COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Eighteenth Session
Geneva, 4 to 8 May 2015

Submissions from entities in the United Nations system and elsewhere on their efforts in 2014 to implement the outcome of the WSIS

Submission by

Internet Society (ISOC)

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.

Flow of information of the follow-up of the World Summit on the Information Society (WSIS)

ISOC Submission to the 15th session of the CSTD (May 2015)

- 1 December 2014 -

Part One: An executive summary (1/2 page) of activities undertaken by all stakeholders, progress made, and any obstacles encountered.

A partnership approach to achieve the WSIS Objectives of Internet development
Sustainable development – smart Internet development – is all about partnerships. For more than two decades, the Internet Society has worked with partners to expand the Internet globally by facilitating Internet infrastructure development and convening communities of interest to build sustainable technical infrastructure, as well as human and technical capacity development.

Our mission since 1992 is to help facilitate the development of a reliable and ubiquitous Internet, to train people, to build human capacity, and to encourage open dialogue among stakeholders about key Internet issues.

No one group does it alone - Internet communities don't just light up once enough routers and switches have been turned on and people trained. Instead, these communities must be nurtured, and trust must be built among participants in order for smart sustainable Internet development to be achieved.

We have found that everywhere the Internet has flourished, it has done so thanks to the existence of a robust technical class of engineers, technicians and users who ensure the network keeps running. It is about people. People who have worked with other experts to learn more, understand network architecture and traffic management, who have created local, regional, and international partnerships for development.

Paragraph 50 of the Tunis Agenda recognized the need for partnerships for building International Internet Connectivity (IIC). A variety of actors play different in facilitating and building infrastructure.

For example – Internet exchange points are a key part of IIC. IXPs - at the most basic level - are

switches, routers, ports, cables, and servers that allow local IP-based network providers (e.g., Internet service providers, national research and engineering networks, government networks, and mobile networks) to interconnect with each other and exchange traffic. In other words, network providers in a single country can share data traffic directly, instead of having to connect through an exchange point in a foreign country.

The Internet Society and other organizations around the world (the African Union, APIX, Af-IX, Euro-IX, LAC-IX, LACNIC, Packet Clearing House) have been helping countries obtain equipment. The important part is what comes next. We have seen plenty of countries plan to implement an IXP—including picking a location and accepting shipment of equipment—only to have the process stall. Why? Sometimes the community of interest has not come together or does not have enough technical bandwidth and participants are not fully invested in developing the IXP. When things like this happen, it's a reminder that the technical infrastructure—routers and switches—is only a part of Smart Internet Development, and not the most important. It cannot stand on its own.

Partnerships create those critical human networks that sustain communities, bring in new technology, and keep building out and improving networks one partnership at a time.

Part Two: A brief (1–2 pages) analytical overview of trends and experiences in implementation at the national, regional and international levels and by all stakeholders, highlighting achievements and obstacles since WSIS. This could include information on the facilitation process of implementation, monitoring and cooperation among stakeholders.

The Digital divide is not binary: The common view of the digital divide is that it separates the Internet haves from the have-nots; dividing those who are online from those who would like to get online, but are prevented based on the availability or affordability of access. This view of the divide is fostered by a positive feedback loop – the haves understandably assume everyone wants to join them, while the have-nots understandably push for access. However, as shown in the Internet Society 2014 Global Internet Report, there is an overlooked divide within the have-nots, between those who are interested to get online, and those who are not. In a series of country surveys, more non-Internet users indicate that they are not online because of a lack of interest, understanding or time, rather than the affordability or availability of access. This suggests a nuanced approach to the digital divide, one that focuses not just on providing affordable and universal access to the Internet, but also on increasing interest to use the access. As discussed in the report, in order to do so, content must be locally relevant – for starters, in the right language – and accessible, preferably hosted in-country to lower the latency and cost of access.

IGF Best Practice Forums: A significant development of the 2014 Internet Governance Forum was the introduction of a new session format aimed at enhancing cooperation around emerging Internet policy issues. IGF Best Practice Forums facilitate the exchange of information and best practices around established and emerging issues. This new format allows the full use of the expertise of all stakeholders around specific issues including spam, CERTs, local content, children online and multistakeholder mechanisms.

Part Three: A brief description (1–2 pages) of:
(a) Innovative policies, programmes and projects which have been undertaken by all stakeholders to implement the outcomes. Where specific targets or strategies have been set, progress in achieving those targets and strategies should be reported.

Internet Exchange Points (IXPs): IXPs - at the most basic level - are switches, routers, ports, cables, and servers that allow local IP-based network providers (e.g., Internet service providers, national research and engineering networks, government networks, and mobile networks) to interconnect with each other and exchange traffic. In other words, network providers in a single country can share data traffic directly, instead of having to connect through an exchange point in a foreign country.
In theory at least, this means that any country that establishes an IXP, or improves the network of IXPs it has in place, will have faster and lower-cost Internet service. It often means that more of the population will be online, and more mobile operators, content companies and other network service providers will invest. IXPs keep local traffic local.

IXP toolkit: The Internet Society has developed an "IXP toolkit" that offers a guide for people interested in either learning about, building, or investing in Internet Exchange Points (IXPs) in emerging markets and developing economies. It is available here: http://www.ixptoolkit.org

AXIS Best Practices Capacity Building: The Internet Society was selected by the African Union (AU) to conduct community mobilization and technical aspects workshops to support the establishment of Internet Exchange Points (IXPs) in AU Member States as part of the African Internet Exchange System (AXIS) project.
The AXIS project aims at keeping Africa's Internet traffic local to the continent by providing capacity building and technical assistance to facilitate the establishment of National Internet Exchange Points and Regional Internet Exchange Points in Africa.
The project is funded by the Euro-Africa Infrastructure Fund and the Government of Luxembourg. The Internet Society is committed to organizing 60 community mobilization and technical aspects workshops in 30 African countries. To this effect, the Internet Society has also contributed its own resources for the implementation of this component of the AXIS project.
More information:
http://www.internetsociety.org/events/workshops/axis-project-and-axis-workshops

Connecting rural areas in Asia-Pacific: The Internet Society Asia Pacific Bureau initiated a project a few years ago in rural India to bring the Internet into a remote and poor area of that country via wireless means. The support of local authorities made it possible to employ the most effective technical approach, one that had not previously been used and opened the door for the local operator to connect with the wireless connection to the rural village. The impact of this "technical" development project has been a major transformation of the village's economy as well as the empowerment of women there. Multiple stakeholders worked together to create the conditions that facilitated the employment of the wireless Internet, achieving together the desired end ─ better conditions for the people. One of the additional benefits of this programme is that it is scalable to other places in the world.
Example: Wireless for Communities Project:
http://www.internetsociety.org/what-we-do/where-we-work/asia/south-asia/wireless-communities

NetRadar: The Internet Society has partnered with Aalto University in Finland to measure the diversity of Internet access around the world. Using an application developed by Aalto University's Department of Communications and Networking, called Netradar (netradar.org), the Internet Society will be able to study how the Internet is changing over time. The free app provides neutral and accurate information about the quality and diversity (in terms of bandwidth and latency) of Internet connections and mobile devices everywhere. It does this by measuring and displaying the data submitted anonymously by anyone who runs the application. This kind of data helps form a more detailed picture of worldwide network quality, so we can better understand the scope and impact of network changes, and ultimately help to ensure the Internet's sustainability and reliability for future generations. http://www.internetsociety.org/netradar

(b) Future actions or initiatives to be taken, regionally and/or internationally, and by all stakeholders, to improve the facilitation and ensure full implementation in each of the action lines and themes, especially with regard to overcoming those obstacles identified in Part Two above. You are encouraged to indicate any new commitments made to further implement the outcomes.

ISOC & ITU-D collaborate to combat Spam

Spam is often the vehicle for malicious code and online fraud; it is a perilous threat that creates a burden for networks, operators, governments and end users.

High volumes of unsolicited email can cause significant impacts to regions with limited Internet access as well as raise concerns everywhere with the increasing malware infections that come from unsolicited email.

In November 2014, the ITU and the Internet Society signed a letter of agreement to collaborate on combating the global problem of spam. Under the new agreement, the Internet Society and the ITU Telecommunication Development Sector (ITU-D) will identify the best ways to build long-term capacity for addressing spam in developing countries. This collaborative partnership will explore and identify potential joint cooperative activities to address the growing need for information on how to address the issue of spam.

The organizations have agreed to preliminarily focus their efforts on three areas:

1. Facilitating greater regional access to technical experts from the global Internet community who can share anti-spam knowledge and experiences on an ongoing basis
2. Providing educational training and information on effective anti-spam policies, technical solutions and operational requirements
3. Documenting anti-spam best practices

Boosting Local Content in Rwanda

The Internet Society is working with the Ministry of Youth and ICT in Rwanda on a study to help build a robust hosting environment for content in Rwanda. In most African countries, including Rwanda, no more than 5% of Internet content is sourced locally, with the rest sourced internationally — including African developed content that is hosted overseas. This is true for global sites, such as Facebook, and for local sites such as online news and radio. Moving this content local will boost the local Internet and business economy, attract more Rwandans to go on- line, and help reduce the cost of delivering Internet access.

ITU, GSMA and Internet Society Unite in Fight against Ebola

At the ITU Plenipotentiary Conference 2014 in Busan, the International Telecommunication Union (ITU), the GSMA and the Internet Society (ISOC), announced that they are joining forces to fight against Ebola. The three organizations will bring together the global telecommunications and Internet communities, to leverage their extensive reach, capacity and respective memberships to increase the effectiveness of information and communications technologies (ICTs), especially mobile communications and the Internet, for better preparedness, early warning and response. Combining the resources of all three organizations will facilitate knowledge sharing and the exchange of ideas, tools and increase their accessibility to the humanitarian community, mobile operators and the general public.

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