS+10 and Beyond: Outcomes and Perspectives for Africa' from 14 to 16 April 2015. Over 70 participants attended the Regional Review Meeting that discussed the report of the 'Ten years Review of the Implementation of the World Summit on the Information Society (WSIS) Outcomes in Africa' prepared by ECA. This regional review provided an opportunity to assess progress made in the region and identified challenges and opportunities going forward especially in the context of the African Union's Agenda 2063 and the UN post-2015 development agenda and Sustainable Development Goals. It also discussed the findings of country studies commissioned by ECA in four African countries -Cameroon, Ghana, South Africa and Tunisia. In addition, the meeting was also enriched by presentations by a number of participating countries, RECs and UN agencies and other international agencies.

The Regional Review Meeting identified key challenges, priorities and lessons in the implementation of the WSIS action lines and recommendations. Overall the continent has made significant progress particularly in enhancing access to and use of ICT. While the meeting recognized the relevance and validity of the existing action lines in the post-2015 era; it also identified new targets that are key to Africa's transformation agenda.

3.2 The Fourth African Internet Governance Forum (AfIGF)

The fourth African Internet Governance Forum (AfIGF) held from 6 to 8 September 2015 in Addis Ababa, Ethiopia, was one of the major events that ECA and the African Union Commission jointly organized. The event attracted over 150 people from all stakeholder groups (government, civil society, private sector, academia, research institutions, international organizations and the technical community) from over 41 countries. Among others, the Forum made several recommendations on Internet Governance in general and discussed and provided comments on the WSIS non-paper in depth. In the meantime, it called upon the AU Commission and ECA to create an African Internet Development Governance Observatory and put in place mechanisms to track and follow-up recommendations from the regional and global IGF and to provide periodic reports to member States. The Forum assessed the key thematic areas of the IGF 2015 in the context of Africa and discussed particular issues for the continent.

The Forum requested the secretariat to continue to promote the region's perspectives on issues coordinated under the Partnership and recommended that the secretariat step up its efforts within the Partnership, notably by contributing analytical work on defining indicators in emerging areas of interest to the region

3.3 ICT Measurement

Within the Partnership on Measuring ICT for Development, in collaboration with International Telecommunication Union (ITU) and with the support of the Democratic Republic of Ethiopia, the ITU Regional Forum and Training Workshop on Telecommunications/ ICT Indicators and Measurement for Africa- (English Speaking) was successfully held from 2 to 30 October 2015 Addis Ababa. The objective of the Forum was to strengthen the capacity of countries in the region to produce national indicators and statistics on telecommunication/ICT, based on internationally agreed standards and methodologies. The workshop guided Member states on the methodologies and parameters used in the ICT Development Index (IDI), ICT e-government indicators and ICT price basket as well as defining a framework of Regional coordination and the development of knowledge and information sharing platforms.

3.4 Partnership for Innovation and Technological Capacity Building for the Least Developed Countries of Africa

Access to scientific research and information is a priority within WSIS action line (C3): Access to information and knowledge. In this regard, ECA The United Nations Economic Commission for Africa (ECA) and the World Intellectual Property Organization (WIPO) organized a meeting on the 26th and 27th of October, 2015 in Addis Ababa. The meeting provided an opportunity to discuss the importance of using scientific and technical information that can be found in patent documents and scientific journals in national development endeavors. The meeting examined how LDCs can build their innovation and technological capacity through greater access to and use of patent information systems and

other databases containing technical and scientific knowledge. The meeting also highlighted the importance of global and regional cooperation as well as nationally focused initiatives of UN organizations to provide need-based and development oriented assistance suitable for strengthening innovation and creativity in the LDCs.

3.5 Youth and Innovation

Within the context of the Post 2015 Development Agenda, ECA created an online Community of Practice that conducted a moderated dialogue in English and French over a period of four weeks. The online dialogue identified strategies that could unlock the potential of young people to innovate in various sectors, including the creative industries, ICT applications, housing, tourism, etc. The outcome of the work has already informed one publication title?.

3.6 Innovation Schools Programme

In a bid to build the capacity of member States to meet their healthcare and industrial development, ECA initiated the Initiative “Engineering Expertise to Improve Health Outcomes in Africa.” The initiative aims to help countries build the necessary skills to install, repair, maintain and upgrade medical devices, attract female students to engineering and instill enhanced entrepreneurial and innovation competencies to bring medical devices to the market. In order to meet these objectives by 2015, a generic Biomedical Engineering (BME) curriculum has been developed and adopted, 11 universities and 10 partners and support institutions from Africa, Europe and the United States are involved and about 220 students are currently enrolled in the BME programme, 33 students have already graduated from the programme. In Uganda, all the students were employed by hospitals or formed their own private firm offering services to hospitals, designing simple medical devices and partnering with top developed country suppliers to enter Congo and Tanzania markets. In Malawi, working with partners in the United States, two medical devices have entered into service and won several global innovation awards. Our partners have been key in helping Kenya ensure that the top firms (i.e. GE and Phillips) that have been contracted to supply equipment to hospitals partner with local universities to build the capacity to use, maintain and upgrade the new equipment.

3.7 Support to African Union Commission

- a) ECA provided substantive support to the organization of the first specialized technical Committee (STC) on Communication and ICT (CCICT), which was held in Addis Ababa, Ethiopia from 31 August to 2 September 2015. The Specialized Technical Committees (STCs), which constitute an important technical organ of the African Union (AU), are expected to work in close collaboration with the various departments of the AU Commission (AUC) and should also be involved in monitoring ICT programme development and implementation by the AUC and Regional Economic Communities (RECs).

- b) ECA provided substantive support to the ICT Ministerial Conference held in Addis Ababa, Federal Democratic Republic of Ethiopia, from 3 to 4 September 2015. The Summit adopted a Declaration related to future ICT4D activities on the continent.

4. Way forward in the context of post-2015 WSIS agenda

The landscape has changed considerably in the last ten years. There has been a general improvement in economic and social conditions in Africa over the ten year period. The continent is focused not on recovery but on structural transformation. It has set out its goals and objectives in two important framework documents: The Common African Position (CAP) on the Post-2015 Development Agenda and, The Africa - We Want: AU Agenda 2063 for the structural transformation of Africa. Both documents affirm the acceleration of Africa's infrastructure development, including ICT, as a pivot for development. With that in view, technology and innovation are identified as key means of achieving Africa's transformation agenda. To succeed, the transformation effort will rely on ICT to address and overcome emerging issues/challenges and collect, analyze, and deploy data and information.

Most of the WSIS eleven Action lines and targets remain relevant today and should be retained in a post-2015 WSIS framework. However, based on the imperatives of Africa, the Review proposed that a post-2015 Information Society framework should include four (4) additional action lines drawn from Africa's experience. These are:

- i) **Technology and innovation:** The direct linkages of the WSIS Action Lines with the proposed SDGs to continue strengthening the impact of Information and Communication Technologies (ICTs) for sustainable development. For Africa, experiences stress the need for a diverse and sustainable ICT ecosystem across all sectors (health, education, security, justice, waste etc.). This can only be achieved by integrating or mainstreaming ICTs in all development sectors through technology and innovation. Key priorities include: promoting the transfer of Information Society technology to developing countries through, for example, the creation of an Information Society Technology Bank for developing countries; building technology capacity in research and development at national, regional and continental levels; intellectual property rights; and encouraging innovation through youth as the most reliable vehicle for the transfer of Information Society technology to poor countries.
- ii) **Financing and resource mobilization:** The rapid pace of technological change and the associated rapid pace of technological obsolescence in the sector is very costly and imposing enormous additional financing costs on resources poor countries. There is a need to put in place an adequate mechanism for resource mobilization. Priorities include countries and stakeholders should mobilize additional resources to finance their ICT infrastructure projects; and development finance institutions with

a special technology lending instrument to enable poor countries obtain loans to finance their ICT infrastructure at concessional rates.

- iii) **Statistics and measuring ICT4D:** Recognizing the value of the Partnership on Measuring ICT for Development, in particular in setting statistical standards for timely, relevant and accurate ICT indicators, there is a need for an elaborate and all-inclusive monitoring and evaluation ICT framework and complete ICT statistics. Priorities include to promote and implement the data revolution in ICT/Information Society and enhance the capacity of States to collect Information Society at all levels namely, national, and regional, continental and global
- iv) **Peace and Security:** There is tension between Information Society objectives and peace and security. The Internet and the World Wide Web have been used for activities that threaten national peace and security in a number of African countries. Security threats also make the construction of inter-country terrestrial fiber optic cable infrastructure unattractive to governments and the private sector.

With these key areas highlighted as new action lines that need to be considered in the post-2015 WSIS, stakeholders have also identified key priorities within the framework of the existing WSIS Action Lines that the continent need to focus on and strengthen its implementation.