ICANN Submission to the ITU Council Working Group Internet

The Internet Corporation for Assigned Names and Numbers (ICANN) appreciates the opportunity to contribute to the ITU Council Working Group (CWG) on International Internet-related Public Policy Issues. We are pleased to share our perspectives as part of the open online consultation on "The Role of Public Policy in Promoting Multilingualization of the Internet."

ICANN is a global nonprofit public benefit corporation with a 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. ICANN supports the idea that everyone, regardless of their background, culture, language, or location should be able to use the Internet. ICANN and the ICANN community are supportive of digital inclusivity, including advocating for a multilingual Internet.

1. What could ITU and its members and other stakeholders do to ensure that the Internet becomes more multilingual in nature and thus accessible for more of the global population?

Domain names and email addresses are generally used to navigate and communicate on the Internet. A truly multilingual Internet requires online content to be available in multiple languages. It also necessitates enabling internationalized domain names (IDNs) and email address internationalization (EAI), allowing global language communities to navigate and communicate online using their local languages and scripts.

Since 2003, based on the standards developed by the Internet Engineering Task Force (IETF), ICANN has worked with the community to enable IDNs at the second level. In 2009, ICANN launched its IDN ccTLD Fast Track Program, through which 44 countries and territories have been successfully allocated 63 IDN country code top-level domains (ccTLDs) to implement domain names in their languages and scripts, e.g. Singapore has two IDN ccTLDs, in Chinese and Tamil scripts. In 2012, ICANN also launched its new generic TLD (gTLD) program, through which another 90 IDN gTLDs have been delegated. Together, these 150+ IDN TLDs represent 37 languages in 23 scripts.

This has enabled millions of domain names to be available and used worldwide in the languages and scripts of their communities.

There are also examples of governments using IDNs to reach out to citizens in their local language and script, e.g. the Devanagari IDN https://एमईआईटीवाई.सरकार.भारत for the Ministry of Electronics and Information Technology of India, or the Russian Federation using http://стопкороновирус.рф to as its main COVID-19 information website during the pandemic. In addition, IDNs allow for EAI, based on the newer email standards available by the IETF (e.g., the test email address in Korean language and Hangul script: 이메일테스트@다국어도메인이용환경테스트.한국). As these IDNs and corresponding emails become more popular in use, software applications and systems need to be

upgraded to accept and process them. Ensuring that all valid domain names and email addresses are accepted by all software applications and systems, also known as Universal Acceptance (UA), is a key goal for ICANN. The ITU and members can help contribute to this important work.

Role of Stakeholders

All stakeholders including governments have a role to play in creating more awareness about the availability of IDNs and EAI.

- Governments: Member states can promote the use of IDNs and EAI, and update their own e-government services to be UA-ready. Member states can also update their procurement policies to include UA-readiness of software as a requirement for future information technology systems. To gauge progress, the member states may institute appropriate measures, e.g. the number of IDNs registered under their IDN ccTLDs and the number of e-services that are UA-ready, and the use of IDNs and their support in the systems deployed in the private sector. UA adoption by the member states can encourage broader usage of IDNs and EAI by software applications, encouraging businesses to support them. ICANN and ITU held a joint briefing for U.N. diplomats in New York and Geneva in January 2024, focused on IDNs and bridging the digital divide. ICANN collaborates annually with the global community to organize a UA Day to promote UA awareness and build capacity. In 2024, ICANN supported 54 UA Day events held in 47 countries. ICANN is planning to support 59 shortlisted UA Day events across more than 50 countries in 2025. Member states could also contribute to these efforts.

- International and regional organizations: Collaboration between the ITU with its member states, other regional and international organizations, and the technical community is crucial to promote the use and acceptance of IDNs, EAI, and a multilingual Internet. As examples, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and ICANN are collaborating on IDNs and promoting UA through the aforementioned UA Day. This work is a continuation of multiple panels on IDNs and UA where ICANN and UNESCO have participated to raise awareness over the past couple of years, including one on multilingual domain names at the 2024 Internet Governance Forum. ICANN contributed to the ITU's Girls in ICT program, organized by ITU's regional office in Thailand, by promoting the use of Thai domain names and email addresses among young women and girls. The ITU's Europe office was also invited to speak at the keystone 2024 UA Day event in Serbia.

Capacity Building for Universal Acceptance Adoption

Capacity development is also needed to promote UA adoption. Training is needed for professionals who develop software applications as well as those who maintain email systems. For a more sustainable mechanism, technical programs at universities and institutes should integrate the IDN and EAI concepts within their curricula. ICANN has been working with its community to develop a detailed training program for professional software developers and system administrators. In addition, ICANN and its community have worked on developing technical modules to integrate into the information and communication technology (ICT) curricula, and are now discussing integration with universities around the world. As an example, ICANN has been working with the Association of African Universities to integrate UA modules into ICT programs at universities across Africa. These efforts need to be broadened to promote the global adoption of IDNs and EAI in a sustainable way. Member States could work with their education departments to encourage universities to update their curricula to support IDNs and EAI, allowing for better access to the Internet in the local languages and scripts they use.

2. What are the benefits and challenges of multilingualization of the Internet, including through universal acceptance of Internationalized Domain Names (IDNs), or the lack thereof, in terms of technical, economic, security, cultural and capacity-building?

Billions of people are excluded from fully benefiting from the Internet, and one of the several reasons for that might be because they cannot use domain names or email addresses in their preferred languages and scripts due to technological limitations. Through Universal Acceptance (UA), all those who develop, provide, or manage websites, applications, and systems have the opportunity to enable users globally to experience the social and economic power of the Internet. This is achieved by updating legacy systems and ensuring all new systems can accept and process all domain names and email addresses.. Achieving UA ensures that everyone can navigate and communicate on the Internet using their chosen domain name and email address that best aligns with their interests, business, culture, language, and script.

The Internet population now has more than 5.4 billion active users. Achieving UA for all domain names and email addresses is crucial to enabling consumer choice online and achieving digital inclusivity for current users, and more so for the billions of people who have yet to come online. Further, there are important economic and social benefits of supporting multilingual Internet users in their ability to access, connect, and communicate for learning, e-commerce, local community engagement, and government services, as well as to embrace and proliferate local culture, like poetry, folklore, cuisine, art, tradition, and much more, through language. IDNs and EAI also build trust, as users who don't speak a foreign language can navigate and communicate online comfortably in their own language and script.

Many organizations are losing business opportunities by not updating their systems to be UA-ready, which has the potential to unlock billions in revenue from untapped customers. An earlier study,[1] conducted in 2017, found that UA of domain names is a $9.8+ billion opportunity - a conservative estimate. Organizations that are UA-ready will be best positioned to reach growing global audiences and maximize revenue potential from the current Internet population, as well as from the next billions of users coming online.

Case Studies and Materials

ICANN published a case study with a roadmap illustrating how it is transforming its own technical systems to become UA-ready, and recently announced support for EAI. The roadmap offers a way forward for other organizations. Similarly, another case study published by the UA Steering Group (UASG), a community-based initiative, provided examples of how organizations are supporting email services in Chinese and Thai languages. The UASG provides a more detailed technical framework for UA-readiness (including sample domain names and email addresses for testing) and many additional technical reports on UA adoption, including a detailed technical introduction.

[1] Kende, M & Kloeden, A, (2017), "Unleashing the power of all domains: social, cultural and economic benefits of Universal Acceptance." [White Paper] URL: https://uasg.tech/2017/04/universal-acceptance-internet-domain-names-usd-9-8-billion-opportunity-new-study-shows/