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Comments on:

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Docket No. 060519136-6136-01

The Continued Transition of the Technical Coordination and Management of the Internet Domain Name and Addressing System

Available at http://www.ntia.doc.gov/ntiahome/frnotices/2006/NOI_DNS_Transition_0506.htm

Introduction and background

I thank the United States Department of Commerce for conducting this consultation which I highly appreciate.

And this because there is at present a very serious issue regarding Coordination and Management of the Internet Domain Name and Addressing System: some countries, including my country Syria, at stated previously on many relevant occasions and formums, believe that the current system is not consistent with their national sovereignty, and this because:

a) ICANN is a US entity under the jurisdiction, laws, and courts of the USA.

b) ICANN and its subdivision IANA operate under formal agreement with the US government.

c) ICANN chooses gTLDs and sets rules regarding prices, services, and dispute resolution with respect to gTLDs, whereas this is a matter of interest to all countries.

d) ICANN determines who operates a particular ccTLD, whereas this is supposed to be a national matter.

e) ICANN is ultimately responsible for IP address allocation, a matter that is of interest to many countries, and where historical imbalances have yet to be corrected (which is not the case for the comparable addressing resources for other telecommunication technologies).

f) The authoritative root server is operated by a US company (Verisign) under a contract with the US government.

g) Three root servers are operated by agencies of the US government.

These departures from national sovereignty have practical consequences, they are not just theoretical problems. The practical consequences include among other things:

1. The assignment of an operator for a country code top level domain names such as ".iq" for Iraq can be tied in US courts for US domestic reasons.
2. The process by which a country re-assigns its ccTLD to a different operator is not purely a national process.

3. IP address allocation is unbalanced, and favors Internet Service Providers (ISPs) in certain countries who then use this to obtain favourable arrangements with respect to Internet interconnections, to the disadvantage of developing countries, as was clearly demonstrated through the preparatory phases of WSIS.
4. Formal recommendations from a body such as WIPO (concerning protection of country names in the domain name system) are not implemented.
5. Domain names such as ".tel" or ".mobi" could be delegated to anybody, with unpredictable consequences for the integrity of the E.164 numbering plan (contrary to ITU Plenipotentiary Conference Resolution 133 adopted in 2002), if the operator decides to implement its own variety of ENUM, ignoring relevant IETF standards and ITU-T Recommendations.
6. The US courts will decide to what and extent ICANN can or should regulate Versign, the operator of ".com", with respect to new services.
7. Unilateral changes can be made to the rules regarding the domain name ".int", even though that domain name is reserved for intergovernmental organizations.

E-Mail is suffering, because of spam, and electronic commerce will soon follow, unless solutions are found to phishing and such. These problems are due to insufficient security and insufficient security is due to the fact that governments did not require adequate security, unlike the situation with respect to other telecommunications technologies, in which governments were properly involved in order to ensure that the public interest is well protected (for example, by requirements for security, quality of service, emergency services, legal intercept, etc. which apply to equipment and operations). The private sector will provide only the level of security that it needs for its own purposes, which is typically less than the level needed for public safety.

It has been proposed that ICANN's Government Advisory Committee (GAC) could be a way to address some, if not all, of these issues. Syria is not convinced that this is the case, for many reasons, including the fact that it is absurd to embed a strong government structure within a private sector company. Those who believe in private sector leadership surely cannot argue in favour of a strong GAC. But a weak, purely advisory, GAC cannot handle the issues outlined above.

As a way forward, Syria proposes that DoC should implement the spit of responsibilities outlined below.

1. Administration of Internet names and IP addresses

1.1 Country code top level domain names

At present, the authoritative source of the correspondence between country code top level domain names (ccTLDs) and the organization operating the ccTLD is maintained in the so-called "hidden" root server operated by Verisign under an agreement with the US Department of Commerce (DoC). Changes to the entries in the "hidden" root server are proposed by the Internet Assigned Names Authority (IANA), a unit of the Internet Corporation for Assigned Names and Numbers (ICANN), approved by DoC, implemented by Verisign, and then automatically replicated to the 13 root servers and their various slaves and copies around the world. IANA/ICANN has its own consultative processes for approving changes prior to submission to DoC, involving various concerned constituencies. (See Annex A below.)

This arrangement is not consistent with national sovereignty (for some countries), in that a sovereign country who wishes to change the operator of its national ccTLD must first agree the change with IANA (a unit of a US corporation), and then wait until it is approved by DoC and implemented by Versisign (also a US corporation).

Given the differing views on this topic ITU should maintain, at the request of specific countries, and as early as possible, the list of authoritative ccTLD operators for those specific countries. The operator of the "hidden" root server should rely on the list published by ITU for those specific countries and this should be recorded in a formal agreement between the US government and the ITU and/or the operator in question (Verisign) and the ITU. The mechanisms for ITU's maintaining such a list should be specified in an appropriate Resolution and/or a Recommendation; pending approval of such a Resolution or a Recommendation, an interim procedure should be used. Other countries may continue to rely on the present arrangement.

1.2 IP address allocation

At present, IP addresses are allocated to Internet Service Providers (ISPs) and large end-users by regional private-sector organizations called Regional Internet Registries (RIRs). RIRs sub-allocate addresses to Local Internet Registries (LIRs). There are no "hard" geographic constraints, in that any organization can request addresses from any RIR, independently of its geographic location.

The current arrangement is an evolution of a historical allocation scheme that had not been designed to cope with the commercial growth of the Internet and that had resulted in what are widely considered to be sub-optimal allocations (for example, excessively large blocks of addresses allocated to early adopters. Some administrations believe that the historical allocation favors large ISPs in developed countries, who use this (in addition to other factors) to negotiate Internet interconnection agreements that are not related to costs and that result is a net transfer of revenue from developing countries to developed countries.

In the future, a portion of the IP version 6 address space should be reserved for allocation by national authorities, thus allowing small national operators to obtain addresses at low cost from a public national source. We recognize that it has been stated that any such national allocation scheme might result in excessive growth of routing tables and eventually create significant technical problems that could adversely affect inter-operability, but these statements should be validated by parties who are not financially implicated in the current allocation system..

ITU should explore, in conjunction with other relevant bodies, in particular the Regional Internet Registries (RIRs), the issues and find a solution that would address all the concerns that have been raised.

1.3 Generic and Special top-level domain names

Generic top level domain names (gTLD) are those such as ".com" that are used generically. Sponsored top-level domain names (sTLD) are those that have a special purpose such as ".aero".

At present, ICANN develops the rules for allocating new gTLDs and sTLDs, chooses the operators for gTLDs and sTLDs, and sets the rules (including fees paid to ICANN, wholesale prices, service limitations, etc.) that apply to operators of gTLDs and sTLDs.

All gTLDs and sTLDs are of interest to all countries. Furthermore, in certain cases, some proposed new sTLDs would appear to have a potential to interact with telecommunication technologies that have been subject to national regulation and to international coordination through ITU, for example ".mobi" and ".tel", for example by using ITU-T Recommendation E.164 numbers in conjunction with Internet domain names.

ITU should be involved, for the time being, in conjunction with a reformed ICANN (if any) and other relevant bodies, in the approval of the rules related to gTLDs and sTLDs, in particular for what concerns multilingual top-level domain names (this is, use of IDN for gTLDs).

1.4 Administration of root server system

At present, there are 13 root servers, each independently operated. Each of these 13 systems has various slaves or duplicate copies around the world. Each of these 13 systems obtains its data from an authoritative source, called the "hidden" root server. The "hidden" root server is operated by Verisign under an agreement with the US Department of Commerce (DoC). Changes to the entries in the "hidden" server are made only with the approval of DoC. Three of the servers are operated by agencies of the US government. This is not consistent with national sovereignty.

There are various options that could be considered in order to change the current arrangement. Some of those options involving ITU are shown graphically in Annex B of this paper.

In particular, ITU should act as repository for a Memorandum of Understanding (MoU) formalizing agreements between concerned parties with respect to administration of the root server system, which parties might include those governments, who wish to be involved in the administration of such systems.

2. Responses to specific questions posed by NTIA

This section contains my responses to the specific questions posed by NTIA.

2.1 Are the White Paper principles still relevant?

Partly. The principles of stability; competition; private, bottom-up coordination; and representation are relevant (as they have always been throughout the history of telecommunications). But it should be noted that ICANN has failed on all counts, because:

a) There is insufficient competition for gTLDs and for IP address allocation;

b) ICANN is hardly a model of private-sector leadership, given the heavy influence of the US government;

c) It has been stated by others that ICANN at times overrides bottom-up consensus views;

d) Many key stakeholders are not represented (see 2.4 below).

Further, the above principles must be supplemented by the principles agreed in WSIS, namely:

1) The Internet has evolved into a global facility available to the public and its governance should constitute a core issue of the Information Society agenda. The international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations. It should ensure an equitable distribution of resources, facilitate access for all and ensure a stable and secure functioning of the Internet, taking into account multilingualism. *(Geneva Declaration of Principles, 48).* This means, among other things, that new methods must be found to ensure equitable allocation of IP addresses.

2) The management of the Internet encompasses both technical and public policy issues and should involve all stakeholders and relevant intergovernmental and international organizations. In this respect it is recognized that: *(Geneva Declaration of Principles, 49)*

    a. Policy authority for Internet-related public policy issues is the sovereign right of States. They have rights and responsibilities for international Internet-related public policy issues;

    b. The private sector has had and should continue to have an important role in the development of the Internet, both in the technical and economic fields;

    c. Civil society has also played an important role on Internet matters, especially at community level, and should continue to play such a role;

d. Intergovernmental organizations have had and should continue to have a facilitating role in the coordination of Internet-related public policy issues;

e. International organizations have also had and should continue to have an important role in the development of Internet-related technical standards and relevant policies.

3) Countries should not be involved in decisions regarding another country's ccTLD. *(Tunis Agenda, 53).* This means that no US entity, whether government or private sector, should be involved in decisions regarding non-US ccTLDs.

2.2 Has ICANN achieved sufficient progress?

No. As noted in the introduction above, ICANN lacks legitimacy, in particular concerning ccTLD management and IP address allocation. The only transition that could be envisaged at present is the implementation of a new cooperation model between ICANN and ITU as proposed in section 1 above.

2.3 Should new or revised tasks/methods be considered in order for the transition to occur?

Yes. A new cooperation model and split of responsibilities proposed in section 1 above should be considered.

2.4 Stakeholder participation

As noted in section 1 above, participation by the governments of many countries is at present totally inadequate, and in fact impossible under the current structure. The same is true with respect to participation by private sector operators and civil society from many countries.

Greater involvement from these stakeholders, who are essential for the future growth of the Internet, could be facilitated by adopting the new cooperation model and split of responsibilities proposed in section 1 above.

2.5 Supporting organizations

Same answer as for 2.4 above.

2.6 ccTLD issues

See 1.1 above.

2.7 Enhanced cooperation

The new cooperation model and split of responsibilities outlined in section 1 above should be implemented.

Annex A: Relations amongst various DNS administration bodies

Administration of the Internet Domain Name System (DNS) comprises two types of activities: agreeing policies for the assignment of certain resources, and administering a database or other record of the assignments made. We will refer to these two different activities as the Policy Function (PF) and the Administration Function (AF).

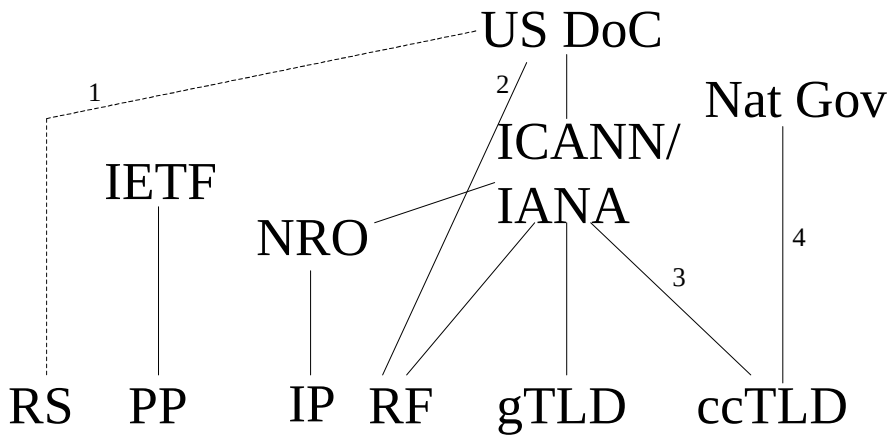
The resources in question are entries in the source (or master) root file (RF), IP addresses (IP), and protocol parameters (PP).

In addition, administration of the DNS comprises developing policies related to operation of root servers (RS) and administration of those policies (that is, ensuring that the actual operations are carried out in accordance with the agreed policies).

And it comprises developing policies related to the operation of gTLDs and ccTLDs and administration of those policies.

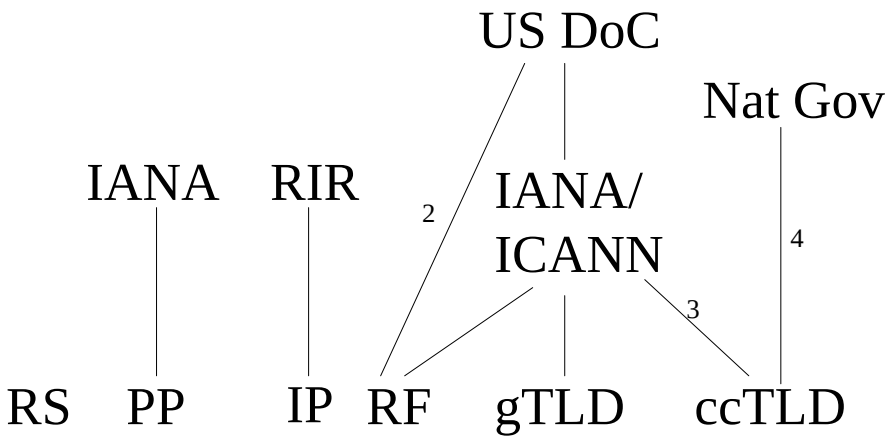
In the figures that follow, NRO refers to Numbering Resource Organization, which comprises the Regional Internet Registries (RIRs).

Figures A.1 and A.2 represent the present relations amongst various bodies.



1: refers to root servers operated by agencies of the US government
2: refers to contract with Verisign
3: only for some ccTLDs
4: only for some ccTLDs

Fig A.1: Present Policy Function

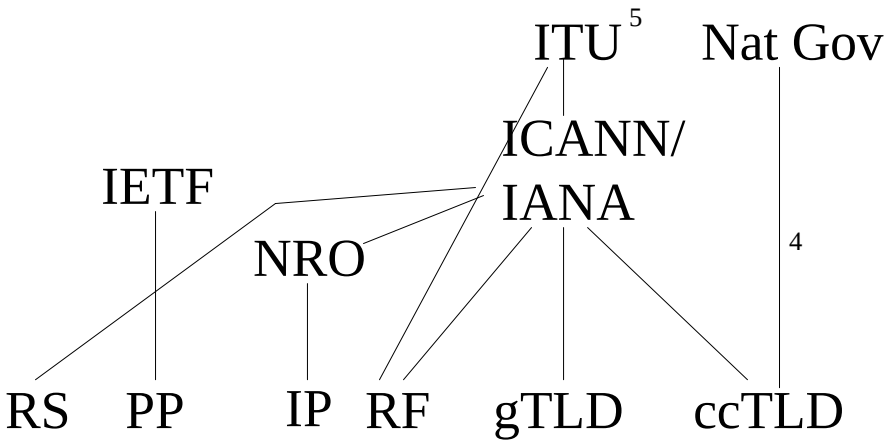


2: refers to contract with Verisign
3: only for some ccTLDs
4: only for some ccTLDs

Fig A.2: Present Administration Function

Annex B: Possible alternatives for Relations amongst various DNS administration bodies

Figure B.1 shows the proposed alternative to the current situation.



4: only for some ccTLDs
5: MoUs between ITU and ICANN and ITU and root server operators and/or alternative equivalent arrangements

Fig B.1: Alternative Policy Function
