ICANN’s submission to the CSTD Questionnaire for 20-Year Review of WSIS Implementation

Joint Questionnaire for 20-Year Review of WSIS Implementation (CSTD, ITU, UNESCO, UNDP)

Government and IGO Engagement Team
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Joint Questionnaire for 20-year review of WSIS implementation (CSTD, ITU, UNESCO, UNDP). This questionnaire is open to all stakeholders.

Please share your experience, views and priorities in response to the following questions, addressing the issues that you consider most important for the CSTD’s twenty-year World Summit on the Information Society (WSIS) review. Issues that you might consider could include any or more of the following, but need not be confined to these:

- infrastructure, access and inclusiveness;
- content, applications and capacity-building;
- technical, financial and related issues;
- governance and wider public policy aspects of the Information Society;
- social, economic and other development activities and impacts;
- measurement and monitoring of the Information Society;
- the changes that the information society has gone through over the past twenty years and the implications for the WSIS vision; and
- the relationship between the Information Society and the 2030 Sustainable Development Agenda.

Questions 1-6 are administrative.

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 within the 20 years since WSIS?

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

9. How much progress do you believe has been made in implementing specific WSIS outcomes?

10. What are the challenges to the implementation of WSIS outcomes?

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

12. What do you consider the most important trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit? What has been their impact?
13. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account ongoing and emerging trends?

14. How will ongoing trends and new developments in technology, especially in the deployment, access, and use of ICTs, impact future progress toward human development, specifically in relation to the SDGs?

15. Please add any other comments that you wish to make on the subject of the review that you believe would be helpful.
7. To what extent, in your experience, has the "people-centered, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed within the 20 years since WSIS?

The foundation for a “people-centered, inclusive and development-oriented Information Society” is stronger than ever, but it should not be taken for granted.

The Internet Corporation for Assigned Names and Numbers (ICANN) is a nonprofit public benefit corporation with a global community dedicated to keeping the Internet secure, stable, and interoperable. ICANN coordinates the Internet’s unique identifier systems, which enable people all over the world to connect from any digital device that is connected to the Internet. Since its inception, the Internet has served as a reliable tool for communication, transmitting information from one end point to the other. Throughout its lifecycle, the Internet has remained stable and dependable, meeting the vision of a “development-oriented information society where everyone can create, access, utilize, and exchange information and knowledge.” The Internet owes its success to its modular design and distributed, multistakeholder governance. This governance paradigm ensures that the development of the Internet is driven by the collective ideas of experts and individuals across the globe who actively participate in collaborative multistakeholder processes at various technical organizations such as ICANN, and the Internet Engineering Task Forces (IETF), as well as forums such as the Internet Governance Forum (IGF).

Addressing the question through the lens of ICANN’s mission, twenty years ago, U.N. member states agreed on a vision for a "people-centred, inclusive, and development-oriented information society," encapsulated in WSIS. WSIS laid out a blueprint that clearly defines the roles and responsibilities of governments, the technical community, civil society, and business in digital transformation. It also highlighted the importance of a multistakeholder approach. At that time in 2005, approximately 1.4 billion people had access to the Internet, constituting roughly 16% of the world’s population.¹ There existed a significant disparity, with 8% of individuals in developing countries having access, compared to 52% in developed countries. By 2023, over two-thirds of the world’s population (approximately 67%) had access to the Internet, with this figure continuing to grow steadily.² Placing people at the center of development, a solid foundation was established that continuously promoted stakeholder inclusion, collaboration, and meaningful participation to maximize possibilities and address the challenges ahead. The multistakeholder model remains pivotal in propelling digital transformation forward. Nonetheless, more efforts are required to bridge the digital divide.

Innovative solutions are necessary to overcome the most challenging barriers to access and ensure that everyone can participate meaningfully in the information society. Beyond being connected, it is essential that everyone has the opportunity to engage meaningfully, including in their native language or script. Using standards developed by the technical community, ICANN collaborated with its stakeholders to establish policies, procedures, and guidelines facilitating the use of domain names in local languages and scripts. Moreover, ICANN has worked with script-using communities to develop secure protocols for constructing complete domain names in local languages. Additionally, ICANN has been working with its community to engage with relevant stakeholders to promote universal acceptance (UA) of these domain names. This ensures that all domain names and email addresses can be used by all Internet-enabled applications, devices, and systems. It includes websites and email addresses in languages other than English and those that are more than three characters long. The significant progress achieved over the last two decades through collaborative efforts underscores the potential to bring connectivity to those presently without access.

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

The WSIS Tunis Agenda establishes a shared understanding and empowers all stakeholders to collaboratively work toward achieving the WSIS outcomes. The firm commitment and collaborative spirit of all WSIS stakeholders have significantly and positively influenced the development of a "people-centred, inclusive and development-oriented information Society."

For instance, the technical community, comprising various technical organizations such as ICANN, has integrated the WSIS outcomes to ensure the continuous development and accessibility of the Internet for all. While these organizations manage shared Internet resources, each has specific responsibilities for Internet operations. Nonetheless, they work together toward the common goal of maintaining a globally connected, stable, and secure Internet. Consequently, progress in implementing the WSIS outcomes by the technical community, along with other WSIS stakeholders, has contributed to improving individuals’ well-being, promoting economic and social prosperity, and fostering a more interconnected world.

Ongoing efforts, such as those at the IETF, have been crucial in developing protocols and best practices that enhance the Internet’s security and resilience. Additionally, ICANN has consistently advocated for the deployment of technical solutions such as the Domain Name System Security Extensions (DNSSEC) which help secure the transmission of information across the Internet. For example, ICANN conducts capacity development workshops in regions worldwide to raise
awareness and encourage DNSSEC adoption. ICANN’s global community is dedicated to maintaining a secure, stable Domain Name System (DNS) that reflects the diverse linguistic landscape. These achievements are possible through ICANN’s global community and its multistakeholder policy development process.

9. How much progress do you believe has been made in implementing specific WSIS outcomes?

The outcomes of WSIS were set approximately 20 years ago, coinciding with the wider accessibility of the Internet and digital technologies to the public. Within the WSIS framework, various targets and Action Lines were defined to tackle crucial issues such as Internet connectivity, multilingualism, confidence and security building, and capacity development. These imperatives remain relevant today, especially with the continuous emergence of new innovations and technologies reliant on the Internet. Significant progress has been achieved across many of these areas, including the successful fulfillment of the Geneva Declaration of Principles.

A notable advancement pertains to the prioritization of multilingualism within the Internet landscape, which has been a focal point for ICANN. Recognizing that mere access to the Internet is insufficient, ICANN and its community have emphasized the importance of ensuring that Internet usage is secure, reliable, and relevant to the local context. Collaboration within the ICANN community has led to the delegation of 151 Internationalized Domain Names, including both generic and country code top-level domains (TLDs). These domains support 37 languages across 23 scripts, demonstrating a commitment to linguistic diversity. Furthermore, ICANN has collaborated with stakeholders in the ICANN community to establish rules for 26 commonly used scripts, spanning over 350 languages. Efforts are ongoing to expand language and script support within the DNS, with ICANN currently working with communities who use the following scripts: Balinese, Javanese, Thaana and Unified Canadian Aboriginal Syllabics.

Additionally, stakeholder groups including technical experts, civil society organizations, businesses, and governments seized the opportunities provided by WSIS to collaborate across various Action Lines. This collaboration extended to initiatives such as sharing best-practices and capacity building, notably evident at the Internet Governance Forum (IGF). This multistakeholder collaboration has never been more robust. Each stakeholder group contributes valuable perspectives, expertise, and resources, both in terms of investment and experience. The Internet, as we know it today, has been significantly shaped by important decisions made through consensus based multistakeholder processes, aimed at meeting the connectivity needs and fostering digital economy participation of a growing global population. For instance the deployment of Internet Protocol Version 6 (IPv6) has facilitated the Internet’s expansion, enabling an unlimited number of devices to connect to it.
10. What are the challenges to the implementation of WSIS outcomes?

New challenges have emerged in the digital landscape, such as content-related issues, cyber threats, erosion of trust, etc. Geopolitical concerns like digital sovereignty further complicate matters. Consequently, the strong foundation for a “people-centred, inclusive and development-oriented Information Society” is now at risk.

Competing priorities, often resulting from geopolitical issues, pose a significant challenge. Governments, in pursuit of immediate solutions, may sometimes adopt a one-size-fits-all approach, potentially overlooking the commitments made in the WSIS Tunis Agenda and inadvertently putting the Internet at risk. Bringing relevant stakeholders to the table - on an equal footing - facilitates a deeper understanding of the complexities surrounding the issues at hand, be they infrastructure-related or content-related. Practical, sustainable, and implementable solutions emerge through this multistakeholder consultation process, leading to better outcomes. This is particularly true for the development of the Internet, given its nature as a distributed global network. Inclusion of the broader technical community in (inter)governmental Internet-related discussions is vital for achieving results that foster the Internet's continued development while avoiding unintended consequences such as Internet fragmentation. A robust, globally connected, and interoperable Internet underpins the WSIS outcomes.

Regardless of the many challenges it has confronted through the years, the multistakeholder model of Internet governance has proven its resilience. It remains the most effective approach for making well-informed policies and finding practical solutions for the further development of the Internet. For example, the multistakeholder approach for the drafting of policies and standards for the Internet remains robust and strong at technical organizations like ICANN or the IETF. The IGF is also serving as a forum for sharing ideas and best practices. Time and again, the multistakeholder model is the preferred choice for a distributed network such as the Internet, with stakeholders across various sectors collaborating to address many emerging challenges. For example, the Internet Standards, Security and Safety Coalition (IS3C), an IGF Dynamic Coalition, brings together key stakeholder groups, including policymakers, to advocate for wider deployment of existing Internet standards and ICT best practices to enhance online security and safety.

11. How are these challenges being addressed? What approaches have proved to be effective in your experience?
All WSIS stakeholders, including those from the technical community, are committed to the multistakeholder model, which drives their shared determination to address challenges to the WSIS outcomes.

In recent years, multilateral processes like the Global Digital Compact (GDC) have emerged, potentially introducing a new framework to handle digital and Internet-related issues in ways that may exclude, to a certain degree, the non-governmental stakeholders, including the technical community. This departure from the multistakeholder model in place for over two decades has prompted numerous inputs into the GDC consultations. Governments, civil society, the technical community, and others have all emphatically supported the multistakeholder model, the continuation of WSIS, and the renewal of the IGF.

The Internet today should not be taken for granted. Efforts have been made to foster open dialogues and encourage collaborations among various stakeholders to find effective solutions. No single entity can solve all issues; maintaining the integrity of the Internet is a collaborative effort. Regular conversations that include all stakeholders on an equal footing are crucial. The views of the technical community should be sought to address technical issues, acknowledging their contribution in the creation and the development of the Internet and their subject-matter expertise.

It is crucial to note that the Internet today was built through many years of hard work by numerous stakeholders. Hence, there is no need to begin anew; instead, all stakeholders should maintain the momentum by building upon the current process.

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

What has been their impact?

One of the most important trends in technology has been the movement within the Internet’s infrastructure layer to enhance end-user privacy and ecosystem security. Initially, the Internet was not designed with security as a primary consideration; rather the focus was on ensuring its functionality. Moreover, the Internet operated within a trusted ecosystem primarily comprising engineers and researchers. However, as the technology became accessible to all, prioritizing security became crucial.

The DNS was developed in 1983. Until recently, every time someone opened a web browser, launched a mobile app, or performed any action involving a DNS query, the DNS data they were asking about was sent over the wire in clear text. This meant anyone could see it, leaving the websites being queried vulnerable and susceptible to tracking.
Since WSIS, the DNS community has listened to concerns over end-user privacy by adding new privacy-increasing protocols. These include encrypted DNS protocols like “DNS-over-HTTPS” and “DNS-over-TCP”, and others.

In the Internet's routing space, the community has dedicated 15 years to implementing cryptographically signed routing information, known as Resource Public Key Infrastructure (RPKI). This technology is now widely deployed across the globe, significantly enhancing the resilience of the Internet's infrastructure layer and improving safety and security for all Internet users.

The technical community remains committed to further strengthening security and confidentiality. Moreover, it provides capacity development support and technical training to ensure the widespread deployment of technologies and solutions like DNSSEC and RPKI.

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

**Prioritize Closing the Digital Divide**

Internet and digital technologies serve as key enablers for both the U.N. Sustainable Development Goals (SDG) and the WSIS imperative to build the information society. Prioritizing the closure of the digital divide is paramount, given that approximately 33% of the world’s population remains offline. Achieving this goal necessitates a multistakeholder collaborative approach, particularly through private and public partnerships.

One noteworthy initiative in this area is the ITU's Partner2Connect Digital Coalition, which aims to cultivate partnerships, investment, resources, and capacity building to expand meaningful Internet connectivity. ICANN joined the Coalition and launched the Coalition for Digital Africa Initiative, seeking to forge partnerships with stakeholders to expand Internet access across Africa. When undertaking to connect people to the Internet, it is important to consider local realities. This involves expanding Internet infrastructure in a manner that accounts for the topology and local context, including different languages and scripts.

Governments also have an important role to play in fostering an enabling environment conducive to infrastructure investment and growth. They can support innovative approaches for connectivity, and implement policies that facilitate stakeholder collaboration. For example, governments can incentivize the industry sector to ensure that their applications, devices, and
systems are ready for UA through their vendor procurement processes, thereby facilitating access to a multilingual Internet. Additionally, capacity development and digital skills training are equally important in these efforts.

**Strengthen the Multistakeholder Model**

Stakeholders’ contributions to the implementation of the WSIS Action Lines are evident in the widespread digital transformation that has swept across much of the globe. Despite these achievements, some U.N. Member States and multilateral organizations remain skeptical of the multistakeholder approach. This skepticism is reflected in the reluctance to find such rules of procedure that would allow the inclusion of nongovernmental stakeholders, particularly the technical community, in the digital cooperation related discussions. This current trajectory poses risks to the Internet’s continued development, especially if these discussions veer towards regulatory proposals that are suggested without considering their implications to the technical functioning of the Internet, particularly regarding the DNS and IP addresses coordination.

The WSIS+20 review should aim to strengthen the multistakeholder model and reaffirm the commitments made during WSIS 2003 and 2005, as well as during the WSIS+10 Review in 2015. The accomplishments to date, as well as the existing gaps that need addressing, require the collaboration of all stakeholders on equal footing.

14. **How will ongoing trends and new developments in technology, especially in the deployment, access, and use of ICTs, impact future progress toward human development, specifically in relation to the SDGs?**

The Internet was designed to support any technologies and devices using common Internet protocols and open standards. As long as new and emerging technologies continue to support the Internet's development using common protocols that enable global connectivity and interoperability, while fostering continuous innovation, this principle holds true for new and emerging technologies reliant on the Internet.

To identify technical gaps effectively, it is crucial to engage with the technical community on appropriate platforms to gain insights into the potential impact of trends and new technologies on the Internet. These insights can then inform regulatory and legislative responses, essential for preventing potential issues that could result in Internet fragmentation.

Regulatory measures that hinder the Internet's connectivity and interoperability are not only detrimental to the Internet itself but also hinder the attainment of the SDGs. The critical role of the technical community in the Internet's operations is acknowledged in the WSIS Tunis Agenda...
and reaffirmed in the WSIS+10 Outcome Document. This recognition should continue through the WSIS+20 review in 2025 and beyond.

15. Please add any other comments that you wish to make on the subject of the review that you believe would be helpful. (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-wsis20@unctad.org )

ICANN Submissions to International Bodies and Reports

- **ICANN Organization Submission for the 2023 Annual Report to the United Nations Conference on Trade and Development (UNCTAD).**
  The report outlines ICANN’s contribution in the implementation of the WSIS Outcomes in 2023

- **WSIS+20 Review Process - Information for the Broader ICANN Community**

- **ICANN Org Submission to the Global Digital Compact**
  ICANN’s contribution to the Global Digital Compact covering the following key digital issues from the Common Agenda report: (1) Connect all people to the Internet, including all schools; and (2) Avoiding Internet fragmentation.

- **The Global Digital Compact: A Top-Down Attempt to Minimize the Role of the Technical Community (21 August 2023)**
  The following blog is co-authored by Sally Costerton, Internet Corporation for Assigned Names and Numbers (ICANN), Paul Wilson, Asia Pacific Network Information Centre (APNIC), and John Curran, American Registry for Internet Numbers (ARIN).
Country Focus Report Update: Russian Federation Internet-Related Laws and UN Deliberations (6 June 2022)
This update covers the period 21 April 2021 to 6 April 2022. The first part looks at Russian Internet-related foreign policy statements and initiatives; the second covers Internet-related national policy statements and initiatives.

Country Focus Report: China Internet-Related Policy Initiatives and Laws
This paper covers Internet-related policy initiatives and laws/regulations put forward by China between 16 December 2015 and 5 November 2021. It is part of a periodic series of country-specific reports that provide an overview of activities relevant to the Internet ecosystem and ICANN's mission.