COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

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Submissions from entities in the United Nations system, international organizations and other stakeholders on their efforts in 2021 to implement the outcomes of the WSIS

Submission by

Internet Corporation for Assigned Names and Numbers

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 25th 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.

2021 Annual Report to UNCTAD

ICANN Contribution

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 (2020-2021)

10 November 2021

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Executive Summary

ICANN is privileged and honoured to be invited to contribute to this annual United Nations Conference on Trade and Development (UNCTAD) Report. We value our involvement with, and contribution to, the overall multistakeholder World Summit on the Information Society (WSIS) process and to our relationship with the U.N. Commission on Science and Technology for Development (CSTD) and with the UNCTAD.

2021 has been a challenging and important year for ICANN and for the Internet ecosystem in general. Throughout the pandemic, much effort was employed in keeping the Internet interoperable and resilient, and ICANN studied the potential risks the pandemic posed for the Domain Name System (DNS), and shared its observations with the broader Internet community[1]

The world is changing dramatically, and the Internet is evolving quickly as well. ICANN participated in relevant cyber dialogues at the U.N. in New York, where discussions with the potential to touch upon ICANN's mission took place. This includes following the work of the newly-established U.N. ad hoc committee (AHC), tasked with drafting a U.N. Cybercrime convention[2], an effort that will continue through 2024.

In 2021, ICANN was included into the U.N. Group of Experts on Geographical Names (UNGEGN) Strategic Plan 2021-2029 as the non-UN international organization "providing advice on proposed domain name submissions."[3] In its 2021 submission to Commission on Science Technology and Development (CSTD), the World Intellectual Property Organization (WIPO) stated that it "continues to liaise with DNS stakeholders," including ICANN, "building on its two decades of experience covering over 50,000 domain name-related disputes (covering over 91,500 domain names)."[4]

ICANN has also been engaged, pursuant to its mandate and mission, in a range of different Internet governance, and WSIS related activities. In September 2021, ICANN participated in the preparatory work of the Informal Experts Group for the World Telecommunication Policy Forum (WTPF)[5] which will take place in December 2021.

ICANN also submitted a statement on "DNS in the times of COVID-19" to the 2021 U.N. Economic and Social Council (ECOSOC) high-level segment for NGO in consultative status with ECOSOC, which was circulated in accordance with paragraphs 30 and 31 of the ECOSOC resolution 1996/31.[6]

Finally, ICANN continues to support WSIS themes, by preparing to participate at the upcoming 16th annual Internet Governance Forum (IGF) in Katowice.[7] ICANN has been a

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[1] https://www.icann.org/en/system/files/files/octo-008-15apr20-en.pdf

[2] The full name of the AHC is "ad hoc intergovernmental committee of experts, representative of all regions, to elaborate a comprehensive international convention on countering the use of information and communications technologies for criminal purposes" https://www.unodc.org/unodc/en/cybercrime/ad_hoc_committee/home

[3] https://unstats.un.org/unsd/ungegn/sessions/2nd_session_2021/documents/UNGEGN_Strategic_Plan_final_5May2021.pdf

[4] https://unctad.org/system/files/non-official-document/a76d64_bn_WIPO_en.pdf

[5] https://www.itu.int/en/wtpf-21/Pages/ieg-wtpf-21.aspx

[6] https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/2021doc/2021-ECOSOC-HLS-Written-Statements-by-NGOS-in-ECOSOC-Consultative-Status.pdf

[7] https://www.gov.pl/web/igf2021-en

strong supporter of the IGF since its founding, and continuous contributor to the IGF Trust Fund, the Multistakeholder Advisory Group, and many of the IGF Regional and National Initiatives (RNI).

[End of executive summary]

Part 2

1 GDPR and Other Data Privacy Consultations and Dialogue

Following the adoption of the European Union's General Data Protection Regulation (GDPR), the ICANN community and the ICANN organization (org) have worked to balance the GDPR and similar laws' data protection requirements with the legitimate interests of third parties seeking access to non-public gTLD registration data. In Phase 1 of an expedited consensus policy development process (Expedited Policy Development Process, or EPDP) the ICANN community developed recommendations for a new ICANN Consensus Policy for gTLD Registration Data based on the Temporary Specification, including purposes for processing registration data. These recommendations are currently subject to an implementation process. In EPDP Phase 2, the ICANN community developed recommendations for a System for Standardized Access/Disclosure (SSAD) to non-public gTLD registration data. Currently ICANN org is conducting an Operational Design Phase (ODP)[8] to assess the potential risks, anticipated costs, resource requirements, and other matters related to the implementation of the SSAD-related recommendations.[9] This assessment will help inform the ICANN Board's deliberations on the adoption of the SSAD recommendations, as they are complex and will require significant resources. ICANN work in relation to personal information held by Registries and Registrars is relevant in the context of WSIS Action Lines 5 and 6 as having an influence in the trust and confidence in the use of ICTs, as well as helping to facilitate an Enabling Environment in which on-line services (both in the private and public sector) can grow and flourish.

2   gTLD Subsequent Procedures

In February of 2021, the ICANN Generic Name Support Organization (GNSO) Council voted to approve the new Generic Top Level Domain (gTLD) Subsequent Procedures Policy Development Process Final Report.[10] More details about the follow up to that vote can be found on the ICANN website[11]. These policy recommendations will guide further application for and introduction of new generic top-level domains. The promulgation of new top-level names has ramifications for WSIS Action Line 8, especially in terms of promoting cultural diversity and local content. This initiative is part of ICANN's work to promote meaningful connectivity and facilitate use of the global Internet and foster development of local content.

3   ITU and ICANN work

As an ITU-D sector member, ICANN org participated in the work of the Informal Experts Group in preparation for the World Telecommunication Policy Forum (WTPF)[12] to be held in December 2021. ICANN also submitted a contribution in response to the ITU Council

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[8] https://www.icann.org/en/system/files/files/odp-concept-paper-05mar21-en.pdf

[9] https://gnso.icann.org/sites/default/files/file/field-file-attach/epdp-phase-2-temp-spec-gtld-registration-data-2-31jul20-en.pdf

[10] https://gnso.icann.org/sites/default/files/file/field-file-attach/final-report-newgtld-subsequent-procedures-pdp-02feb21-en.pdf

[11] https://gnso.icann.org/en/group-activities/active/new-gtld-subsequent-procedures

[12] https://www.itu.int/en/wtpf-21/Pages/ieg-wtpf-21.aspx

Working Group on International Internet-Related Public Policy Issues Call for Comments.[13] At the regional level, members from the ICANN's Global Stakeholder Engagement (GSE) team in the Middle East took part at the ITU Global Symposium for Regulators (GSR21) Regional Regulatory Roundtable (RRR-ARB21) and Regional Economic Dialogue (RED-ARB21) for Arab States. Additionally, members from the ICANN's GSE team in Latin America and the Caribbean participated in CTU ICT week, with the chair of ICANN's Board giving a presentation during the event. Taking place under the theme of "Regional Imperatives for Digital Transformation Post COVID-19", the event provided a forum for the exchange of ideas on how regional governments could collectively respond using digital platforms in the fight against the COVID-19 pandemic. ICANN's work with the ITU supports the WSIS theme of Internet governance.

4   Internet Governance Forum

The Fifteenth Annual Meeting of the Internet Governance Forum (IGF 2020) was scheduled to take place in Katowice, Poland, but due to the COVID-19 pandemic it became a virtual event, taking place fully online. ICANN participated in the virtual global event hosted by the IGF Secretariat and the UN under the overarching theme of "Internet for human resilience and solidarity."

ICANN's participation in IGF 2020 involved a number of events, including two pre-events: The DNS-Abuse in the Age of COVID-19, which was promoted to the parliamentarians attending the IGF, and Internet 101, organized as part of the Youth track. ICANN also organized two workshops in the main conference: DNS-Abuse in the Age of COVID-19: Lessons Learned, and Universal Acceptance of Domain Names and Email Addresses. ICANN also presented an Open Forum on Technical Internet Governance, and hosted a Virtual Booth. ICANN org's participation involved several departments, including ICANN's President and CEO Göran Marby speaking during the closing ceremony.

Many of the same themes and topics have been sustained in the planning for IGF 2021, of which the overarching theme is "Internet United." This year the event will include a robust hybrid component with sessions taking place live and in-person in Katowice, Poland, as well as online. ICANN is organizing three events, a pre-event titled "Youth IGF: Tutorial on the DNS Root," a workshop on "The State of the DNS Privacy Technologies," and an Open Forum on "The Building Blocks to Meaningful Connectivity. The ICANN Open Forum will focus on the building blocks for meaningful connectivity to ease barriers to access and increase creation of local content in support of the WSIS Action Line 3 (access to information and knowledge) as well as Action Line 8 (cultural diversity and identity, linguistic diversity and local content) through the promotion of Universal Acceptance and the use of internationalized domain names (IDNs).

ICANN President & CEO Göran Marby will also be speaking at the IGF 2021 High-Level Leaders Track, addressing barriers to meaningful connectivity. Leading up to the IGF2021, ICANN org arranged an online preparatory session for the IGF 2021 Parliamentary Track, and a preparatory session for the IGF 2021 Youth Project; a cooperative effort of the Youth IGF of Poland, IGF Secretariat, IGF Host Country, Government of Poland and the Polish Research and Academic Computer Network - NASK.

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[13] https://www.itu.int/en/Lists/consultationFeb2021/Attachments/24//ICANN-ITU%20CWG-Internet%20Consultations%20September%202021.pdf

5 Universal Acceptance and Internationalized Domain Names (IDNs)

To promote broader access, choice, and innovation in the Internet's domain name system, ICANN and volunteers globally have been working to enable and promote Internationalized Domain Names (IDNs) in different languages and scripts of the world. As of November 2021, a total of 153 IDN top-level domains (TLDs) have been delegated, including 61 country code top-level domains (ccTLDs) in over 30 languages written in 19 different scripts. In addition, 92 IDN generic TLDs (gTLDs) have been delegated. This now allows end-users to choose from a broad variety[14] of domain names and email addresses in the language or script of their choice.

Even though the domain names and the corresponding email addresses are available in local languages, they are not consistently accepted, which means they don't work in many currently deployed software and applications. Universal Acceptance (UA) of these domain names and email addresses is a foundational requirement for a truly multilingual Internet, one with which users around the world can navigate entirely in local languages. To achieve universal acceptance, Internet applications and systems must treat all TLDs and IDNs in a consistent manner. For example, a recent study reports that only about 11 percent of websites globally accept email addresses in local languages. Another study found that out of the 2.5 million Internet Protocol (IP) addresses connecting approximately 35 million email servers globally, only 7 percent are configured to support email addresses in local languages.

For an effective global multilingual access to the Internet, it is essential that all current software applications are updated, and future applications are designed to accept, validate, store, process, and display – in other words, universally accept – all types of domain names and email addresses.

ICANN has identified the universal acceptance of all domain names and email addresses as one of its strategic goals for the years 2021-2025. As a part of this effort, ICANN supports the Universal Acceptance Steering Group (UASG), which is a community-based effort reaching out to the multiple stakeholders to achieve UA-readiness around the world. Information about the current status of UA-readiness and the efforts being taken by ICANN and the community to address them are available in the UA Readiness Report FY21.[15]

The work to promote the use of IDNs, and the work on Universal Acceptance, is contributing to the WSIS Action Line 8; namely cultural diversity and identity, linguistic diversity, and local content.

6 ICANN in the Time of the COVID-19 Pandemic

In coordinating the stable operation of the Internet's unique identifier systems (including the DNS), ICANN works with other relevant stakeholders, by monitoring security trends and potential threats to the stability of the DNS and keeping the global community informed about the latest developments touching on ICANN's mission. This allows for a cooperative

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[14] https://uasg.tech/wp-content/uploads/documents/UASG004-en-digital.pdf
[15] https://uasg.tech/wp-content/uploads/2021/09/UA-Readiness-Report-FY21.pdf

and multistakeholder approach in identifying and mitigating risks. The DNS is a centerpiece of the Internet infrastructure, providing the ability for anyone globally to access services and applications online by name instead of by numbers. The continued resilience and security of the DNS is critical regardless of the situation, location, and contingencies. Several factors imposed by the pandemic have forced people around the world to work and live differently: lockdowns have increased remote working and boosted online shopping habits of consumers in countries with the existing infrastructure, moreover, decreased travel has transferred many face-to-face interactions and events to online video calls. Inevitably, all these changes created additional demand on the DNS. To assess the impact of the pandemic on the DNS, in 2020 and 2021 ICANN org conducted tests and analyzed traffic data to measure and test the resilience built into the DNS. These measurements and studies demonstrated that the DNS has handled the increase in traffic and proved its resiliency by responding to the new challenges.

The pandemic led to other challenges as well, such as people creating domains that use COVID-19 as a hook to gain traffic and draw victims in, subjecting end users to phishing, malware, and scams. ICANN org is contributing to the COVID-19 anti-abuse effort, using its knowledge and expertise to put actionable intelligence into the hands of those able to disrupt malicious campaigns.[16]

ICANN org will continue to encourage and work with all relevant stakeholders around the world, who are actively engaged in mitigating the impact of COVID-19 and possible future pandemics, to preserve and further develop a strong and resilient Internet infrastructure.[17]

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[16] For more details, see this blog entry: https://www.icann.org/en/blogs/details/reporting-potential-pandemic-related-domains-1-5-2020-en

[17] https://www.itu.int/en/Lists/consultationFeb2021/Attachments/24//ICANN-ITU%20CWG-Internet%20Consultations%20September%202021.pdf