UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

Report by UNESCO on its role and activities in implementing the WSIS outcomes (2011)

Contribution to the Report for the Commission of Science and Technology for Development (CSTD)

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Communication and Information Sector
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**Part I: Executive Summary**

UNESCO acknowledges the crucial role of the information and communication technologies (ICTs) in creating activities that will expand access to knowledge, contribute to achieving Internationally Agreed Development Goals, and in assisting to bridge the digital and knowledge divides, which encompass more than technology challenges only.

By using its convening power and enhancing private and public partnerships, UNESCO successfully mobilized multiple stakeholders – including government, the private sector, civil society, academics, ICT practitioners, local authority, university, research institutions – to advance the overarching goal of building inclusive Knowledge Societies. UNESCO has also conducted a research on the status of ICT use for its programmes and activities in 2010 and 2011 towards meeting the WSIS goals. That exercise showed that more than 600 activities have ICT dimensions which contributed to the WSIS outcomes implementation.

This report presents UNESCO facilitated activities that have contributed to the advancement of the WSIS goals and highlights key achievement made in the implementation of the six WSIS Action Lines (C3 Access, C7 E-learning and E-science, C8 Cultural and linguistic diversity, C9 Media and C10 Ethical dimension of the Information Society), for which UNESCO is the lead facilitator.
Part II: Brief analytical overview

UNESCO notices with satisfaction that the openness and inclusiveness of the WSIS process was further enhanced in 2011 with the establishment of an open consultation practice and the extensive use of online means of communications, which significantly facilitated the remote participation of all stakeholders including from developing and least developed countries. UNESCO, together with ITU, UNDP and UNCTAD, undertook two successful consultation processes this year: the WSIS Forum and the 2015 UNGA WSIS review. UNESCO's online platform WSIS KC – Knowledge Communities (wsis-community.org) played an important role in these developments. Thanks to its thematic communities (open educational resources, open access, FOSS), WSIS KC membership grew fourfold with at present some 2800 members, and succeeded to involve non-traditional WSIS stakeholders in the consultation process. That stimulated interactions and introduced new dynamics to WSIS discussions.

As underlined several times by stakeholders, UNESCO also acknowledges the importance of involving new stakeholders in particular development communities. ICTs should be the integral component of development mechanisms and strategies, and recognized as key enablers for empowering people, delivering quality education, preserving cultural and linguistic diversity and fostering pluralistic, free and independent media. In this regard, the UN Group on the Information Society (UNGIS) made significant progress in 2011. By organizing a special event at the 4th UN LDC Conference held in Istanbul, UNGIS advocated for the judicious use of ICTs for development. UNGIS also developed a strategy paper to better coordinate ICT initiatives of its 29 member agencies. Using its wide network, knowledge and expertise, UNGIS should continue facilitating access to and use of new and emerging technologies for developing countries, promoting transfer of technology and mainstreaming science, technology and innovation policies, including ICTs, into national development policies and poverty reduction strategies in accordance with the priorities of countries.

The Broadband Commission for Digital Development launched by ITU and UNESCO in 2010 continued its work in 2011. This is one of successful examples of WSIS partnerships. UNESCO hosted the Working Groups on Education and Multilingualism of Broadband Commission on 5 June and the third meeting of the Broadband Commission in its HQ in Paris on 06 June. Through the events and follow-up activities, UNESCO has been working with other international organizations and private sector companies to promote cross-sector cooperation in using ICTs to provide education to the un-reached group and empower girls and women especially in LDCs.
Part III: Description of programmes and activities undertaken

Coordination of the WSIS outcomes implementation

Together with ITU and UNDP, UNESCO is designated as leading agency for the WSIS global implementation process.

Co-organization of the WSIS Forum 2011 and co-charing the UN Group on the Information Society (UNGIS)

UNESCO co-organized, along with ITU, UNCTAD and UNDP, the WSIS Forum 2011, held from 16 to 20 May in Geneva, Switzerland. This event attracted over 1000 participants and provided a great networking and knowledge sharing opportunity for WSIS stakeholders. Under UNESCO's chairmanship, UNGIS mainstreamed ICT potential for development within the UN system by organizing the special event “Harnessing ICTs for Development: opportunities and challenges” at the 4th UN Conference on the Least Development Countries held on 12 May. Within the framework of the UNGIS joint initiative, UNESCO, in cooperation with UNECA and UNCTAD, led a survey on UN practices for Open Access and received responses from 11 agencies. Aiming to enhance UNGIS’s strategic value, a strategic paper was developed and presented at the UNGIS annual meeting on 16 May where UNESCO handed over the chairmanship to ITU.

WSIS KC- Knowledge Communities

Aiming to facilitate networking and interactions among stakeholders, UNESCO’s WSIS KC – Knowledge Community (www.wsis-community.org) has increased its members by more than 400% with some 2800 members since its creation in 2009. In 2011, UNESCO improved its function by introducing new features such as 'oxford style' debate and video, and by making the interface also available not only in English, French and Spanish but also in Portuguese and Chinese. The WSIS KC hosted two open consultations to facilitate dialogues between UN and other stakeholders on the thematic focus of the WSIS Forum and the preparatory process towards the 2015 UNGA review. New communities on “FOSS and Gender” and “Open Access” were created.

Facilitation of the WSIS outcomes implementation

UNESCO’s designated as lead facilitation agency for six WSIS Action Lines.

WSIS Forum 2011

Bringing together representatives of international organizations, academia, public-private partners, UNESCO organized a High Level Dialogue on “Rights to Communication” and facilitated following Action Line Meetings at the WSIS Forum 2011:

- C3 & C7: “Open Access to Scientific Knowledge” discussed OA policies and strategies targeted to different stakeholders.
- C3: ”Access to Information and Knowledge for Persons with Disabilities” explored existing and potential usage of ICTs to improve access by persons with disabilities to encourage their participation in social, economic and political life.
- C7: ”Teachers Count” discussed teacher's role in e-learning.
- C8: "Indigenous Peoples, Education and ICTs" focused on the theme of promoting indigenous education and intergenerational transmission of indigenous knowledge.
• C9: “Media Regulation on Broadcasting and Social Media” explored various guidelines and media regulation frameworks of broadcasters, particularly public service broadcasting, and the emerging social network platforms.

• C10: “Cyber and Information Ethics: Freedom & Security, Privacy, Malice & Harm, Property” provided an opportunity to examine some aspects, that underlie phenomena such as social media, crowd-sourcing and the design of information system which may impede the creation of just, peaceful, inclusive societies and the full expression of human rights.

Implementation of the WSIS outcomes

UNESCO’s implementation gives high priority to fostering participation and inclusion of multiple stakeholders.

Contribution to the Internet Governance

• The UNESCO General Conference adopted at its 36th session, in November 2011, the “Reflection by UNESCO on the Internet” item, which delineates the Organization-wide approach to the Internet and its future development in the framework of UNESCO’s mandate in Culture, Education, Sciences and Communication.

• At the sixth Internet Governance Forum (IGF) held in Kenya, UNESCO organized the following workshops in cooperation with other key stakeholders including OECD, ISOC and the Economic Commission for Africa:
  o "Free flow of information and social networks: a role for democracy and social participation": It discussed the important role of social networks in promoting democracy and social participation, and explored how to strengthen this role by fostering free flow of information on Internet.
  o "Economic Aspects of Local Content Creation and Local Internet Infrastructure": Internet Society (ISOC), the Organization for Economic Co-operation and Development (OECD) and UNESCO presented the joint research study “The Relationship between Local Content, Internet Development and Access Prices”.
  o "Addressing some unintended consequences of participation in the digital environment": UNESCO and UNECA convened a panel of practitioners, researchers and policy-makers working on ICT for Development issues in Africa to explore some of the unintended consequences of efforts to increase Africa’s participation in the digital world.

Contribution to the WSIS Target (G) e-learning

• The UNESCO Institute for Statistics (UIS) is one of the twelve members of the multi-stakeholder Partnership on Measuring ICT for Development. Within the Partnership, UIS has led the task force that developed the core indicators on ICT in education.

• Between late 2010 and March 2011, the UNESCO’s Institute of Statistics (UIS) conducted a region-wide data collection exercise on the use of ICT in education in all countries of the Latin American and the Caribbean (LAC) region. This initiative aimed at generating core ICT in education indicators to monitor related WSIS targets as well as contributing to statistical requirements of a regional ICT4D policy platform. The questionnaire was successfully completed by 38 out of 40 countries. The UIS plans are to extend its regional rollout strategy to Asia and the Pacific in 2012.

Contribution to the Action Line C3: access to information and knowledge

• Most of digital documents produced globally are not designed inclusively. This presents significant barriers to education, employment, culture, social exchange and civic engagement for an ever-increasing contingent of the world population with disabilities. UNESCO, together with the Inclusive Design Institute and Ontario Ministry of Social Services and Community (Canada), contributed to the development of the guidelines for inclusive access to digital office documents.
A regional dialogue on Open Access (OA) was also organized in New Delhi on 16 March to facilitate the development of better understanding about OA, and proceed towards policy development. The Global Open Access Portal (GOAP) covering information on the status of OA in UNESCO Member States was launched on 1 November. The GOAP currently has information from over 148 Member States, and shall be continuously updated to serve as a clearinghouse of information on OA.

As for the promotion of free and open source software (FOSS), UNESCO has conducted a research on FOSS in education deployments within primary and secondary school systems in Africa: the findings will be published in 2012.

Awareness on the use of Open technologies for improving Higher Education systems has been raised through the "Open Learning Centre Initiative". The first pilot project was launched in Tanzania closely involving the Ministries of Education and Information technologies and local stakeholders, namely the Dar-es-Salaam University.

The use of Open Technologies and standards in ICT accessibility has been explored through assessments of best practices in 5 regions: a global report including recommendations will be issued in 2012.

UNESCO has conducted the restructuring of the Open Training Platform (OTP). Launched in November 2011, a new website has been produced and most of the content (3500 resources) revised. Thanks to the OTP, more than 120 thousand visitors/year have accessed training and learning resources.

Contribution to the Action Line C7: e-Science

UNESCO has implemented programmes to assist Member States in establishing normative, strategic and operational frameworks for E-science. UNESCO's E-science programme has helped in enhancing and optimizing utilization of resources and maximizing the quality and efficiency of learning process, systems and activities.

The UNESCO Institute of Statistics is implementing a worldwide consultation on science, technology and innovation (STI) statistics and indicators. Extent of use and promotion of ICTs in science serves as one of the key indicators being considered.

Science policy support carried out in Africa and in Latin America (especially in the MERCOSUR region) promotes ICT use for the creation of scientific knowledge and to enrich teaching and learning experiences in science. The project initiated through complimentary efforts of the African Union Commission, the European Union and UNESCO continues to use ICTs to create science awareness and to train teachers of science, engineering and technology.

The Avicenna Virtual Campus is strengthening teaching capabilities of Science teachers in Arab states, including Iraq. An extension of this e-learning initiative, the African Virtual Campus has been launched in West African countries.

Strengthening knowledge creation and dissemination of key accumulated experience is another key area of e-Science operation. UNESCO has partnered with the Secretariat of the Convention on Biological Diversity, the Secretariat of the UN Permanent Forum on Indigenous Issues and the Office of the High Commissioner of Human Rights to create a Climate Frontline initiative, which provides a moderated, multilingual online forum for small island communities and indigenous peoples on climate change adaptation.
UNESCO’s International Oceanographic Commission supports Member States in assessing tsunami risk, implementing Tsunami Early Warning Systems (EWS) and in educating communities at risk about preparedness measures.

Within the framework of IHP’s Global Network on "Water and Development Information for arid lands" (G-WADI), Geoserver system has been developed with several online data access and visualization tools. G-WADI geoserver data was used to analyze floods in Namibia.

Contribution to the Action Line C7: e-learning

In cooperation with experts of Jordan, Namibia, Rwanda, Singapore, and Uruguay, UNESCO published case studies on e-learning policies entitled Transforming Education: The Power of ICT Policies to facilitate the North-South knowledge sharing on e-learning policy development.

Based on the publication, and in cooperation with the Government of Uruguay, UNESCO convened an International Workshop on ICT Policies for Policy Makers. In response to the request from Member States, UNESCO organized national workshops on the development of National ICT in Education Policies for 30 Ministry of Education (MOE) officials from Antigua, Maldives, Trinidad and Tobago.

In cooperation with the World Bank, two regional learning events on ICT in Education were organized for the ten English-speaking Caribbean Countries. The sector-wide ICT in education policies were either developed or updated. In cooperation with Intel, the second Asia-Pacific Regional Ministerial Forums on ICT in Education was convened, about 10 (Vice-) Ministers of Education and another 30 MOE officials were brought together to discuss how to make e-learning effective and safe for students.

On 31 October 2011, UNESCO launched the ICT Competency Framework for Teachers Version 2.0 which aims to support national teacher ICT competency policies and standards. ICT-CFT was developed in partnership with civil society and private sector companies, This is part of UNESCO’s overall strategy to support teachers in becoming qualified e-learning facilitators.

UNESCO, in cooperation with the Talal Abu-Ghazaleh Organization (TAGorg), has undertaken a study of ICT Indicators for Education in the Arab States region in Bahrain, Egypt, Jordan, Oman, the Palestinian Authority, Qatar and the United Arab Emirates.

UNESCO launched the UNESCO Open Educational Resources (OER) Platform and the UNESCO/COL OER Guidelines for Higher Education at the 36th UNESCO General Conference. These tools aim to facilitate and mainstream the use of OER by the education community.

Working with Nokia and the US government, UNESCO launched three mobile learning projects: Mobile Technologies for Literacy Education, the Development of Policy Guideline on Mobile Learning, and on Using Mobile Technologies to Support Teaching and Teachers Development respectively.

Contribution to the Action Line C8: Cultural diversity and identity, linguistic diversity and local content

Action Line C8, is based on the shared assumption that cultural and linguistic diversity, also essential for identity, traditions and religions, are strategic to the development of a dialogue and cooperation-based sustainable information society.

The Convention for the Protection and Promotion of the Diversity of Cultural Expressions entered its operational phase, with the launching of 48 projects financed by its International Fund for Cultural Diversity. The online UNESCO’s Atlas of the World’s Languages in Danger was updated and the printed version was published in English, French and Spanish.

In the Solomon Islands, UNESCO collaborated with teachers and local communities in the Marovo Lagoon, the Solomon Islands Ministry of Education and Bergen University (Norway) in order to
strengthen transmission of local indigenous knowledge through the use of ICTs. A locally-accessible Wiki-based online educational resource was developed in the Marovo language, based on UNESCO’s Reef and Rainforest Encyclopedia of indigenous knowledge.

- UNESCO, together with OECD and ISOC, conducted a study entitled “The economic aspects of local content creation and local Internet infrastructure”. The study analyses whether the promotion of local content creation and the development of local Internet infrastructure has an impact on the access price of the Internet for local users.

**Contribution to the Action Line C9: Media**

- UNESCO worked to enhance freedom of expression and freedom of information and organized the International Symposium on Freedom of Expression at UNESCO’s HQ, 26 January 2011 and the celebration of World Press Freedom Day "21st Century Media: New Frontiers, New Barriers" (Washington, D.C., 2-3 May 2011), as well as other activities in more than 100 countries.


- To address the challenge of journalists’ safety, UNESCO initiated a joint strategy for the UN and professional stakeholders through an UN Inter-Agency meeting on the Safety of Journalists and the Issue of Impunity in September 2011 at UNESCO HQ.

- The International Programme for the Development of Communication has continued to play a prominent role in UNESCO’s efforts to develop free, independent and pluralistic media through 93 projects in more than 70 developing countries, with the allocation of some US $2.3 million in 2011.

- In response to the social upheavals in Egypt and in Tunisia, UNESCO, in collaboration with the European Broadcasting Union and France Télévisions, organized on 31 May at UNESCO HQ, an International Conference in Support of Tunisian and Egyptian Broadcast Media and carried out two rapid assessments of their respective national media landscapes based on UNESCO’s Media Development Indicators (MDIs), aimed at identifying the immediate needs of the media in the two countries.

- UNESCO’s widely-acknowledged Model Curricula for Journalism Education, available eight languages has been adapted by 63 journalism schools in 51 countries.

- UNESCO was instrumental in its action to foster media literacy and information literacy (MIL). UNESCO launched model MIL Curriculum for Teachers Trainers and set up an international network of Universities on MIL.

**Contribution to the Action Line C10: Ethical dimensions of the Information Society**

- UNESCO continues to collaborate with other stakeholders from civil society, IGO and academia and international networks of practitioners working in this field, including the Internet Society (ISOC), the Council of Europe (COE), UNESCO Chair in computer and information ethics and the International Centre for Information Ethics (ICIE).

- At the WSIS Forum, UNESCO organized “The Ethical dimensions of the information society” event under the theme of “Cyber and Information Ethics: freedom & Security, Privacy, Malice & Harm, Property”. The session generated a rich debate on the ways in which evolutions in the field of technology was contributing to dynamic societal changes not yet well understood. These interactions are changing perceptions and relationships between people and technology in far reaching and complex ways.
• Information ethics are crucial for building information and knowledge societies driven by critical reflection on values. Excellent progress continues to be made by UNESCO in its efforts to support capacity building in the area of information ethics for tertiary education institutions in Africa. An academic workshop on information ethics took place on 4 and 5 July 2011 at the University of Pretoria in South Africa. The workshop was organized by the Africa Network for Information Ethics (ANIE) with the support of UNESCO, the University of Pretoria, the University of Wisconsin Milwaukee and the South African Department of Communications.

• UNESCO’s General Conference took note of the Code of Ethics of the Information Society which was developed in the framework of the inter-governmental program Information for All (IFAP).