ccTLD Requirements for International Coordination of the Domain Name System

(A response to the Lynn Proposal for ICANN Reform)

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The ccTLD managers in Europe have been, and continue to be, instrumental in ensuring the robust operation, technical stability and interconnection of the Domain Name System since 1986 and the early days of the Internet.

An important aspect of a ccTLD manager’s role is to foster a technical stable and secure basis for the development of the e-commerce in Europe.

To maintain a universal service and to share experiences, in 1998 European ccTLD managers formed the Council of European Top Level Domain Registries, (CENTR) to encourage the development of Policy and Best Practice for the European Union in a stable, integrated and coherent forum.

The experience of the European ccTLDs is we believe of significant value to the European and Global community and we offer our considered opinions all those interested in the continued success of the Internet and the principle of industry self-management.

Introduction

In February 2002, Dr. Stuart Lynn, CEO of ICANN, published a proposal for a fundamental reform of ICANN. The full text of this can be found at: www.icann.org/announcements/announcement-24feb02.htm.

CENTR is encouraged by ICANN’s plan to consider a new structure as part of the ongoing evolution of DNS governance and co-ordination. We recognise this as a difficult but essential step to ensure the viability of DNS self-governance. We respectfully submit this paper for consideration, explaining our view on the best solution for ccTLD co-ordination in a future ICANN framework.

This paper concentrates on ICANN’s role in relation to the administration of the ccTLD database, which is of the highest concern to ccTLD managers. It should not be misconstrued that the CENTR members did not acknowledge the need for a global policy body for gTLDs, or that CENTR members rejected the idea of having an international forum for exchange and voluntary technical coordination.

CENTR agrees with Dr Lynn’s appraisal that ICANN, in its current form, cannot fulfil the goals for which it was set up. Therefore we welcome the invitation to participate in an ICANN reform and thank ICANN staff for its intense preparation work.

Whilst the importance of the ccTLDs is recognised in the new ICANN structure as proposed by Dr Lynn, CENTR does not propose to address the detail of the Lynn Proposal nor to comment on the various controversial statements with regard to ccTLD managers which are contained within it but instead to examine what is required by ccTLD managers and the Internet public in Europe in respect of a body for technical coordination for ccTLDs.
1. ICANN the policy function

1.1 A global policy function?

ccTLDs are very different from gTLDs. For example, ccTLDs need to address:

- cultural multiplicity,
- diversity of political and legal platforms,
- the need to determine policies based on local (national) law,
- disparity in Internet infrastructure and technical competence within their national internet communities and
- the requirement to maintain operational standards and accredited their Registrars or Resellers.
- to address the concerns of and remain accountable to their local internet communities

The unique position of ccTLDs in the Internet community was recognised during the Green and White Papers which led to the inception of ICANN. To that end, ICANN was set up to function as a purely technical coordination body with respect to the ccTLDs, (see also Attachment 2 Historical Notes). The concept that the technical and interoperability standards are developed by the Internet Engineering Task Force (IETF) – not ICANN - have proven successful in the past and should not be changed. However a forum for the exchange of technical standards and recommendations is needed and highly appreciated.

ICANN today is an organisation based in the US, which in recent years did not appear to take into account the local diversity that is essential to ccTLDs as they act on behalf of the Local Internet Community and are accountable locally. Structure and mission creep is perhaps one of the reasons why the current ICANN has failed.

While the ccTLDs see their role as a service provider to their local communities, developing and funding local policies, ICANN sees its role as a global policy provider and attempts to act as “Super-registry for ccTLDs”. Due to the diversity of the ccTLD community, the variety of political and legal frameworks, ccTLDs believe they must continue with a remit of local accountability and implementation of local needs. The global policy role is seen by ICANN as a responsibility for the proper management and technical stability of local domain name registries. Even when the past years have shown that this function is neither needed nor accepted for ccTLDs, the situation might be seen different in the area of gTLDs.

Since the scope of gTLDs is transnational, a global policy making institution for gTLDs could be desirable and has proven to be successful in the past in areas such as UDRP and the creation of new TLDs. However, the locally based role of ccTLDs should not be merged with the role of transnational gTLDs. This approach does not rule out the interest and participation of individuals, organisations, corporations and governments since local public policy concerns with gTLDs might arise.

Therefore the proposed ICANN agreements for ccTLDs have not found a wide acceptance, as they do not reflect the technical coordination role of ICANN, but a rather undefined global policy involvement of ICANN for the ccTLDs.
It seems clear to us that the most important reason for ICANN’s problems today are the lack of distinction between its technical co-ordination role for ccTLDs and other technical related bodies and its role in global policy matters.

As the Lynn Proposal does not reflect the necessary separation between technical and policy matters it is most unlikely that a reformed ICANN as proposed by Dr Lynn would have any better success of working than the existing organisation.

1.2 ICANN funding

In the past CENTR Members have generously contributed to the ICANN Funding without any regard for the actual expenses ccTLDs incur in ICANN’s Budget.

In the future the European ccTLD managers recommend a non ccTLD based funding model for ICANN with regard to the ICANN global policy function as ccTLDs are not a part of this responsibility. ccTLDs pay their share to their local communities in facilitating the establishment of local policies. Nevertheless, all ccTLDs are free to voluntarily contribute to any other organisation such as ICANN, RIPE, &etc should they so wish.

For the needed services and the participation on conferences etc., the European ccTLDs will provide a stable funding mechanism as outlined under IANA funding.

1.3 Redelegation - a Local Policy Issue

One issue has to be seen as a purely local issue: The change from one ccTLD manager to another. Only the local Internet community including the government based on the legal system of the community will guarantee that the requirements of the community are fulfilled.

2. Root Name Servers and IANA – the technical functions

2.1 Technical Support and Limited Responsibility

ccTLDs are critically dependent on two basic technical functions, which must be performed by an independent and neutral international body.

- Stable and secure operation of the Root Name Servers: Most of the Root Name Servers are operated on a pro-bono basis by organisation with staff of excellent technical competency and network infrastructure of more than adequate capacity with ICANN performing a management function with insertions and modifications of entries in the root zone file on behalf of US Department of Commerce.

- The IANA function - maintenance of a database of ccTLD Managers and associated information (“the IANA ccTLD database services”) such as address, telephone, email and other technical information, such as name server addresses. This database provides the administrative and technical link between the ccTLD managers and the Root Name Server Operators.
(This function is currently performed at the direction of the US Government by ICANN under a ‘contract with no consideration’ – i.e. at no charge) Therefore it is critical that this function should be performed in accordance with the instruction of the ccTLD managers and the Root Name Server operators, following agreed procedures. To assist in the smooth, secure and stable operation of the IANA database, CENTR has established a working group to formulate procedures (many of the procedures have been used in an informal way for over 10 years already) that have proven to be successful, addressing issues such as changes to contact information, changes to Name Server information, and the more complex issue of re-delegation or re-assignment.

As a TLD registry is not considered to be responsible for the general use of each Second Level Domain registered with it or for the technical functionality of Sub Level Domains delegated by the domain name holder, the administrator of the ccTLD database (or any other organization) should not attempt to assume such a responsibility for ccTLDs and domain names registered under them.

2.2 Root Name Servers

Contrary to the position expressed in the Lynn Proposal, CENTR emphasizes that the current situation with the Root Name Servers is tolerable, mainly for the following reasons.

The work of the pro-bono Root Name Server operators has historically provided a stable and reliable system in the past and there are no signs that this might change in the near future. While it is desirable in the long term that more formal recognition of the arrangement should be put in place, we do not accept the solution proposed by Dr Lynn, which in our view creates a single point of failure.

It is crucial that Root Name Server operators work together with ccTLD managers and ICANN’s envisaged database co-ordination role, to ensure the ongoing stable, secure and reliable operation of the Root Name Servers. Such matters that are of mutual concern are:

- Timely synchronisation between Root Name Server data and the ccTLD database. Both files (or databases) need to reflect the latest changes and these changes should be implemented “in a timely manner” by the organisation who carries out the IANA function.
- Development and implementation of new technical standards, such as secure communication.
- Work on ensuring best practices on all operational matters.
- Monitoring of performance and reporting of critical incidents.

2.3 IANA ccTLD Services Function

The IANA ccTLD function as it is carried out today by ICANN under contract with the United States Government deals with three issues:

- Domain name services
• IP address services
• Protocol number assignment services

For ccTLD Managers, the essential and relevant service is the maintenance of the IANA ccTLD database.

This database contains the administrative and technical information about each ccTLD. Part of this information is publicly available in the whois of the IANA database which can be viewed at www.iana.org/cctld/cctld-whois.htm and is replicated in the Verisign WHOIS database.

The IANA ccTLD database contains several sets of data:

1. information about the ccTLD manager’s identity (most often this is an organisation or other legal person, though occasionally it is a natural person);
2. host names and addresses for the ccTLD’s name server;
3. postal, telephonic and electronic addresses of the ccTLD manager;
4. information regarding natural persons who are listed as contact persons for the ccTLD.

cctLDs require that this information must be kept accurate as otherwise this will impact on the technical stability of the system.

Therefore it is important to distinguish between two different types of requested changes.

• Routine changes (e.g. change of the address of a technical contact person or a change in telephone number)
• Changes of ccTLD manager – (“Redelegation”)

2.4 Change of ccTLD Manager

This is where an existing ccTLD manager (whether a natural or legal person) ceases its responsibilities and is replaced by a different ccTLD manager. In other words the change of the ccTLD manager from one individual or organisation to another.

The designation of a new ccTLD manager is, of course, a policy issue as well as a critical issue for the technical operability of a ccTLD. Such issues are local matters, involving dialogue with local Internet community, local government, and other interested parties such that agreement can be reached. Once agreement is reached the instruction is given to IANA to make the required changes.

2.4.1 Outstanding issues in some ccTLDs

It is clear that there are situations in some ccTLD’s registries where it is unclear which of several parties is actually the responsible ccTLD manager.
However, such cases are much the exception rather than the rule, and we are not aware of any such cases in Europe. Therefore we do not feel it is appropriate to deal with these issues explicitly in this paper, but the existence of such cases should not prejudice the proper operation of European ccTLDs (where in all cases the identity of the ccTLD manager is unambiguous).

2.4.2 Request for change of manager ("redelegation")

CENTR has further identified two classes of requests for re-assignment of ccTLD manager which it believes should be considered as follows:

1. The ccTLD manager has a presence in the country or territory to which the two letter code relates.

2. The manager does not have a presence in the country or territory to which the two letter code relates.

2.5 Registry Having a Local Presence and Subject to Local Law

If a registry has a local presence in the respective country/territory they are subject to local law and every redelegation is simply a local issue, where no global authority is needed. The role and the competence of the local Government is well defined by the law of the country or territory concerned. As the registry is operating under this law, its rights and obligations are defined by this local law, which the respective government can obviously adjust to meet the government’s particular needs.

Consequently a redelegation will only take place:

- If the current ccTLD manager disappears or cannot be contacted after several attempts (and the proposed ccTLD manager has or will have a presence in the country or territory to which the two letter code relates).

- With the consent of the existing and proposed new ccTLD managers (and the proposed ccTLD manager has or will have a presence in the country or territory to which the two letter code relates).

- Without the consent of the existing ccTLD manager in a process as defined by local law.

In this concept the IANA function has no role in judiciary determinations, but keeping the only official record of the data connected to the management of the ccTLD. Thereby the IANA function will also mitigate the liability that would occur if the IANA function should be carried out in selecting the ccTLD manager of a country/territory, even when it is done with some involvement of the Local Internet Community.

2.6 Registry not Subject to Local Law

If the ccTLD registry does not have a presence in the respective country/territory:
As we are not aware of any such cases in Europe, this issue has not been dealt with in this paper other than to note that this must be a matter between the existing ccTLD manager and the Local Internet Community (including the Government).

2.7 Independent Audit

The IANA ccTLD function needs to be carried out by an international body, which must have the complete trust of all parties concerned.

This body must not deal with any policy actions, because all policy questions, including the issue of redelegation, need to be dealt with on a local basis under local law.

The processes and structure of the body empowered to action changes in the ccTLD database must incorporate some form of independent quality auditing and a complete audit-trail of all operations, which it carries out, must be maintained. (see the Attachment 1). Such auditing should be carried out within the context of the Agreement between the body carrying out the IANA ccTLD function and the ccTLD manager.

2.8 IANA Funding

The funding issue of the body who carries out the IANA function is not controversial as this function is not expensive.

CENTR recommends that funding mechanism for the body carrying out the IANA ccTLD function should be based on fee bands, and that each ccTLD contributing to the funding have one vote in the organisation. In addition, for financial matters only, a model based on a concept similar to the EU’s Qualified Majority Voting be adopted (such a model is already very successfully in use within CENTR itself). Under such a scheme budgetary matters require both a simple majority and majority of weighted votes.

CENTR Members have indicated a strong commitment to stable funding of the IANA ccTLD function. However CENTR Members will not accept cross-subsidy of matters unrelated to the ccTLD function through such contributions.

2.9 Contingency

The IANA organisation should maintain sufficient reserves to be able to deal with unexpected expenditure.

2.10 Structure

If the IANA function is carried out in an independent manner and within the guidelines described in this document, the internal structure of ICANN is of limited relevance to ccTLD managers. However, we re-affirm the need for independent oversight of whichever body or organisation carries out the IANA ccTLD functions.
For further explanation of the structure foreseen by CENTR please refer to the diagrams in Attachment 1.

Conclusions

The European ccTLD managers are highly experienced at running ccTLD registries and most of them have been doing so since the earliest beginning of the Domain Name System.

A majority of CENTR Members support industry self regulation, which has proven highly successful within Europe and the European Economic Area and re-affirm their commitment of service to their Local Internet Communities (including local/national Government) to encourage the stable growth of national internet usage. Such self regulation is currently and should continue to be based on interoperability, stability, security and local/national accountability.

CENTR is firmly of the opinion that it should not be the responsibility of ICANN to solve issues within ccTLDs as a part of a global policy function, as this is the task of the relevant local communities and not ICANN which does not have the breadth of knowledge, experience nor resources to address the diversity from which the world Internet community is comprised.

ICANN could and possibly should have a very specific limited administrative role, - not passing judgement - but serving the various constituencies that comprise the Internet community.

The main administrative function beside the technical function of the Root Name Server operation is the IANA function as described above.

The current operation of the IANA function by ICANN does not guarantee stable and secure management of the ccTLD registry functions, therefore we propose to return to the proven system that empowers the local communities, national law and service to the local internet communities.

The way the IANA function is carried out today is examined whereby policy goals of ICANN have been advanced by the withholding or delay of the services required by ccTLDs under the IANA function. (“refusal of redelegation without ICANN contract”) is unacceptable.

Therefore CENTR is pleased to propose the changes to the IANA ccTLD function as outlined in this document and invites all other stakeholders to give input to our proposals.

We trust that our views, expressed in this document should give the basis of a new, more focussed and consensus based Internet technical co-ordination body and we remain willing and able to assist in the stable evolution of ICANN and its service to both the local and global Internet communities.
Attachment 2

Some Historical Notes

ICANN's mission statement with respect to ccTLDs has been documented in the past:

a) The White Paper[1] on which ICANN was based reflects a balance between negotiations at the time between many governments. The documents identify that the role of ICANN relates only to matters of the gTLDs and NSI's monopoly. Notably, the role in relation to ccTLDs is constrained to that of technical coordination. ccTLDs are mentioned twice in the document:

- in DNS Today Management, "More than 200 national, or country-code, TLDs (ccTLDs) are administered by their corresponding governments or by private entities with the appropriate national government's acquiescence."

- in Creation of the New Corporation and Management of the DNS, "Of course, national governments now have, and will continue to have, authority to manages or establish policy for their own ccTLDs."

b) The first Memorandum of Understanding[2] does not refer to ICANN's role in relation to ccTLDs.

c) ICANN's Bylaws consider ccTLDs as one of the seven partners of the DNSO, which relates to the gTLD space.