

**UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY
FOR DEVELOPMENT (CSTD)**

**Contribution to the CSTD ten-year review of the implementation of WSIS
outcomes**

Submitted by

EGYPT

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Egypt's input on CSTD questionnaire on progress made in the implementation of WSIS outcomes

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6. Which stakeholder category do you belong to?

Government

7. To what extent, in your experience, has the "people-centred, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed in the ten years since WSIS?

The focus on the people-centred, inclusive and development oriented Information Society was traced in the work exerted by governments and all stakeholders in areas such as providing an enabling environment to develop the Information Society. This is in addition to finding it in areas such as

providing access to marginalized areas and groups including people with disabilities. More elaboration on this is under question 9.

8. How far do you consider the implementation of specific WSIS outcomes to have been achieved?

Some of the WSIS outcomes have been achieved in light of what has been stated in WSIS Plan of Action and Tunis Agenda. however, and due to the rapid developments in technology and innovation some other outcomes were not fully achieved.

We can say that by different means the outcomes or WSIS - Geneva phase targets mentioned in the different action lines have been achieved, where many countries have supported an enabling and competitive environment for ICT development. This includes:

- Universal access policies and strategies
- ICT Connectivity in public institutions
- ICT backbones and broadband infrastructure
- Accessibility and affordability for marginalized groups

The above was achieved through the adoption of a number of mechanisms to promote the usage of ICT:

- Holistic approach to ICT development that is:
- Based on relevant expertise
- Targeting actual needs
- Utilizing available resources
- Broad cooperation and partnerships with relevant stakeholders:
- Open consultations
- Multistakeholder committees
- Public private partnerships
- Innovation and industry development

In addition, issues related to developing different kind of e- applications have been developed and achieved, through adopting different national and regional policies.

Furthermore, fostering an enabling policy that encompasses both the legal and regulatory framework was created through:

- National strategies to enhance transparency and efficiency
- Consumer Protection
- Investment promotion

One of the central pillars of the Information Society (IS) is capacity building. Without providing people with the essential knowledge to work for an IS we would be unable to create one. In this regard, many countries have promoted further cooperation between international and regional communities in order to ensure the creation of a sustainable capacity building program.

It is worth-mentioning that the different roles of stakeholders and governments are essential and vital to the development and promotion of ICT and the Information Society. Both the Geneva Summit and the Tunis Commitment stipulate that the government takes a responsible role in developing ICT and to lean on the inclusion of the stakeholders as much as possible towards ICT development. In this context, we see the development of the multistakeholderism principle as one of the most important achievements of the WSIS outcomes implementation.

International and regional cooperation was essential in implementing commonly beneficial international projects. It was notable as well that developed countries assisted developing countries with ICT programs; a process that is much more needed in the future with a focus on national action plans that would fulfill the goals of developing nations.

On another note, when it comes to Tunis Commitments where the focus was on establishing the Internet Governance Forum and enhancing cooperation in Internet Public Policy Issues, we see that IGF mandate has been achieved and is to be encouraged for continuity and extension with more improvements that include the importance of coming up with concrete outcomes. As for “enhanced cooperation”, it was implemented as a concept but needs further developments. We see that in spite of the delayed progress in tackling the issue of “enhanced cooperation”, however the latest developments are inaugural of more to come. Hence, any future discussion should involve all relevant stakeholders.

9. How has the implementation of WSIS outcomes contributed towards the development of a "people-centred, inclusive and development-oriented Information Society"?

Inclusion is a key factor in the development of ICT. Inclusion means that the benefit from ICT development be directed to various segments of the society. This includes and is not limited to youth, women, poor, persons with disabilities and indigenous peoples but also people in marginalized areas.

Youth are igniting societies with their enthusiasm, creativity and forward looking. If there will be a group to think outside any box, it should be youth. In addition, the largest segment of ICT users in any given community is formed of youth. Hence, there was a focus on developing youth capabilities through means of ICTs in various domains, including education, health, and environment. This is in addition to efforts exerted to provide them with easy access to ICTs to enable them to get oriented to the world of economy and business, and hence enable them for better job creation and employment. In addition, ICT facilitated youth contribution in policy making and public governance. This meant that ICT can play the role of reducing the gap between public governance and young citizens.

Women do not only comprise half of any given society, but they are as well a driving force on many levels. Enabling them has been in favor of the development of large segments of the society and the community at large. Women, if educated, they will facilitate the education of a whole nation. Hence, there were efforts to address women issues through ICTs, through involving them in ICT training and raising awareness. Capacity Building was geared towards catering for their daily lives and concerns, like access to health care, exercise of legal rights and participation in government. ICTs as an enabler has helped women to develop their economic profiles, and hence their gender equality, self-independence and self-realization.

Poverty is not only lack of money, but in the first place lack of resources and access to knowledge and eventually to development. ICTs have proved to be a source for developing economies and societies. Sustainable access to information and services has enhanced peoples' capabilities, especially in remote and under-served areas, providing an equal opportunity to benefit from the knowledge society, starting with education to services and of course to business opportunities.

The benefits of ICTs to people with disabilities is considered as an important outcome to be built upon in the future, in order to better include them in their societies and help them to interact, and provide them with new employment and socialization opportunities.

10. What are the challenges to the implementation of WSIS outcomes? What are the challenges that have inhibited the emergence of a "people-centred, inclusive and development-oriented Information Society"?

There is a need to:

- Develop Innovation and Entrepreneurship Programs that provide funding, mentorship and knowledge, and moreover helps in promoting and supporting social entrepreneurship for the aim of creating solutions for social, economic and environmental challenges.
- ICT Research and Development Centers of Excellence are virtual or physical centers of sustained distinction in research in key areas that have the potential to increase the country's capacity in highly qualified human resources. The purpose of these centers is to provide a platform for research and development (R&D) by concerned experts in their respective fields of specialization.
- The need to develop a strategy for parliaments to utilize the ICT tools in the parliamentary proceedings.
- The digital Identity management is a one of the issues that should be considered and held by the governments to ensure the achievement of the Information Society target.
- Recognize the importance of cloud computing in the international ICT arena by exerting the needed efforts in this field and the related areas of data centers, integrated solutions and Web 2.0 technologies.
- Develop a convergence strategy between broadcasting and mobile services by having new technological and regulatory approaches.
- The transition from analogue to digital terrestrial broadcasting will be essential to benefit consumers by having more choices and quality in television services, and also to free up radio spectrum for new services.

The needs of the developing countries should be considered in this aspect.

- Develop new technologies and standards to lower the cost of broadband backbone infrastructure.
- There is a need to develop new business models and finance arrangements for funding broadband backbone development, which is vital for enhancing the investment opportunities in this field, especially in the developing countries and rural areas.
- Assure the gender aspect by providing women the access to information, research, databases, legislation, and career and business opportunities.
- Consider Open Source Software for facilitating access, and develop the need procedures in this regard.
- Promote the utilization of the embedded software system for training and education.
- Support the local content and software industry for the use of ICT in the training and education systems, to be in accordance with the national culture and respecting the linguistic aspect of each state.
- Develop an e-skilling impact assessment framework, with clear indicators that are relevant and acceptable.
- Enable policies for M-learning, taking into consideration the need to provide professional development to teachers on using mobile technologies to support teaching and learning; acquiring more affordable and relevant devices, content and connectivity, including smart phones, notepads, tablets and integrated digital textbooks; creating an ecosystem for the safe use of mobile technologies for education; encouraging private-public partnerships to popularize and roll out m-learning initiatives; and the new to assure the importance of research in the area of m-learning.
- Promote the use of e-signature methods, with enhancing the confidence and security in using such technology, which could be done through adopting efficient legislations and using different mechanisms as

developing USB-based authentication token for multiple applications and network services.

- Develop an effective and efficient equipment certification process and ensure adherence to global standards benefits both the industry and users, as it protects the integrity of the telecom networks, guarantees that consumers get standard equipments that works and prevents frequency spectrum interferences.
- Facilitate the introduction and expansion of electronic transactions over the Internet and the development of efficient security systems in this regard.
- Raise awareness on the IPR and related rights.
- Encourage educational and training institutes to develop related programs on cyber security to ensure the availability of qualified human resources.
- Develop policies to guide child online protection.
- Adopt a strict hierarchical architecture for the public key infrastructure (PKI) set up as it is becoming central to efforts to protect digital identity for individuals and organizations, enabling advanced e-business, e-government and e-commerce activities.
- Support the establishment of national and regional Computer Emergency Response Teams (CERTs), which provide support to various entities in the ICT, banking and government sectors, helping them tackle cyber security threats. This should be considered especially with developing countries.
- Cooperate with the business sector, such as manufacturers and operators, to pave the way toward the achievement of the “security by design” concept, where devices and products contain standard security features to reduce the exploitation of vulnerabilities.
- Promote the use of e-signature methods by enhancing the confidence and security in using such technology, which could be done through adopting efficient legislations and using different mechanisms.

- Enhance the local content industry with respect to the cultural diversity among and within countries.
- Encourage the development and the establishment of domain names in different languages to meet the multilingualism aspect.
- Encourage the use of Social media and new networks by developing its use in different languages.
- Support the growth of converged media industries and the applications that will devolve from it.
- Encourage the heavy investments in telecommunications and IT infrastructure and looking particularly closely at the potential that broadband connectivity presents to deliver media content that has been traditionally delivered through terrestrial and satellite broadcasting.
- The delivery of the content over electronic networks could be the catalyst needed for stimulating demand for communications as well as media services.
- Address freedom of expression and privacy protection on internet in formulating an inclusive information society.
- Optimizing the role of traditional media, such as public service broadcasters and community radios, by embracing new media platforms and user-generated content in the emerged Internet era.
- Develop policies and strategies for the increasing role of media and Internet/mobile and digital platform.
- Continue the ongoing Multistakeholder consultative and participatory process and formulate a coordinated strategy with stakeholders, including UN agencies.
- Promote the gender equality in using ICT by empowering women especially
- Using the new social media mechanisms to communicate with citizens where Government officials could have social media accounts which will achieve political and economic inclusiveness, in addition to realizing

basic human rights, and Protection of the rule of law, accountability and transparency.

- Promoting inclusiveness & diversity through establishing social media with local content and applications.
- Promote user-driven models that provide better alternatives than consumer-driven and regulatory focused approaches to understanding the drivers of social change and ethical behavior on-line amongst individual and groups.
- Promoting the rights to communications as a main pillar of the basic human rights in the emerging Information Society.
- Preserving the Communications rights which enable the citizens to use the ICT tools with respect to the ethical and legal frames in accordance to the cultural, religious bases of the society subject to national laws.
- Regional and International Cooperation among the different stakeholders on the newly emerging communications.
- Promote Programs and Projects working on utilizing ICT indicators.
- Enhance the cooperation on the related programs on the utilization of ICT tools for enabling Gender equality, disabilities and indigenous groups.
- Developing e-strategy development; access to and use of ICT in developing countries; enabling environment and measuring ICT for development with focus on e-government indicators development worldwide.
- Creating ICT-based services using mobile communications services.

11. How are these challenges being addressed? What approaches have proved to be effective in your experience?

Challenges have been addressed by a holistic approach to ICT development that is:

- Based on relevant expertise
- Targeting actual needs

- Utilizing available resources
- Broad cooperation and partnerships with relevant stakeholders:
- Open consultations
- Multistakeholder committees
- Public private partnerships
- Innovation and industry development

12. What do you consider the most important emerging trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit? What has been their impact?

- Cloud Computing: The cloud computing has been one of the emerging issues in the ICT sector. The development of this technology introduced the need for advanced infrastructure that could support it. Moreover, countries should adopt related policies.
- Open Source
- Social Networking: The social networks have become one of the main mechanisms that reflect the wide usage of ICT tools and the expansion of Internet utilization. This comes in line with assuring the main rights of access and freedom of expression. Social networks have become a new alternate for media, becoming a main source of information and interaction. Furthermore, social networks have relevance to promoting the principal of ICT for Democracy, through providing virtual citizenship and creating a platform for common discussions and interaction among citizens within and across borders. This is in addition to the tendency of governments and officials to use such tools for the interaction with the citizens.

13. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account emerging trends?

- Broadband Development: The broadband has become a vital source for the usage of different actors either on the level of citizens, or on the level of other stakeholders as governments, private sector, civil society, academia, and international organizations. The development of an advanced broadband network will support the economic growth of the country and facilitate the utilization of ICT tools by citizens. This process

urges high investment in the infrastructure for establishment of broadband networks. The investment opportunities are one of the main obstacles that face the developing countries due to the challenge of raising funds in this regard. Countries need to develop relevant strategies and policies that could meet the new developments that occur in the broadband networks in order to expand the benefits on all society sectors and different stakeholders.

- Content Industry: This is one of the main pillars for promoting the Information Society, especially in developing countries. There is a need to develop the content industry to meet the diversity in cultural and religious aspects, and be in accordance with the WSIS target to assure the multilingualism aspect. The development of this industry will enhance access and inclusiveness of different societies and groups, especially in rural areas and for the benefit of indigenous people. Content should also be developed in a way that could meet the needs of people with disabilities. A related aspect for the content industry is the development of ICT applications that could be relative to cultural diversity. Moreover, there should be support for adopting the use of Internet domain with local languages.

14. What role should information and communications play in the implementation of the post-2015 development agenda?

We recognize that establishing the international agenda for ICT and development beyond 2015 involves a number of challenges. When the international community began working to set the WSIS agenda back in 2000, The potential of ICTs was largely untapped. Around the world, societies, governments and most economic sectors were only beginning to explore how technologies could enhance communication, participation and creativity and improve operations and productivity. Today, this agenda involves not only actors in the ICT sector, but also stakeholders from all other sectors, which have become owners, users and beneficiaries of ICTs. As such, the agenda needs to address the wider set of demands and needs of an information society growing in both size and diversity.

We will focus on three main issues that we deem particularly important and consider as being the key for achieving any ICT sustainable development.

We believe that Access should remain the first priority on our discussion table. There are still several impediments to affordability that prevent many countries from joining many ICT events even remotely. It is noticeable that the current distribution of access to the Internet needs to be readdressed, especially with regard to the developing world.

Mobile subscribers in the developed world have reached a saturation point with at least one cell phone subscription per person. This means market growth is being driven by the demand of the developing world, led by rapid mobile adoption in China and India, the world's most populous nations.

In addition, there is a need to give special attention to Mobile applications as they are probably the main tool of ICTs that would serve the next billion users. More studies about their market, impact and how best to exploit them in developmental purposes is certainly needed led by a long term vision and clear legal framework. Appropriate tools and applications need to be developed so that all segments of society regardless of social classes, gender, geographical or age distribution can benefit from Internet services. National broadband and introducing WiFi hotspots in public areas, as well as promoting WiMAX deployment and promoting wireless LANs in residential areas are key among the options to solve access concerns.

Encouraging the development of content is also important including putting in place technical conditions in order to facilitate the presence and use of all world languages on the Internet.

- The Internet is a viable tool that could be utilized in reaching out for rural and remote areas, providing them with the kind of information and support they need.
- Nevertheless, the absence of localized content stands as an obstacle in that regard. The African Continent for instance is very rich in cultural and natural heritage. However, there is a need to see enough African local content online. Egypt believes that it is our clear responsibility together to further dig into current mechanisms and propose creative models to address policies that encourage the creation of multilingual content and Internationalized Domain Names (IDNs).
- Also, we still need more to do with regard to the content industry itself and again the connectivity issue whether through encouraging the creation of national or regional IXPs.

The development of legal and regulatory frameworks for the information society remains a challenge in many countries. In this context, work is required to promote the adoption of frameworks that relate not only to the ICT sector, but also to all areas and instruments involving ICTs.

15. Please add any other comments that you wish to make on the subject of the review that you believe would be helpful.

16. We would also welcome any documents, reports, etc. that you can forward which you think will provide useful evidence for the review. Please send these to cstd-wsis10@unctad.org. It would be helpful if you could list these in this box, together with any URL which enables access to them on the World Wide Web.

http://www.mcit.gov.eg/Upcont/Documents/WSIS_Country_Report_Final.pdf

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