COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

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Submissions from entities in the United Nations system and elsewhere on their efforts in 2013 to implement the outcome of the WSIS

Submission by

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 17th 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 CSTD 2013 consultation

- 8 January 2014 -

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

Since the Tunis Summit, the Internet Society has been actively involved in supporting the implementation of the targets, recommendations and commitments of the WSIS as they pertain to the Internet. Here we would like to specifically underline lessons learned by the Internet Society in the area of Internet access development:

Internet development:
The Internet Society (ISOC) devotes significant resources to initiatives aimed at development and particularly for capacity building. These efforts focus on technical and policy capacity building, infrastructure enhancement projects, and enabling access for underserved communities.

One of the most common misconceptions around Internet development globally is “if you build it, they will come”. Thriving Internet communities don’t simply develop once enough routers and switches have been deployed. Instead, these communities must be nurtured and trust among partners must be developed. Our experience has shown that the Internet’s power as an open platform for economic and social development can only truly be unleashed when three

foundational pillars are present and balanced:

- *Human infrastructure*, in the form of people educated and empowered by technology;
- *Technical infrastructure*, as seen, for example, in the success stories emerging from the implementation of Internet Exchange Points (IXPs) in places as diverse as Lesotho, Brazil, and Nepal; and
- *Governance infrastructure*, a range of critical factors that spur investment, deployment and public engagement.

The human infrastructure component is the easiest for some to overlook but it is the most critical in determining the success or failure of a development effort. For development to materialize, it must draw on a local community of technologists, innovators and early-adopters who can build, maintain and ultimately grow and sustain networks to their full potential and for the benefit of their broader local communities.

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 not only ensure the network keeps running, but also create the tools, forums and services that stimulate local demand.

Still, major challenges lie ahead for counteracting the wide disparities in Internet infrastructure development and enabling entire groups and countries to benefit from universal access to information, communication and knowledge.

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.

Over the past decade, the **multistakeholder approach** and its implementation at the international level have proved to be considerable assets in taking forward the WSIS themes and Action Lines.

Cooperation among stakeholders:
From the perspective of a non-governmental organization such as ISOC, there can be no doubt that the WSIS was a significant achievement for the international community, particularly in the way that the Summit enabled unprecedented participation by stakeholders in the Summit and its follow-up. As a result, the WSIS made a critical contribution by raising awareness of the importance of the multi-stakeholder approach to achieving good public governance. ISOC has long embraced this collaborative approach to its own work. We operate collaboratively and inclusively to pursue public policy objectives, working with governments, national and international intergovernmental and non-governmental organizations, civil society groups, the

private sector and other parties to help them shape policies and reach decisions about the Internet that are consistent with our core values.

Since the WSIS, the ISOC community has expanded its collaboration with intergovernmental organizations, such as the Organization for Economic Cooperation and Development (OECD), the African Union, the Asia-Pacific Economic Cooperation (APEC), the World Intellectual Property Organization (WIPO), the Organization of American States/Inter-American Telecommunication Commission (OAS/CITEL), the Council of Europe, and with national governments to promote the expansion of the open Internet around the world: http://www.internetsociety.org/who-we-are/our-community-and-partners

One concrete example of enriched international cooperation is ISOC's participation in the Internet Technical Advisory Committee (ITAC) of the OECD's Committee on Digital Economy Policy (CDEP) (formerly, the Information, Computer and Communication Policy Committee (ICCP)). ITAC was created in 2008 to provide information and expert advice to assist policymakers and improve the public policy development process. The CDEP addresses a wide range of topics, such as information security, privacy, critical infrastructures (such as IPv6), Internet economy and innovation issues. In 2013, ITAC had the opportunity to organize its third face-to-face-meeting, including sessions to discuss the OECD's work-plan for 2013-2015 with OECD senior staff and representatives of other stakeholders groups (Business and Civil Society). ITAC has developed an excellent reputation for providing thoughtful technically-informed policy advice to the OECD. In 2013, ITAC again recruited several new members. This example demonstrates the benefits to all stakeholders that come about from enhanced cooperation.

Security/privacy/surveillance:
Privacy and security continue to be key policy and technical issues. The IETF and the W3C have implemented initiatives to specifically address privacy and security in Internet standards development. For example, the IETF, through the IAB Privacy Program, published RFC 6973 "Privacy Considerations for Internet Protocols" and the W3C is developing similar guidance for Web standards through the Privacy Interest Group.

The disclosures in 2013 concerning the nature and extent of government surveillance of Internet users' communications and data drew the world's attention to a new threat model: pervasive surveillance and interception of private communications. The IETF and W3C have responded with initiatives to develop standards that strengthen the Internet against this type of threat. For example, the IETF launched a new public email list (perpass@ietf.org) to discuss specific technical proposals for improvements in IETF protocols for better mitigation against pervasive monitoring. Importantly, IETF mailing lists and meeting are open to everyone. The IETF also reached consensus at the last meeting to address pervasive surveillance as a community in all its standards-track specifications. The W3C and IAB will be holding a joint workshop in 2014 on "Strengthening the Internet Against Pervasive Monitoring" (STRINT).

Capacity building:
ISOC has placed significant emphasis on organizing, supporting, and participating in hands-on technical training for Internet engineers in emerging economies and developing countries. For example, ISOC hosts training and workshops on a range of network development and operational skills, including network administration and monitoring, bandwidth and critical resource management, advanced routing (IPv4/IPv6), wireless networking, and Internet services, among other topics, in various in-country locations ranging from Latin America and the Caribbean, Africa, and Asia. ISOC also works in conjunction with Internet community colleagues such as AfriNIC, AfNOG, RIPE-NCC, APNIC, and LacNIC, to conduct regional technical trainings and forums such as the Middle East Network Operators Group (MENOG), the South Asian Network Operators Group (SANOG), the Workshop on Internet Networks Technologies for Latin America and the Caribbean (WALC), and AfCHIX, a regional training workshop specifically aimed at women Internet engineers in Africa. Through our direct trainings and partnership projects, ISOC reaches some 600+ emerging economy and developing country engineers per year with vital skills and knowledge that supports Internet growth and development.

In addition, the Internet Society works closely with OAS and CITEL to provide briefings, seminars and webinars for governments on various Internet issues such as Interconnection, IPv6 deployment and Spam.

Finally, while the Internet Society and its partners have been successful at reaching small groups of individuals, ISOC has been exploring ways to more effectively scale its efforts. To this end, ISOC recently deployed a Learning Management System, Inforum, to reach many more. The formal launch of Inforum in 2014 will build upon ISOC's experience in online education and allow new training to be available. This online training, which takes into account bandwidth and other regional consideration can complement classroom instruction for more technical courses and can also be available as standalone, online-moderated, or mobile courses for courses more theoretical or informational in nature.

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.

We have observed that a successful formula for **Internet infrastructure development** combines human, technical, and governance infrastructure development. We call this "Smart Development". An example of Smart Development and the multistakeholder model in action can be found in Internet exchange point (IXP) development. The academic and technical communities work closely with governments and business to develop, manage and sustain IXPs. Our work in this area spans the globe and includes countries like Brazil,

Argentina, Grenada, Nigeria, Lesotho, Tunisia, Serbia, Thailand, Vanuatu. Working with government officials is essential, but ultimately, the goal is development *for* the community *by* the community.

Another example of the multistakeholder model in action is the work that the Internet Society is undertaking with the African Union to develop **Internet exchange points (IXPs)** in Africa. Our teams are working with partners across Africa to provide Best Practices (BP) and Technical Assistance (TA) workshops to help lay the ground for community IXP development. This is exemplary of multistakeholder collaboration: the Internet technical and academic communities, governments, development institutions, and civil society are working together to build much needed technical and human capacity. Over the last 18 months our team in Africa has conducted 19 Best Practices workshop and 13 Technical Assistance workshops across Africa.

Spam continues to be a challenging problem for many end-users and an important policy concern for many governments. We have found that tackling this phenomenon is most effective through a multistakeholder partnership, which facilitates dialogue among experts and others who seek a better understanding of the options available to them to form and implement spam mitigation solutions. This collaborative exchange has been very well received in the two regions (Africa and Latin America) where ISOC has facilitated workshops on combating spam in 2013. These workshops bring governments, industry and technical experts together to exchange approaches and experiences built upon the recognition that spam is a global pervasive problem that requires all stakeholders to work together to stop its proliferation.

The Internet Society's approach complements other initiatives in the area, notably the Messaging, Malware and Mobile Anti-Abuse Working Group (M3AAWG), a global industry led partnership of governments, trusted network operators, ISPs and bulk mail distributors who collaborate on global technical and policy initiatives to mitigate spam and messaging abuse. M3AAWG's membership is organized around technology, and collaboration between trusted stakeholders to address cooperative capacity building to mitigate spam, malware, botnets and phishing and other abusive messaging.

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.

With the remaining billions of Internet users mainly coming from developing countries, **fostering vibrant multistakeholder cooperation at the local level** is essential for the future of the global Internet. Some of the key challenges include the need for increasing awareness and capacity building regarding existing cooperation mechanisms. The number of parallel processes and

different modes of participation can be unsettling for newcomers, and further efforts should be made to make them easier to understand and engage with.

Contributing to addressing this challenge, ISOC has initiated **fellowships for policy makers to participate in Internet Engineering Task Force (IETF) meetings**. The IETF is a loosely organized group of engineers that plays a critical role in shaping the future evolution of the Internet through the development of technical standards and protocols. Participation to the IETF is open to anybody, and doesn't require any formal membership or participation fee. While this forum is completely open, not all governments are aware of these processes, which - while essential to the Internet's future - do not follow the same procedures as traditional UN meetings.

ISOC's program allows policymakers an opportunity to see the Internet standards process first-hand and to interact with the leading innovators in the Internet. In addition, this provides an opportunity for the engineering community to learn about the key technical concerns of policymakers. This exchange can help make future protocols more robust and relevant around the world. Our experience from bringing policymakers from over 40 countries to the IETF has proven extremely positive in fostering a greater understanding and facilitating cooperation across different mechanisms of the Internet ecosystem. Our hope is that, through this engagement, more technical experts from developing countries will participate in the IETF and contribute to the technical development of the Internet. More information about this program may be found here: http://www.internetsociety.org/what-we-do/education-and-leadership-programmes/ietf-and-ois-programmes/internet-society-fellowship-5.

The fellowships for policy makers complements ISOC's technical fellowships to the IETF, which the Society has been offering since 2006. The key opportunity is strengthening local communities across policy makers and technologists. This allows the two groups of professionals to speak with shared understanding and appreciation of the complexities across governance and technology topics.

In line with Action Line C1 of the Geneva Plan of Action on the role of governments and all stakeholders in the promotion of ICTs for development, governments should initiate**, at the national level, a structured dialogue involving all relevant stakeholders**, including through public/private partnerships, in devising e-strategies for the Information Society and for the exchange of best practices. Such a dialogue should include Internet-related public policy issues. Implementation of Action Line C 1 b) and d) would not only enhance democratic participation at the national level, but would also contribute to fostering more efficient and legitimate policies. As a general rule, governments should consult with all parties that would be affected by the results of policy decisions. This includes the academic and technical communities, civil society and the private sector.

In accordance with the Tunis Agenda for the Information Society, the **monitoring and evaluations of future implementation of the WSIS process** should be multistakeholder. Stakeholders could assess on a regular basis what has been achieved and analyze the underlying factors for success. The process

could also identify areas where implementation is not as successful as was hoped and further investigate the obstacles and challenges. Examining the reasons why a policy was not successful can provide valuable lessons: best practices seeking to improve information of all stakeholders involved could be identified; and sharing best practices could provide guidance and set benchmarks. This process has the advantage of being able to evolve as improvements emerge. One of the significant advantages of identifying best practices is that they can be used for self-assessment or benchmarking. These constitute significant steps towards realizing the goals of the Tunis Agenda.