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Fiona Alexander
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National Telecommunications and Information Administration
1401 Constitution Avenue, N.W., Room 4701
Washington, DC 20230

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Dear Mrs Alexander,

We noted with interest your Docket No. 060519136-6136-0 : the United States Department of Commerce's National Telecommunications and Information Administration (NTIA) seeks comment on the continuation of the transition of the technical coordination and management of the Internet do main name and addressing system (Internet DNS) to the private sector.

INTLNET was created in France, in 1978 to serve as a common secretariat for the cooperation, information, and catalysis of the development of public and private systems participating in the international packet switch services, which were primarily pioneered by Tymnet Inc. under an FCC value added network licence. Until 1986, INTLNET directly participated in the development of the international network and of the name space (ttp://intlnet.org/intlhist.htm), as well as the introduction of OSI technology and the international connection of the Internet. INTLNET publishes a daily status report on the Internet top zone. It develops a distributed registry architecture in order to document and support the Multilingual Internet by way of usage.

To best know how to transition a system such as the Internet, one would need to gather elements about its previous evolutions and transitions, to better understand what it is, where it comes from, and where it should go. This is not easy, as most of the experience of the Tymnet and OSI pre-Internet international network deployment and successive transitions has been lost, and since plans for the future Internet (NSF) are slow in their forthcoming. An additional problem for a Government Agency is that the USA is probably the only country that has issued a legal definition of the Internet, in which their definition that was offered is rather confusing. To our knowledge their definition is:

> *"Internet: The term "Internet" means the international computer network of both Federal and non-Federal interoperable packet switched data networks." 47 U.S.C. § 230(f)(1).*

and is further detailed as follows:

> *Internet.--The term ``Internet'' means collectively the myriad of computer and telecommunications facilities, including equipment and operating software, which comprise the interconnected world-wide network of networks that employ the Transmission Control Protocol/Internet Protocol, or any predecessor or successor protocols to such protocol, to communicate information of all kinds by wire or radio.*
> *- Internet Tax Freedom Act, Pub. L. No. 105-277, Div. C, tit 11, § 1101(e)(3)(C)*
> *- The Children's Online Privacy Protection Act, Pub. L. No. 105-277, Div. C, tit 13, § 1302(6).*

In addition to being technically confuse, this definition, depending on the way it is understood or use, can be erroneous. This can only result in confusion, misunderstanding, and most probably inadequate decisions.

Let us observe the reality at hand. There is a human digital ecosystem.

This ecosystem is made of three structural levels of a different nature, origin, and governance.

- an ***infrastructure*** made of all the digital links and **information** systems of many technologies, with billions of owners, and their physical addresses.

- a ***superstructure*** made of many logics and procedures permitting many types of **communications** through that infrastructure, based on Ethernet, TCP/IP, OSI, MPEG, etc., of which the end to end Internet global networking system is only one part.

- a ***metastucture*** made of all the different relational **services** organised by and for the users, one of which is the DNS (which can be used outside the Internet, as is done on some mobile phones).

What the NTIA is now discussing is a vertical approach that could be labelled an “Internationalized US Internet”. It does not consider this horizontal layering. The risks are unmanageable, rigid, and complex layer violations, ultimately leading to conflict with other horizontal approaches such as China's as well as grassroots projects’ approaches.

In Tunis, the USA demanded to the world to control the Internet. The world fortunately accepted, and in turn created the IGF. However, it seems that there is a misunderstanding between what the concerned politicians think that they discussed and what they actually decided on in terms of the Internet architecture of usage.

They did not agree to having foreign computers and communications lines controlled by the USA. They did not agree to allow the USA to have control over their languages, cultures, societal behaviours, e-economy, Internet policy, and laws (even though some US Industry consortia feel they did). They also did not agree that the foreign non-Internet technologies systems would be controlled by the USA.

They only agreed that three small files, which list the TLDs that the NTIA wants to protect and the IP address block allocation, to be retained under the control of the IANA/ICANN. This is because together with the US datacoms infrastructure, other FCC policies regarding the other digital issues, US service industries, relations established with foreign ccTLDs, and the IETF protocols and language oriented solutions they collectively builds that Internationalized US Internet.

In so doing, the Tunis agreement de facto acknowledged that each country has the right to operate the same control on its own Internet equivalent resources. This created a **compartmentalization** framework at the meta-infrastructural level, which is hopefully able to prevent an Internet vertical **fragmentation** (also called “balkanization”). This is what can be described as the “national networks of the network of networks”. This situation is the stable situation of the other communication areas, and datacommunications known before the blunt expansion of the Internet due to the advent of the Web application. One can call it network maturity.

However, that stability will only exist when the US Government demonstrates that it shares that understanding, through the formulation of the mission assigned to its Internet Coordination Agency, whether public or private (ICANN). Until then, we are in an unstable situation where many things are developing without a clear vision of a common goal.

The Internet is a global system where there cannot be any win/lose situations. There can eventually only be win/win and lose/lose solutions. The issue today is the Multi-Internet (multilingual, multinational, multilateral, multitechnology, etc.). It can result either from a consensual evolution, or from an opposition to the “Mono-Internet” (unilingual/internationalized, unilateral leadership, one single technology, etc.). The NTIA must provide a clear sign that it does not want to prevent a “Multi-Internet”, even if at this time the current solutions were able to address all the US needs (what is probably not the case).

The core of the “Mono-Internet” is the IANA, which is managed by ICANN. In a distributed Internet, the IANA was a single point of possible failure but a valuable control tool for names and addresses. The addition of language registries makes it now a point of contention, and a planned target for power control. (cf. http://jefsey.com/iana-review-060630.pdf).

Vint Cerf recently explained that the authoritative root is the one that has more users. The authoritative root is

now the GSMA root file, which is supported by NeuStar, including ".gprs", with a potential of 2 billion existing users. To try to artificially maintain ICANN as the sponsor of the International Network, and to use the Root Server System and the IANA servers to that end, would be extremely hazardous. These two key services must become virtual, focusing on the content of the registries, protecting their leadership through quality rather than by complementarity exclusion: this would only pave the way to an Internet split, along with IANA competition and its eventual take over by some large stakeholder. This most probably would lead to instability and further splits.

This is why the proposed NTIA ICANN job definition is adequate. The role of ICANN should primarily be to manage the NTIA root file and ensure that its TLDs can be accessed worldwide. In so doing it will protect US interests and help every other country attain that their own TLDs be accessed in their own language, based on reciprocity. Similarly, it should ensure that the current Ipv4 and the ICANN Ipv6 are supported by the RIRs, and should cooperate well with the ITU Ipv6 /3 block for the countries that would like to deploy it.

To obtain this, ICANN should act as an innovation catalyst. It should promote IPSec, true Multilingual Internet support, and press the IETF for the documentation of the transition from a DNS unique authoritative root to a virtual root matrix, along the lines of the ICANN ICP-3 Document (http://www.icann.org/icp/icp-3.htm). Otherwise the multilingual domain names, keywords and private aliases will be supported in confusion.

An historic pioneer of international datacommunications services, after the delay created by the deregulation period, the USA used the academic Internet as their national packet switch network. It easily developed worldwide, the deregulation being then widespread, when the Web application came. The existing foreign systems found it appropriate to back to the e-central US market communication solution. Today, the world is not US e-centric any longer and can reconsider more national or even user centric solutions. This could soon become detrimental to the USA (and therefore to the rest of the world in a global system). The USA does not have an NIC like all other countries do, they are not ready for new services/visions of a foreign origin, or to maintain their digital presence on a Multilingual Internet, where English and even Ascii will no longer have an advantage.

This must be addressed. Delaying it can only be detrimental to everyone. If the USG decides that ICANN is in charge, it MUST assist in the development of US multilingual support, contribute to international cooperation, ensure that US interests are internationally duly considered, and document the US government and Congress when reciprocity is unsupported (what would on the mid-range only deserve US and Global interests). It is believed that it is only in being more American, and in clearly supporting the international American interest and security concerns (http://whitehouse.gov/pcipb) among the international cooperation, in turn pushing other countries to do the same in the common interest, that ICANN can best contribute to the development, stability, end to end interoperability, and innovation of the networks of the network of networks.

Yours faithfully,

JFC Morfin
Executive Director