Public Interest Registry

Principles for the Foundation of Top Level IDNs

Public Interest Registry (PIR) believes that the full deployment of internationalized domain names (IDNs[1]) at all levels (including the top level, as well as at the second and lower levels) is part of a necessary evolution in the development of the Internet. IDNs are a vehicle of inclusion for communities worldwide, including the non-commercial community, and are a requirement for true closing of the digital divide. The day has passed when the Internet can operate in a single language (English), and there is now global demand for IDNs.

PIR believes that the principles for IDNs should be global in scope and should be applicable to all peoples and all languages.

It is therefore our belief that the following six basic principles must be embedded in the foundation of all discussion on IDNs:

1. Retention of public trust—The public trust earned by existing domains must not be betrayed, or trust in the Domain Name System (DNS) itself may be eroded;
2. Protect DNS security and stability-An increasingly hostile environment requires coordinated, not fractured, TLD management;
3. Ensure equity and parity for Registries and Registrars—Contributors to public trust in the domain space must not be disenfranchised;
4. Minimize regulatory burdens—Fragmented regulation will add needless complexity and retard DNS expansion rather than aid it;
5. Foster a balanced approach to Intellectual Property protection and dispute resolution—The need for uniformity dictates fewer authorities;
6. Maintain consistency with proven Internet principles--.RFCs 2825 and 2826 urge single maintainers for symbols with common meaning.

In greater detail, the principles are as follows:

1. Retention of Public Trust

Stewards of the technical administration of the Internet are committed to act in the best interests of the public (current and future domain name registrants and Internet users).

All registry operators of top level domains are obligated to operate in accordance with the technical requirements and guidelines set by ICANN and

[1] Technically speaking, ASCII labels (such as .ORG) and IDN labels (such as .團體 or .团体) are both represented in ASCII in the Domain Name System. Users, however, may view the IDN label in their local script and be unaware that this representation is converted to ASCII prior to transmission on the DNS.

the IETF. The generic Top Level Domains (gTLDs) and many country code Top Level Domains (ccTLDs) have become globally recognized brands as a result. Users have an expectation of ubiquitous yet coherent worldwide resolution of the gTLDs and have grown accustomed to consistency in registration and resolution processes. Regardless of the continent from which a user accesses a TLD, users expect and deserve a similar, consistent and coherent experience at the level in the DNS where actual resolution, propagation and delegation of domains occur.

Users have arrived at a reasonable conclusion that the operator of a globally resolving TLD registry can be trusted to deal with significant operational issues as they arrive in the domain; it is reasonable for them to expect the same comparable level and quality of service in all scripts that represent the same domain label worldwide.

If the implementation of IDNs is managed in such a way as to result in brand fragmentation, this will inevitably diminish the public trust of all gTLDs and ccTLDs. We believe that this factor must be considered in order to avoid exposing registrants to the dangers flowing from a devaluation of the trust that has been built up in the DNS and the global single-root system.

Further, registrars and other distributors of gTLD and ccTLD registrations have implemented automated and standards-compliant systems that result in rapid and accurate domain name transactions. Should a gTLD or ccTLD be managed by different operators for each IDN representation, registrars and other distributors will have to build systems that connect to each of these separate entities for what is essentially the same string (albeit in different languages). This raises the prospect of confusion in terms of the identity of individual registries. In addition, there is a strong possibility of difficulties in dealing with problems that need to be addressed in a variety of representations in an accountable manner.

2. Protect DNS Security and Stability

<u>As the Internet becomes ubiquitous, nothing is more critical than ensuring the protection of the security and stability of the DNS.</u>

The selection of registry operators to manage the gTLDs was made with explicit evaluation of the capability of the operator to handle DNS security and stability issues in an expert manner. With respect to the country code top level domains (the ccTLDs), ICANN and its IANA function regularly review the security and stability of requested changes by ccTLD operators prior to making such changes in the root – a necessary safety precaution whose value has been proven time and again. In addition, there are industry expectations as to the operator's achievement of service levels, the operator's ability to scale to accommodate significant growth of the TLD, and the

operator's ability to handle attacks that threaten to compromise the security or the stability of the TLD.

The existing registry operators are in a unique position to respond swiftly and appropriately to numerous security and stability issues because of their investment in systems, structures, processes and people who have gained expertise in resolving problems. Should the management of registries for the same domain in various IDN representations be entrusted to different organizations, then concerted and uniform response to security and stability threats could be so difficult as to be almost impossible.

3. Ensure Equity and Parity for Registries and Registrars

Disenfranchisement of existing registries and registrars will result in a domain name system that is not based on justice and fairness**.**

The allocation of existing gTLDs and ccTLDs in other IDN representations to parties other than the current operators would not result in any increase in value either to the community or the existing operator. This is inequitable to the operators and is not consistent with principles of parity and fair treatment.

Competition in the top levels of the DNS should be fostered by calling for competition to establish new strings, clearly separate from existing gTLDs, through equitable and transparent processes that evaluate the proposed strings and their operators on their merits.

There are similar issues of equity and fairness with respect to registrars. Registrars transacting business with a registry offering IDN versions of an existing TLD would be able to offer these multiple IDN strings to their customers more economically through a uniform back-end solution that leverages their technology investment. In contrast, registrars face costly implementation of new systems if a label in different IDN representations is managed by different operators. Current ccTLD experience illustrates this: ccTLDs supported in a common system (e.g. Afilias' or other's) are more economical for registrars to offer and typically enjoy wider availability than those in proprietary, single TLD systems.

4. Minimize Regulatory Burdens

The appointment of new registry operators for existing gTLDs or ccTLDs in other IDN representations risks subjecting them to parochial regulatory restrictions, and a likelihood of slowing the natural expansion of the DNS required to accommodate the multilingual interests of the peoples of the world.

One of the secrets of success of the Internet has been its growth and expansion generally free of undue regulatory burdens imposed by governmental and intergovernmental authority. It should be a primary goal of policy development for IDNs to recognize that multiple jurisdictions asserting regulatory authority over the same TLD in different IDN representations would hinder and not help the expansion and utility of domain name system.

In addition, a single regulatory jurisdiction offers other advantages, some of which are enumerated below:
a: Simplification of contact by law enforcement authorities
b: Single source of information for users,
c: Uniformity and established relationships with users.

The Internet is a crucial engine for economic growth and free speech. The Internet remains open to innovation and progress due to the existence of a system free of conflicting regulatory burdens.

Among all the gTLD registries, PIR has been one of the leaders in the introduction of IDNs. Governmental and inter-governmental interests should respect the achievements and legitimate interests of PIR in maintaining the registry of .ORG across the full range of its IDN expressions. .

5. Foster a Balanced Approach to Intellectual Property Protection and Dispute Resolution

The uniform application of guidelines providing a consistent process for Intellectual Property protection and dispute resolution is necessary for all users of the Internet.

Intellectual property challenges have always been present in the DNS and are likely to become even more complex in IDN representations of domain names. The Uniform Dispute Resolution Policy adopted by ICANN for the resolution of domain name - trademark disputes should be extended and modified as necessary to cover IDNs.

Uniformity is an essential element of this policy. The adoption of different dispute resolution procedures for the same TLD in different IDN representations would seriously compromise public trust in trademarks and

brand names and inevitably lead to consumer confusion. All users of the Internet are entitled to the benefits of a balanced and uniform approach to the protection of intellectual property.

6. Maintain Consistency with Proven Internet Guiding Principles

The IAB (Internet Architecture Board) has provided significant relevant guidance for the DNS in the following RFCs from May of 2000:

RFC 2825: A Tangled Web: Issues of I18N, Domain Names, and the other Internet Protocols; and
RFC2826: IAB Technical Comment on the Unique DNS Root.

In RFC 2825, two statements provide useful guidance:

1) "…solutions must not cause users to become more isolated from their global neighbors even if they appear to solve a local problem."

2) "One aspect of the challenge is to decide how to represent the names users want in the DNS in a way that is clear, technically feasible and *ensures that a name always means the same thing*." [emphasis added]

One of the significant challenges of implementing IDNs is to avoid fragmenting the Internet and isolating users. PIR believes that a key means of avoiding this problem is to allow all manifestations of a given top level domain to be managed by a single entity. This simple solution will also address the second issue: ensure that each TLD name always means the same thing.

In RFC 2826, the IAB wisely observed that: "Effective communications between two parties requires two essential preconditions:

-The existence of a common symbol set, and
-The existence of a *common semantic interpretation* of these symbols. [emphasis added]

Failure to meet the first of these conditions implies a failure to communicate at all, while failure to meet the second implies that the meaning of the communication is lost."

Further, the IAB says: "Names are then constant symbols, whose interpretation does not specifically require knowledge of the context of any individual party."

Most, if not all, existing TLDs have achieved a "common semantic interpretation." Of all domains except .COM, .ORG probably has the most

consistent interpretation, or meaning, on the Internet—a meaning well understood and accepted by most Internet users.

Importantly, RFC 2826 goes on to say:

"Since the DNS is hierarchically structured into domains, the uniqueness requirement for DNS names in their entirety implies that each of the names (sub-domains) defined within a domain has a unique meaning (i.e., set of DNS records) within that domain. This is as true for the root domain as for any other DNS domain. The requirement for uniqueness within a domain further implies that there be some mechanism to prevent name conflicts within a domain. *In DNS this is accomplished by assigning a single owner or maintainer to every domain, including the root domain*, who is responsible for ensuring that each sub-domain of the domain has the proper records associated with it. This is a technical requirement, not a policy choice." [emphasis added]

Insofar as .ORG in different scripts is considered the "same domain," RFC 2826 appears to *require* that it be managed by a "single owner or maintainer." To the extent that .ORG in different scripts is considered a "different domain," ICANN should establish an equitable and transparent process for evaluating both the value of a new domain as well as its prospective management.

Another well accepted principle, the "Principle of Least Astonishment" also dictates that TLD's be managed in the most consistent manner possible so as to lead to the least confusion. Under the IAB principles outlined above, a "common owner or maintainer" is the likely best solution for this issue as well.

In summary, PIR's position on this issue is well supported by current thinking on the technical issues as well as by wisdom applied years ago to similar problems. It should be remembered that the initial set of IDN problems were eventually solved through adherence to these simple, but powerful, principles.