

**COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT
(CSTD)**

**Twenty-second session
Geneva, 13 to 17 May 2019**

**Submissions from entities in the United Nations system and elsewhere on
their efforts in 2018 to implement the outcome 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 22nd 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.

<p>DISCLAIMER: The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.</p>
--

2018 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

Executive Summary

ICANN is pleased and honoured to be invited to contribute to this annual UNCTAD Report. We value our involvement with, and contribution to, the overall WSIS process and to our relationship with the UN Commission on Science and Technology for Development (CSTD).

2018 has been a busy and important year for ICANN and for the Internet Governance Ecosystem in general; with the ITU Plenipotentiary taking place in Dubai and the IGF in Paris. For ICANN, the main body of work has been on the implementation of measures pursuant to compliance with the EU general regulation on data protection (the GDPR), and on policy development concerning a subsequent gTLD application process.

On wider Internet Governance issues, ICANN has been engaged, pursuant to our mandate and Mission, in a range of different activities. These have included being part of the Technical Community representation in the (now concluded) Enhanced Cooperation Working Group (ECWG), contributing to, and attending, the ITU PP-18 Meeting in Dubai (in November) and in the Multistakeholder Advisory Group (MAG) for the 2018 IGF in Paris.

We were also involved as a partner in the annual WSIS Forum (hosted by ITU in Geneva) in March.

On the more generic WSIS (and especially Internet) agenda, and pursuant to paragraph 29 of the Tunis Agenda, ICANN plays an appropriate role as a contributor to the overall Internet Ecosystem, this includes taking part in stakeholder events hosted by the UN High Level Panel on Digital Cooperation¹, contributing to the work of the Commission on the Stability of

¹ <http://www.un.org/en/digital-cooperation-panel/>

Cyberspace² and being part of the Internet Technical Advisory Committee of the OECD for their important work on “Going Digital”³.

With our partners in the Technical Community, and in line with paragraph 31 of the Tunis Agenda, we will continue to contribute, within our Mission, to public policy issues pertinent to the governance of the Internet, whether at the global or regional level. As recognised in the Tunis Agenda, public policy issues with respect to the Internet, benefit from the involvement of all stakeholders, not just governments or businesses.

Detail

1. GDPR Consultations and Dialogue

The European Union’s General Data Protection Regulation (GDPR)⁴ which came into effect in May this year is a significant piece of legislation, replacing previous legislation on data protection which was promulgated back in 1995. It is relevant in the context of WSIS Action Lines 5 and 6 as it is having a major 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. Indeed, because of the effect it has outside of Europe (it applies to non-EU entities that provide services to EU residents) it is being seen as a significant contribution towards (a much needed) global benchmark for data protection.

ICANN is affected by the GDPR both as a corporate entity (we employ and have engagement with EU residents and citizens) and as a party to contracts with Registries and Registrars who, themselves, contract for the selling of domain names with EU citizens and residents. In light of this, significant work was taken forward to ensure compliance with the GDPR, involving changes

² <https://cyberstability.org/>

³ <http://www.oecd.org/going-digital/>

⁴ <https://www.eugdpr.org/>

to internal processes and an introduction of a Temporary Specification⁵ (for our contracts with Registries and Registrars). The latter has affected the collection and publication of personal information of registrants (the owners of domain names) entered by the contracted parties into the WHOIS database⁶. This, consequentially, has affected to an extent, those parties, such as law enforcement and security professionals, who use the registrant information on the WHOIS for their legitimate activities in protecting the public.

The ICANN Community is currently undertaking a policy development process (known as the Expedited Policy Development Process (EPDP) on the Temporary Specification for gTLD Registration Data⁷) which plans to recommend measures for contracted parties to comply with the GDPR but also, as appropriate, to ensure that access can be given to registrant information for legitimate purposes. On the latter, draft proposals for a possible Unified Access Model (UAM) were published in August⁸ for ongoing discussion with the Community.

The new measures, recommended through the EPDP, once approved by the ICANN Board, will replace the Temporary Specification and are scheduled to come into effect in May 2019.

This work is clearly linked to WSIS Action Line 5, as the WHOIS contributes towards consumer protection in facilitating transparency in the ownership of domain names.

2. Subsequent gTLD Application process

Since the launch of the (new) gTLD Application Round in March 2012, over 1200 new names have been delegated to the root of the Internet, with domain names with extensions like .Africa, .Paris; .news, .xyz and .bank now being widely sold. A full list of the new gTLDs is at

⁵ <https://www.icann.org/resources/pages/gtld-registration-data-specs-en>

⁶ <https://whois.icann.org/en>

⁷ <https://www.icann.org/public-comments/epdp-gtld-registration-data-specs-initial-2018-11-21-en>

⁸ <https://www.icann.org/en/system/files/files/framework-elements-unified-access-model-for-discussion-20aug18-en.pdf>

<https://newgtlds.icann.org/en/program-status/delegated-strings>

During 2016 and 2017 a number of Reviews were initiated to assess the impact of this significant expansion of the generic domain name space, not least to look at the economic impact and to assess how competition, consumer choice and trust have been affected. These having been concluded, a new policy development process⁹, within the ICANN Community, was initiated to develop an appropriate framework under which further top level generic domain names could be applied for.

The Working Group (which has membership across the ICANN Community) consulted on an initial framework in July¹⁰ and is currently analysing the results, looking at, inter-alia, whether preferences should be given to certain TLD types (eg Community names), whether there should be a rolling application process (rather than rounds) and whether certain types of geographical names should be excluded. It is expected that final proposals will be consulted on during 2019 ahead of any implementation process.

A latest update on this important process for ICANN, which also has ramifications for WSIS Action Line Action Line 8 – especially in terms of promoting cultural diversity and local content - can be found at <https://gnso.icann.org/en/news>.

3. CSTD Working Group on Enhanced Cooperation (WGEG)

The Working Group¹¹ was established pursuant to the WSIS+10 review process in December 2015¹². It first met in September 2016 and concluded its deliberations in January with a report

⁹ <https://gnso.icann.org/en/group-activities/active/new-gtld-subsequent-procedures>

¹⁰ <https://www.icann.org/news/announcement-2018-07-03-en>

¹¹ <http://unctad.org/en/Pages/CSTD/WGEC-2016-to-2018.aspx>

¹² http://unctad.org/en/PublicationsLibrary/ares70d125_en.pdf

being submitted to the UN CSTD in May. ICANN was a member of the representation from the Technical Community along with both ISOC and DIPLO.

It was very disappointing that the Working Group, despite the best efforts of the Chair could not reach agreed conclusions on the nature of Enhanced Cooperation or on how dialogue on Internet related public policies could be enhanced for the benefit of all stakeholders. The exercise, however, was not futile. Members were able to learn from each other's experiences and to better understand national and regional concerns in respect of Internet issues. It will be important that the lessons learned from this Working Group are taken account of when the WSIS mandate is next reviewed by CSTD ahead of 2025.

4. Internet Governance Forum (IGF 2018)

The 2018 IGF¹³ in Paris in November was an important meeting in several ways. Not least it was the first time the UN Secretary General and the President of a host country had, together, addressed the IGF Community at the Opening Ceremony.

It will, though, be remembered for the important and ground-breaking address, lasting nearly an hour, by President Macron. With calls from both the President and the UN Secretary General for the IGF to evolve into a more policy orientated vehicle (rather than just a discussion forum) and from the former for it to be a direct responsibility of the Secretary General, it is clear that new approaches from all participants may be needed. ICANN, as a long-term supporter and sponsor of the IGF, stands ready to be involved in this evolution, at an important time generally for determination of Internet policies.

The President also used the occasion to launch his (so-called) Paris Call for Trust and Security in

¹³ <http://www.intgovforum.org/multilingual/content/igf-2018-0>

Cyberspace¹⁴ which brings together a range of partners in an endeavor to tackle threats on the Internet collaboratively.

ICANN, which had a significant presence in Paris led by our CEO, Goran Marby, our Board Chairman, Cherine Chalaby along with other Board and Community members, used the Forum to update the wider Internet Community on developments at ICANN and to listen to concerns and queries. Specifically, we used an Open Forum, a “Lightening” Session and a Workshop to discuss GDPR and WHOIS, the current status of the subsequent gTLD Programme and our capacity building programme in the Underserved Regions.

A key message, at these sessions, was our willingness to impart technical knowledge and factual information to those involved in drafting legislation or policies potentially affecting the security, stability and openness of the Internet.

In 2019, we look forward to meeting in Berlin to carry forward the important conversations both from Geneva in 2017 and from Paris.

5. Root Zone Key Signing Key (KSK) Rollover

For the first time ever, ICANN, in October, successfully changed the cryptographic key that helps protect the Domain Name System (DNS)¹⁵. This change was completed on 11 October 2018 and with minimal disruption of the global Internet. It was the first time the key had been changed since it was first put in use in 2010.

¹⁴ <https://theconversation.com/paris-calling-emmanuel-macron-calls-on-the-world-to-build-trust-and-stability-on-the-internet-107130>

¹⁵ <https://www.icann.org/resources/pages/ksk-rollover>

The key change was performed after more than two years of consultation with stakeholder communities, particularly in the DNS technical community. ICANN performed significant global outreach efforts in support of this change, in consultation with the ICANN community, and with extensive analysis of available data.

Following more than two years of effort, ICANN implemented the 16 September 2018 resolution of ICANN's Board of Trustees, stating that the organization should proceed with its revised plans to change or "roll" the key for the DNS root on 11 October 2018.

Importantly, the success of this action will lead to better security practices for the DNS in the future. This successful change is promoting greater confidence in ICANN's ability to seamlessly change the key again at periodic intervals – a practice strongly recommended in the world of cryptographic key management.

This significant work is clearly linked to WSIS Action Line 5, in Building Confidence and Security in the use of ICTS.

6. International Domain Names (IDNs)

ICANN, for nearly a decade now, has been working to promote domain names in different languages and scripts of the world, called Internationalized Domain Names (IDNs)¹⁶. It has already delegated 151 IDN top-level domains (TLDs), of which 56 are country code top-level domains (ccTLDs) for the different countries and territories in 33 languages written in 19 different scripts. In addition, to further promote the security and usability of IDNs, ICANN is actively engaged with the Community to define conservative rules to determine valid IDN TLDs and their variant labels. It aims to determine these linguistic constraints for at least 28 scripts used to write the various languages around the globe, including Arabic, Armenian, Bengali, Cyrillic, Devanagari, Ethiopic, Georgian, Greek, Gujarati, Gurmukhi, Han, Hangul, Hebrew,

¹⁶ <https://www.icann.org/resources/pages/idn-2012-02-25-en>

Hiragana, Kannada, Katakana, Khmer, Lao, Latin, Malayalam, Myanmar, Oriya, Sinhala, Tamil, Telugu, Thaana, Tibetan and Thai scripts. It has already published proposals for eighteen scripts, of which six have been finalized and integrated for the Internet's Root Zone. ICANN is also engaged with the Community to determine the management mechanism for IDN variant TLDs, once defined by these rules and possibly delegated in the future.

ICANN continues to promote universal acceptance of all domain names and email addresses equally, by supporting the Universal Acceptance Steering Group (UASG)¹⁷. UASG is a community-based team working to share this vision for the Internet of the future with those (ie coders) who construct this space. The group's primary objective is to help software developers and website owners understand how to update their systems to keep pace with an evolving domain name system (DNS), including IDNs.

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

ICANN; December 2018

¹⁷ <https://uasg.tech/>