

Internet Corporation for Assigned Names and Numbers
Mr. Kurt Pritz, Senior Vice President, Services
4676 Admiralty Way, Suite 330
Marina del Rey, CA 90292-6601, USA

November 25, 2010

Dear Kurt,

I am writing to you in my capacity of the chairman of the IPAG, the independent policy advisory group for the .tel Top Level Domain. The IPAG controls all policies active in the .tel TLD. The IPAG consists of five members (Jeff Neuman, Elmar Knipp, Micha Benoliel, Bart Lieben and myself) each of whom has an equal vote.

I am a Senior System Architect at Roke Manor Research. I'm an active contributor to the IETF and a co-author of a number of ENUM-related RFCs, including the new version of the ENUM standard. I have been an active member of the UK ENUM Technical Group that led up to the introduction of the ENUM system in the UK. I have also been personally involved in ENUM trials in a number of countries, in development of ENUM software and systems, and have co-hosted the first ENUM technical interoperability tests. In short, I know ENUM in depth, both technically and from an operational perspective. I have been a member of the .tel policy advisory group since 2006 and have served as the IPAG Chairman since 2008.

Recently Telnic submitted a request to ICANN to allow allocation of numeric-only strings in .tel (excluding single-digit strings).

Below I summarise the process Telnic and the IPAG has used so far in submitting this RSEP proposal.

I also provide some technical background to show why multi-digit strings in .tel are not in conflict with ENUM and Telnic's agreements with ICANN.

Also, comments have been raised that suggest that the RSEP is not appropriate for this change (or, apparently, any change) to an sTLD's operation. I list the reasons why I believe it *is* appropriate (indeed, it is the only way to make such changes).

RSEP process and the IPAG

There were two RSEP proposals being processed by ICANN for .tel; one covering permission to release one and two ASCII character labels that was recently approved, and another proposing release of all but single digit labels that is still under review.

For this digit label RSEP proposal, the process so far was as follows:

1. Based on community feedback, Telnic's Policy Director contacted me to ask if digit only strings could be allowed in .tel domains. Given that neither the current .tel AUP nor the .tel ICANN contract permitted such labels I decided to conduct a thorough review of this issue.

2. After that review I came to the conclusion that the only reason for this restriction on digit strings in .tel was to prohibit Telnic from competing against ENUM.
3. From my expert knowledge of ENUM I knew that the restriction imposed on Telnic was over-zealous and unnecessary. Simply restricting *single* digit labels as opposed to *all* digit labels was sufficient to prevent Telnic from running an ENUM tree in .tel, in keeping with its agreement with ICANN.
4. I therefore concluded that relaxing the restriction from blocking all numeric-only strings (as in the current charter) to prohibiting only single digit strings would continue to prevent Telnic from competing with ENUM (the intent of the charter text), whilst not changing the purpose of the .tel TLD at all.
5. On the basis of this conclusion I informed Telnic's Policy Director that as long as Telnic restricted the use of single digit domains it would not be a change of community, purpose, use, or charter principles for the .tel TLD and therefore he should prepare an RSEP proposal to request the registration service change.
6. Acting as the IPAG Chairman, I sent a summary of the process, my suggested position on the policy aspects, and the background to this to the IPAG. As a precaution I asked the IPAG members to vote on the principle of releasing these labels. IPAG did vote unanimously in support of this principle.
7. Telnic submitted the RSEP request.

This reflects the normal procedures. Where there is obviously no change in community or the spirit of the charter, Telnic consults with me as the IPAG chairman, and with my agreement proceeds. Where there are policy implications, I notify the IPAG and indicate the policies that will need to be considered.

Given that this RSEP proposal does not have any impact on the principles of the .tel charter, retains the distinction between .tel and ENUM, and certainly has no impact on the community OR on the way in which .tel is used, I considered it reasonable merely to notify the IPAG and to wait until the final form of agreement between the company and ICANN was forthcoming. Once that happens, the IPAG will convene to amend the .tel AUP to allow for number digit strings.

The .tel Acceptable Use Policy (AUP) controls the purpose and use of the .tel sTLD and its registered domains, reflecting the .tel charter and community principles. This AUP also controls registrations, as it incorporates its own defined limits on acceptable domain names.

Thus the RSEP process gives permission for change, but it is the .tel IPAG that determines what change is acceptable from a sponsored community and charter perspective.

Sponsored TLD paradigm and purpose of an sTLD

The concept of Sponsored TLD first emerged in the 2000 new TLD application round. According to that idea, "a sponsored TLD is a specialized TLD that has a sponsor representing the narrower community that is most affected by the TLD. The sponsor thus carries out delegated policy

formulation responsibilities over many matters concerning the TLD”.¹ Accordingly, there are two principles that define a specific sponsored TLD:

1. Sponsored Community.

This defines who **can** participate in the TLD. This also determines the mission of the sponsoring organisation.

2. Eligibility Requirements.

These define who **can not** participate in the TLD. Eligibility requirements are needed to ensure that the scope of the sTLD and hence, the delegated authority of the sponsoring organization are indeed limited to the needs of the sponsored community.

.tel as a sponsored TLD

According to the .tel charter², the purpose of the .tel sTLD is to serve individuals and organisations “that wish to store and publish their contact information using the DNS” (paragraph 1 of the .tel charter).

The .tel **Sponsored Community**, according to the same paragraph, is defined by the activity of the registrants who use their delegated DNS zones for publishing NAPTR records rather than Address records.

The .tel **Eligibility Requirements** are established in the .tel AUP³ which is mandatory for all registrants (paragraph 2 of the .tel charter). The first rule is that every .tel domain must contain at least one piece of contact information in the form of a DNS NAPTR record. The second rule is that user-specified A records (Address records) are not allowed in .tel. This essentially means that one cannot use a .tel domain for a website.

There is one further element in the charter that is germane to this RSEP proposal. This is Telnic’s agreement to ensure that .tel is not and cannot be used to provide an ENUM service or otherwise conflict with ENUM. This is covered in more detail in the following section.

By embedding contacts directly in domains, .tel is vastly different from just every other TLD in the world. The definition of the Sponsored Community and the Eligibility Requirements provide a very clear delineation of what .tel is and what .tel isn’t.

Does the purpose of the TLD or its essential principles change if multi-digit strings are allowed in .tel rather than just alphabetic strings? Clearly, that is not the case.

The Sponsored Community will still be defined by the activity of its members. Those that publish NAPTR records in the DNS are still members of the community, regardless of whether they do it via an alphanumeric .tel domain or via a purely numeric one.

¹ ICANN Rio de Janeiro Meeting Topic: Criteria to Be Used in the Selection of New Sponsored TLDs, <http://www.icann.org/en/meetings/riodejaneiro/stld-rfp-topic.htm>.

² Appendix S to the .tel Registry Agreement, part I - .tel charter, <http://www.icann.org/en/tlds/agreements/tel/appendix-s-04feb08.htm>

³ .tel Acceptable Use Policy, <http://www.telnic.org/downloads/AUP.pdf>

The Eligibility Requirements will also stay the same. Holders of numeric-only domains will still be required to publish contact information in the DNS and they will still be disallowed from using user-specified Address records. All the essential sTLD requirements stay in place. Use of the domains is identical whether they are alphabetic or multi-digit labels.

The proposed amendment does not propose anything remotely resembling a “fundamental change” to the sTLD. This is merely a non-essential modification of the syntactic rules of the TLD.

ENUM and .tel

One could reasonably ask why the restriction on all numeric names was put in place in the .tel registry agreement. To explain that we’ll need to go back to ICANN’s new sTLD round of 2004, and a separate system called ENUM.

NAPTR records that are the core of the .tel ecosystem are also used in a system called ENUM, which is being standardised by the IETF and is controlled by the ITU and IAB. ENUM is a way of routing communications. It maps telephone numbers to domain names and provides facilities to associate traditional telephone numbers with specific Internet resources such as VoIP identifiers.

For example, according to the ENUM rules, the phone number +442074676450 corresponds to an Internet domain name 0.5.4.6.7.6.4.7.0.2.4.4.e164.arpa. Note that in the ENUM domain tree the telephone number has to be written backwards and broken down into separate digits. Each of the single digits then becomes a domain label.

The key point is that machines (softswitches and Session Border Controllers) use ENUM to place calls or set up communications that are addressed using fully qualified telephone numbers.

In the 2004 new sTLD round two applications were submitted for the .tel TLD – one from Telnice that was eventually approved by ICANN, and another application from NetNumber/Pulver.

The NetNumber/Pulver .tel application was specifically focused on linking telephone numbers with the domain name system and simply copied the ENUM approach. As stated in their RFP application, the new TLD was supposed to become “the top-tier of a globally distributed directory solution that enables IP Communications Service Providers (IPCSPs) to register the phone numbers of their individual or enterprise subscribers on the Internet and associate those phone numbers with any number of IP-enabled communications devices (phone, fax, e-mail, PDA, etc.) or services.”⁴

During the public comment period numerous comments were posted that highlighted the overlap between the Pulver concept and ENUM, and expressed concerns because of the potential conflict between two addressing systems⁵.

Telnice proposed a completely different and innovative concept of using the .tel TLD. This envisaged placing personal contacts directly in domains, with the goal that these would be published by and

⁴ New sTLD RFP Application .tel-Pulver. <http://www.icann.org/en/tlds/stld-apps-19mar04/tel-pulver.htm>

⁵ Public comment forum on Pulver .tel application. <http://forum.icann.org/lists/stld-rfp-tel-pulver/>. See e. g. comments by Daniel R. Tobias, Mark Healey, JongYun Ra, Koki Higashida, Jim Reid and Paul Rosbotham.

presented to people. This contrasts with the ENUM approach of taking telephone numbers and mapping these to a strict domain hierarchy, with machines processing fully qualified telephone numbers to find the appropriate domain in that hierarchy and using records stored there to place calls automatically.

In 2004, ICANN (in common with almost all other stakeholders) did not have a clear understanding of ENUM and the way it operated, and so it was simpler to block all digit-only strings. This was and is a gross over-restriction, as ENUM simply does not operate on multi-digit strings (instead relying a domain hierarchy with specifically crafted sets of single digit labels). However, at the time it was simpler to phrase the restriction in this way rather than explain the details.

The current RSEP proposal retains the distinction between .tel and ENUM whilst removing the over-restriction. It will now block only the labels that need to be blocked.

In this proposal, single-digit labels (such as 1.tel or 4.tel) are reserved, rather than continuing to apply a blanket prohibition of all numeric labels (such as 3663.tel); that is not needed or useful. By blocking all single digit labels, the root of an ENUM tree cannot be placed directly in .tel. ENUM simply doesn't work with multi-digit labels.

Telnic did not and does not intend to launch any alternative to ENUM, and has a long standing agreement with ICANN that this will be the case for .tel. That is why in its RSEP request Telnic volunteered to block all single-digit labels in .tel. This is reflected in the proposed amendment to the .tel registry agreement.

It should also be noted that all other TLD agreements except .tel and .name do not contain any restrictions on numeric-only strings. Besides, alternative ENUM-like systems such as e164.org have existed successfully for years and we are not aware of any community concerns in this respect.

Why RSEP is the applicable process

Should the proposed amendment be approved, new domain names will become available in .tel. This represents an extension to the core service of the registry – registration of domain names. This service can only be provided by Telnic by reason of its designation as the registry operator. As such, the proposed change clearly falls under the definition of a registry service given in paragraph 1.1 of the Registry Services Evaluation Policy⁶.

Other registries apparently have come to the same conclusion. Every request resulting in additional names becoming available in a TLD, be it for allocation of 1- or 2- character domain names (such as requests from .mobi or .cat) or for allocation of numeric strings (such as .name request), have been submitted via RSEP. Many of these requests have already been approved by ICANN. We are not aware of any complaints about inapplicability of the RSEP procedure in any of the above-mentioned cases.

Indirectly this approach was also confirmed by the ICANN staff in the course of preliminary email exchange with Telnic, in which they proposed submission of the request via the RSEP procedure.

⁶ Registry Services Evaluation Policy, <http://www.icann.org/en/registries/rsep/rsep.html>

I therefore believe that RSEP is the only process applicable for dealing with the proposed change to the .tel registry agreement.

In the particular case of sTLDs, each of their sponsoring organisations were given delegated authority to manage policy aspects specific to their sTLD. Thus, whilst this particular proposal uses the RSEP, changes to policy that are within delegated authority need no ICANN involvement at all.

The RSEP procedure for registry services that fall outside delegated authority is appropriate. Removing the RSEP as a channel for change in sTLDs is unreasonable, as it forces the sTLDs into a rigid straightjacket and blocks their ability to change while the rest of the industry can. I believe that ICANN has developed the RSEP for use by all TLDs, and attempts to hobble sTLDs are unwarranted without major justification, which has not been given.

Conclusion

Telnic and the IPAG have used our normal procedures in processing this RSEP proposal (as with all other policy changes). Absent compelling explanations to the contrary, the IPAG will consider changes to .tel policies once changes in the .tel agreement are confirmed.

In submitting this RSEP proposal, I know the company has acted in good faith and has kept to the principles it agreed with ICANN originally. It is entirely unclear what could be a change in the community or change in use of .tel domains caused by implementation of this RSEP proposal.

Telnic expects the vast majority of community members will continue to choose names or distinctive words for the domains they register and use. However, the choice of label to be registered does not affect the way in which the domain can be used; the eligibility criteria that define community membership remain entirely unchanged. If someone chooses 3663.tel as a domain to register, this merely means that his or her contacts are stored in that domain rather than example.tel or any other. The use of .tel (storing and presenting personal or company contacts inside domains within NAPTR records) remains the same. The block on user web sites in .tel (by barring user-specified address records in domains) is and will remain in place.

Thus if people believe that there is a fundamental change in either community or use, it is their responsibility to explain in detail just what the change is, and how and where this conflicts with the principles of the sTLD as described in the ICANN .tel agreement and its policies. Such a change was certainly not intended, and is at best obscure. Domain labels containing multi digit strings are entirely different from ENUM, and the purpose of ENUM was and is entirely different from .tel.

I hope that this explains my position on this topic, and shows the steps we have taken so far. I can't see how we could have acted differently.

Yours Sincerely,



Lawrence Conroy
.tel IPAG Chairman