

DOCUMENT FOR ccTLD WORKSHOP

Source: TSB

Title: Review of Cooperation between ITU-T and ICANN, and ccTLD issues

1. ITU-T's Mission

The [International Telecommunication Union Telecommunication Standardization Sector](http://www.itu.int/ITU-T/) (ITU-T)¹ is one of the operating sectors of the ITU. Its primary mission is to develop non-binding standards (called Recommendations) covering all fields of telecommunications and to act as registration authority for certain numbering resources, for example international country codes for telephone numbers (Recommendation E.164), Subscriber Identification Module (SIM) numbers used in GSM mobile phones (Recommendation E.212), Signaling Area Network Codes (SANC) (Recommendation Q.708), etc.

ITU-T has its own mission, procedures and methods to accomplish the tasks entrusted to it. ITU-T's membership consists of 189 governments and about 500 industry members. ITU-T's main role is to provide a forum for discussion, coordination, and consensus-building between its members, including governments and industry.

The ITU-T performs world-wide administration, and acts as the forum for policy management, of a number of naming and address allocation systems that are essential for the good functioning of critical infrastructures, including the physical-layer infrastructure of the Internet itself. We cite here only such well-known examples as the E.164 numbering resource and the E.212 mobile numbering resource.

The presence in ITU-T of developing country governments broadens participation to people in those countries who would not otherwise have been represented. Thanks to the maturity of the processes and procedures, there are sufficient checks and balances in place to ensure that vested interests cannot misuse ITU processes for their particular interests.

ITU-T, as an intergovernmental organization, enjoys sovereign immunity and thus does not require liability insurance or extensive legal advice concerning liability issues. Furthermore, ITU-T is responsible to all of its members jointly and severally.

¹ <http://www.itu.int/ITU-T/>

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Both government and industry membership of ITU-T, and both government and industry participation in ITU-T technical and governing bodies, are allowed under the existing ITU Constitution and Convention, and have been in place for many years, with satisfactory results.

As IP-based networks and IP-based services have become more and more widely used to provide services similar to those of traditional telecommunications networks, ITU-T has increased its involvement with the new technologies. It should not be forgotten that the physical infrastructure which is required for Internet is based on ITU-T Recommendations, ranging from modem specifications such as Recommendation V.34 to Recommendation X.509 which provides the basis for public key infrastructure (PKI).

Indeed, the use of the new technologies within (or as a replacement for) traditional telecommunications networks has given rise to a number of integration issues, issues which have been discussed within ITU-T and in liaison with the Internet Engineering Task Force (IETF)². Two joint meetings of IETF Area Directors and ITU-T Study Group Chairmen have been held. There are a number of areas in which ITU-T and IETF have cooperated successfully, on the basis of mutually agreed [cooperation guidelines](#)³. Among these, we cite the ITU-T Recommendations H.248, H.323, and the work on [ENUM](#)⁴.

Indeed, the Internet today is widely viewed as an important, or even critical, national telecommunications infrastructure in many countries. Its role today is very different from that of the military/academic network that was the precursor of today's Internet. Governance mechanisms based on models that were valid over 20 years ago, when the Internet was in its infancy, are not likely to serve the needs of today's Internet. Some believe that the Internet today is in many ways similar to any other international telecommunications infrastructure or network.

It is clear that increased participation from Internet Protocol (IP) experts would be highly desirable if ITU-T were to become more involved in IP-based network issues. While many IP-based network experts already participate in ITU-T work, additional participation would be encouraged if ITU-T increases its activities in this area. In particular, participation from experts in specific topics would be sought as required.

Industry members of ITU-T (Sector Members) are very active and typically drive much of the standardization work. Any Sector Member can initiate work on any issue of interest to it. ITU-T is open and flexible and provides a forum for market forces to discuss any issues in which they are interested.

In summary, ITU-T is an effective public-private partnership, rooted in the public sector but with the active backing and participation of industry players. In the ITU-T industry and governments work together, to achieve common goals for the public benefit. **And ITU is unique in being a partnership between governments and industry for information and communication technologies (ICT).**

It is widely acknowledged that the ITU-T performs its tasks to the general satisfaction of industry, governments, and the public at large, using processes that are open, transparent, and ensure accountability to all stakeholders.

² <http://www.ietf.org>. For a matrix showing the fields of common interest between IETF and ITU-T, see <http://www.itu.int/ITU-T/studygroups/com13/ip/ietf-wg.html>.

³ <http://www.itu.int/itudoc/itu-t/com2/infodocs/006.html>

⁴ <http://www.itu.int/ITU-T/worksem/enum/index.html>

There is a misperception that if an issue is coordinated within ITU, it will be "controlled" by the ITU or by governments. This is not correct. Government participation and coordination do not amount to government control. A good example is the international telephone numbering scheme, which is coordinated by ITU-T and is universally considered to work to the satisfaction of the general public; however, telephone services are not controlled by ITU-T.

2. ICANN's situation

ICANN is a not-for-profit corporation established under the laws of the State of California, in the United States of America (USA). It operates under the framework of a Memorandum, of Understanding (MoU) with the US Department of Commerce⁵. ICANN currently performs a number of critical tasks⁶ related to the management and operation of IP-based networks. In particular, ICANN makes recommendations to the US Department of Commerce regarding the creation of top-level domain names (such as ".com", ".ch"), and the delegation of actual operations for any particular top-level domain to any particular operating entity (for example, ".com" is delegated to Verisign, Inc.). The tasks performed by ICANN are widely acknowledged to be critical for the good functioning of IP-based networks and IP-based services (which include the networks often referred to as "the Internet").

There has long been discussion of the implications of the increasing international character of IP-based networks, and the increasing importance to national economies of IP-based services, particularly with respect to the legal status of ICANN.

Some of these concerns were echoed by Mr. Stuart Lynn, President of ICANN. In February 2002, Mr. Lynn, published an [extensive report and detailed proposal](#) entitled "President's Report: ICANN – The Case for Reform"⁷ in which he stated: "the original concept of a purely private sector body, based on consensus and consent, has been shown to be impractical" and "experience has shown that the influence, authority, and close cooperation of governments is essential to accomplish ICANN's mission". Mr. Lynn went on to state that ICANN's current mechanisms for consulting governments were not adequate. Mr. Lynn invited public comment on ICANN Reform.

3. ITU's position on Cooperation between ICANN and ITU

ITU-T has worked closely with ICANN in recent years. ITU was a founding member of ICANN's Protocol Support Organization (PSO)⁸, a technical advisory body and will be a member of ICANN's Technical Liaison Group (TLG), which will replace the PSO. ITU is a member of ICANN's Government Advisory Council (GAC)⁹. An expert proposed by ITU-T sits on the ICANN Board.

Under the current ITU Constitution and Convention ITU-T could cooperate more closely with ICANN in many ways¹⁰. New Questions could be created within existing Study Groups, or new Study Groups could be created, if required.

⁵ <http://www.ntia.doc.gov/ntiahome/domainname/icann.htm>

⁶ See Article I of ICANN's bylaws at <http://www.icann.org/minutes/minutes-appa-31oct02.htm>

⁷ <http://www.icann.org/general/lynn-reform-proposal-24feb02.htm>

⁸ <http://www.pso.icann.org/>

⁹ <http://www.noie.gov.au/projects/international/DNS/gac/index.htm>

¹⁰ Indeed, Article 1, paragraph 1(a) of the ITU Constitution states that the purposes of the ITU are "to maintain and extend international cooperation among all its Member States for the improvement and rational use of telecommunications of all kinds". And telecommunication is defined at 1012 in the Annex to the Constitution as "Any

By working with ITU-T on selected topics, ICANN could address a number of issues that are currently open. As a result of this cooperation, ICANN would remain faithful to the principle of private sector leadership while recognizing the important role of governments as representatives of the public interest.

One or two specific areas could be identified to use as pilots or trials for increased cooperation.

The Director of TSB has communicated the outline of the above proposals to ICANN, in the context of ICANN's discussions on reform. There have also been informal discussions between members of ITU and members of the ICANN staff and Board, including meetings between the Director of TSB and the President of ICANN (in both Geneva and Los Angeles) but no formal consultations have yet taken place, and no agreements have been reached.

ITU's Plenipotentiary conference in Marrakesh (23 September-18 October 2002) approved resolutions instructing the ITU to pursue increased cooperation with appropriate entities¹¹.

ITU believes that neither ICANN alone, nor ITU alone, could address successfully all of the issues that ICANN must face. But ICANN, ITU, and other working together could meet the issues. As Stuart Lynn pointed out in his initial paper, ICANN needs government involvement. ITU-T can provide an **appropriate** level of government involvement, that is, one that recognizes the leadership role of the private sector and one that does not seek to impose government control on ICANN.

The basic principle of the proposals in this paper is to find ways in which ITU could offer cooperate with ICANN, just as it does for the rest of the telecommunications sector worldwide. ITU would not be involved in operational matters.

The following section presents an outline of proposals for the issues listed above.

4. Proposals

What follows constitutes initial thoughts for discussion (a strawman), not final proposals. Any actual proposals would have to be agreed by both ICANN and ITU using their respective normal decision-making processes.

4.1 Policies and Procedures for .int

ICANN currently administers the “.int” domain. The ITU receives complaints from time to time from international treaty organizations that do not understand the rules that ICANN uses to assign names in “.int”.

Since the “.int” domain name is reserved for intergovernmental treaty organizations, ITU-T could assist ICANN by developing internationally agreed principles and procedures for the administration of the “.int” domain.

Specifically, the process of preparing an ITU-T Recommendation for the administration of “.int” could be initiated

4.2 Issues related to .arpa

The fact that the “.arpa” domain is perceived to be controlled by US entities (whether ICANN through IANA or IAB through ISOC) has created some very serious concerns regarding the implementation of the ENUM protocol.

transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems". See http://www.itu.int/aboutitu/Basic_Text_ITU-e.pdf

¹¹ See <http://www.itu.int/osg/spu/mina/>

Such concerns could be mitigated if it were to be accepted formally that ITU-T should play some role, to be discussed and agreed, in the formal administrative control of the ".arpa" domain and its sub-domains, in particular "e164.arpa". That is, some consideration could be given to the development of some form of formal assurances that the concerned entities would not unilaterally take steps considered to be inconsistent with sovereign national rights.

Such assurances might take the form of an exchange of letters between ICANN and TSB, or the form of an ITU-T Recommendation which ICANN would then formally adopt. Development of such a Recommendation would best be initiated by ICANN itself.

4.3 Issues related to gTLDs

There are calls from various quarters, including the US government¹², for increasing the number of gTLDs. But other quarters argue against that increase. As ICANN's New TLD Evaluation Process Planning Task Force has pointed out¹³, there are a number of unanswered questions. Some of the questions fall outside the scope of ITU, some do not.

It is proposed that a process could be initiated to create a high-level ITU-T Recommendation (along the lines of E.190) covering the general principles that should guide gTLD creation. This Recommendation would **not** cover all the issues, only some of them. Again, it would not be binding on ICANN. Work on such a Recommendation would best be initiated by ICANN itself.

4.4 Interactions between ICANN and GAC

There does not seem to be much concern with GAC's role as an advisory body and this role is considered valuable. ITU has contributed to the work of GAC from its inception. But GAC was not formally established by the world's governments, and this leads some to question GAC's credibility as a competent entity. To date, many governments do not participate in GAC.

While ICANN does request advice from GAC in its current form, there have been some calls reform of GAC itself.

4.5 Increasing Participation of Developing Countries

While several developing countries participate in ICANN in various ways (ICANN Board, ccTLD, GAC, etc.), there are many developing countries who have a low level of awareness of ICANN's activities. ICANN has addressed this issue making several efforts to increase the involvement of developing countries (efforts called "outreach" by ICANN).

Both ITU-T and ITU-D have ongoing relations with all developing countries and ITU maintains field offices in several countries. These resources could be used to increase the participation of developing countries.

¹² <http://www.icann.org/correspondence/doc-to-icann-25may01.htm>

¹³ <http://www.icann.org/committees/ntepptf/final-report-31jul02.htm>

4.6 Issues related to IP addresses

The RIRs currently perform IP address allocation in accordance with policies developed by the RIRs themselves. Although there is general satisfaction with the RIRs' performance, some questions have been raised with respect to a perceived regional imbalance of IPv4 address allocation, and with respect to future policies for IPv6 address allocation.

It is proposed that the RIRs, the IETF, ITU, ICANN, and other interested parties could cooperate to agree a high-level ITU-T Recommendation (along the lines of E.190) covering the general principles that should guide IP address allocation. This Recommendation would **not** cover all the issues, only some of them. Work on such a Recommendation would best be initiated by the RIRs themselves.

5. ITU-T's Contacts with ccTLDs

There have been several informal contacts between ITU-T and ccTLD operators, including a [presentation](#) by TSB staff at the 5-6 September 2002 meeting of the Council of European National Top-Level Domain Registries (CENTR).¹⁴

In accordance with the instructions given to the Director of TSB in Revised Resolution 102 (Marrakesh, 2002), the TSB has organized a [Workshop on Member States' Experiences with ccTLDs](#).¹⁵ ccTLD operators, and other interested parties, are invited to participate in this workshop.

Among the areas where increased cooperation with ITU-T could be envisaged, we mention the following.

5.1 Re-delegation of ccTLDs when the Administrative Contact is not In-Country

The ITU regularly receives complaints from countries in cases where the administrative contact for "their" ccTLD is located outside the country. In some cases, the complaint states the current ccTLD delegation is in some way "illegitimate", as opposed to one fully approved by the concerned government (".tv" is a well-known example of an approved "off-shore" delegation).

ITU could provide a good forum for a discussion of how to approach this sensitive issue and ensure that the interests of all parties are respected.

At a minimum, ITU-T could assist ICANN by "authenticating" letters to ICANN that purport to come from national governments (this is the same role that ITU-T plays for ENUM¹⁶).

5.2 ICP-1 and the Role of Governments in ccTLD Re-delegations

While there are many ITU Member States who either are or have ccTLD operators under what they consider to be an appropriate level of control, there are other Member States who are not satisfied with their level of control of their "ccTLD" manager. On the other hand, while there are many ccTLD operators who have good relations with their governments, there are some instances of tensions between ccTLD operators and governments.

¹⁴ The presentation given is at <http://www.centr.org/meetings/ga-15/CENTR3.pdf>

¹⁵ Workshop information is at: <http://www.itu.int/ITU-T/worksem/ccTld/index.html> . The text of Resolution 102 is reproduced as an Annex to Circular 135, available at the same web site.

¹⁶ <http://www.itu.int/ITU-T/inr/enum/index.html>

ccTLD operators have expressed in a number of ways and in a number of forums¹⁷ their unease over the fact that ICP-1 (and its predecessors, including RFC 1591) were formally agreed without formal consultation with the operators themselves.

It is proposed that a process could be initiated to create an ITU-T Recommendation covering portions of ICP-1. ccTLD operators, governments, ICANN itself, and all other interested parties would cooperate to agree this Recommendation.

5.3 ccTLDs and national governments

There might be some issues of general interest, or concern, which affect both ccTLD operators and national governments. Some of those issues could be addressed at the international level, if this were agreed by all parties. In this case, ITU could provide a good forum for consensus discussions between ccTLD operators and national governments.

6. Conclusions

It appears that ITU could increase its cooperation with ICANN, to mutual benefit. The modalities of such increased cooperation remain to be discussed and agreed. In accordance with the instructions contained in ITU Resolution 102 (Marrakesh, 2002), ITU-T will also work with Member States with respect to their experiences with ccTLDs and would invite ccTLDs to participate in this process to address issues of common interests.

¹⁷ See for example <http://forum.icann.org/reform-comments/general/msg00135.html> and <http://www.centri.org/news/CENTR-ICANN-statement.html>