

# Final Report from the Board Technical Relations Working Group

2011-08-22

## **Background**

The ICANN [Technical Liaison Group](#), TLG, was established under [ICANN Bylaws Art XI-A, Sect. 2](#) and consists of four organizations:

- European Telecommunications Standards Institute (ETSI),
- International Telecommunications Union's Telecommunication Standardization Sector (ITU-T),
- World Wide Web Consortium (W3C), and
- Internet Architecture Board (IAB).

The purpose of the TLG is to connect the ICANN Board with appropriate sources of technical advice on specific matters pertinent to ICANN's activities.

The TLG is one of the ICANN entities undergoing review pursuant to [ICANN Bylaws Art IV Sect. 4](#) as decided by a [Board Resolution](#) on 25 June 2010. The first step in the TLG Review was an independent review performed by a contractor, JAS Communications LLC , that delivered a [Final Report](#) to ICANN in December 2010. A key recommendation of this report was to disband the TLG and find other ways of fulfilling its purpose. This report was published for [public comments](#) and a [summary](#) of the seven comments received is available.

## **The Board Technical Relations Working Group – establishment and proceedings**

On 18 March 2011, the [Board resolved](#) to accept the Final Report on the TLG Review and to establish a Board Technical Relations Working Group (BTRWG) to consider measures to enhance the coordination and cooperation between ICANN and other members of the Internet technical community with the intent of dissolving the TLG by the 2011 Annual meeting. The Board requested the Board Governance Committee (BGC) to nominate five members of this Working Group and requested the Structural Improvements Committee (SIC) to develop a Charter for the Working Group based upon the TLG review report.

On 21 April 2011, the [Board resolved](#) to adopt the composition of the BTRWG as proposed by the BGC and also [resolved](#) to adopt the Working Group's [Charter](#) . The members of the Working Group are:

Gonzalo Navarro, Chair;

Thomas Narten;

Thomas Roessler;

Reinhard Scholl; and

Jonne Soininen

Additionally, Elise Gerich was the ICANN staff representative on the Working Group and Alina Syunkova provided administrative support.

The BTRWG Charter contains a time plan with target dates for deliverables. The Working Group has endeavored to meet these deadlines and provides this Final Report with recommendations agreed by the BTRWG for delivery to the Board by 30 August 2011, as stipulated in the Charter.

### **Responsibilities**

In preparing for the needed Board decisions at the 2011 Annual Meeting (24-28 October 2011), the BTRWG, according to its Charter, was commended to:

- a. Identify the types of entities, or entities, in the Internet technical community with which ICANN should establish relationship for cooperation and coordination, stating the reasons why such cooperation and coordination would be beneficial.
- b. Identify modalities and measures for cooperation and coordination with the types of entities, or entities, identified in a) above, stating the advantages and drawbacks associated with each measure.
- c. Perform outreach to entities identified in a) to assess feasibility of the alternative measures identified in b).
- d. Summarize the findings from steps a-c above and recommend actions to be taken in a draft report for public comment.

e. Evaluate public comments received, adapt the draft report findings as appropriate in preparing a final report, for consideration and decision by the ICANN Board.

### **Recommendations from the BTRWG**

In connection with the aforementioned Responsibilities, the BTRWG has proceeded in the following manner:

- a. Identify the types of entities, or entities, in the Internet technical community with which ICANN should establish relationship for cooperation and coordination, stating the reasons why such cooperation and coordination would be beneficial, and;
- b. Identify modalities and measures for cooperation and coordination with the types of entities, or entities, identified in a) above, stating the advantages and drawbacks associated with each measure.

ANNEX I to this document includes a list of institutions in the Internet Technical Community and suggestions on types of cooperation and coordination as requested by the Charter in the above referred letters a. and b. for consideration by the SIC.

- c. Perform outreach to entities identified in a) to assess feasibility of the alternative measures identified in b).

The BTRWG believes that such actions are beyond of the scope of its responsibilities and should be performed by the Board of ICANN or ICANN Senior Staff as appropriate.

- d. Summarize the findings from steps a-c above and recommend actions to be taken in a draft report for public comment.

### **Findings**

The Technical Liaison Group (TLG), comprised of the IAB, ETSI, W3C and ITU-T, is chartered by the ICANN bylaws to "connect the Board with appropriate sources of technical advice on specific matters pertinent to ICANN's activities." Additionally, the group appoints (in an annual rotation between ETSI, W3C and ITU-T) a non-voting liaison to the ICANN Board, and a voting delegate to the ICANN Nominating Committee. The TLG is, by the ICANN bylaws, prohibited from meeting or formulating positions of its own.

According to ICANN's bylaws, there are two ways in which the TLG can be used to "channel technical information and guidance to the Board and to other ICANN entities". ICANN can specifically request information from the TLG, or the TLG can provide a watchdog activity, "to advise the Board of the relevance and progress of technical developments in the areas covered by each organization's scope that could affect Board decisions or other ICANN actions, and to draw attention to global technical standards issues that affect policy development within the scope of ICANN's mission."

These mechanisms have rarely, if ever been invoked.

In practice, the TLG's technical input role has come primarily as a result of its Board appointments and its input into the Nominating Committee.

Within the Board Technical Relations WG as currently chartered, ICANN must address both topics at once

1. What should ICANN's relationships with the TLG's constituent organizations be?  
Which of these organizations should be vested with Board-level or other special representation? What are appropriate reciprocity arrangements?
2. How can ICANN best obtain timely and relevant technical advice?

**Recommendation:** ICANN should consult with the TLG's constituent bodies individually about what relationship and involvement in governance mechanisms is appropriate for the respective organization. This consultation should be undertaken by the ICANN Board or senior staff.

**Recommendation:** ICANN should not disband the TLG before it has substantially concluded these consultations. We believe that a time frame of six months should be sufficient to substantially conclude these consultations.

**Recommendation:** ICANN should work to strengthen and better institutionalize the mechanisms for obtaining technical advice and input, including at the Board level. It is the recommendation of this Working Group that, given the ICANN Board's current mode of operation, the organization continues to need technical advice and expertise within the Board's deliberations, such as the

expertise and advice that has been provided by liaisons appointed by the TLG. A decision to disband the TLG should be made only in conjunction with simultaneously addressing this issue.

**Recommendation:** The Nominating Committee is designed for broad participation. The TLG provides for participants in the Nominating Committee who are connected to the broader technical community. ICANN should maintain this connection, and should continue the TLG's role of fulfilling it.



<b>ICANN Board Technical Relations Working Group ANNEX I List of Entities Identified for Bilateral Discussion (updated August. 20. 2011)</b>				
<b>Organization</b>	<b>Tech Area</b>	<b>Relationship Benefit</b>	<b>Type of Engagement</b>	<b>Reciprocity</b>
The European Telecommunications Standards Institute (ETSI)	Global standards for ICT - 700 members from 60 countries	ETSI is one of the key telecoms standardizations organizations in the world. It is the home of the main cellular standardization organization (3GPP), and has been the organization to define a myriod of important telecom standards used all over the world. Therefore, it is the home of great technical knowledge for technical telecommunications related issues, and gives important insight for ICANN of the telecommunications industry and its technologies	ICANN board and the ICANN as an organization needs insight to the telecommunications technologies, and their evolution. Understanding the technology, and the ecosystem is needed for ICANN to understand the whole picture of the telecommunications and Internet ecosystem. In addition, there is a clear benefit for ETSI to have the interaction with ICANN, and understand the domain name ecosystem. Strong connection to this organization also give more credibility to ICANN, and roots ICANN within the organizations in the whole wide Internet ecosystem	ETSI does invite the CEO and the chairman of the ICANN board to the ETSI general assembly that is the highest meeting of ETSI. Neither has ever (as far as I know) taken up this invitation. (Jonne Sonienm)
FIRST	Forum for Incident response and security teams - govt, commercial, and educations membership	can have benefit without being member of FIRST - do we want to go there?	Initially may participate in conferences and papers.	(Elise Gerich)
IEEE	Professional association for advanceent of technology	N/A	See no advantage to a formal relationship	N/A
Internet Technical Advisory Committee (ITAC)	Advisory Committee to OECD's ICCP - formalizes technical communities role with OECD	1) Contribute technical expertise to OECD's committee for ICCP (Information, Computer, and Communications Policy) 2) contributions to CISP, WPISP and working party on information economy	1) ICANN is a founding member and has designated staff who participate on mailing lists, at meetings, and report on potential issues.	It is a co-operative relationship where ITAC members contribute constructively to Internet-related polices developed by OECD. (Elise Gerich)
ITU-T	Telecommunications Standardization Sector - defines elements of ICT infrastructure	ITU is the United Nations specialized agency for ICTs. ITU-T develops the technical standards that ensure networks and technologies seamlessly interconnect. Founded on the principle of international cooperation between governments (Member States) and the private sector (Sector Members, Associates and Academia), ITU is the premier global forum through which parties work towards consensus on a wide range of issues affecting the future direction of the ICT industry. ITU-T's standards include ITU-T H.264 (video compression standard found in billion of consumer devices), xDLS, optical networking (90% of Internt traffic goes through optical fibre)	ITU's highest decision-making organ, the Plenipotentiary Conference, resolved (October 2010) that ITU "explore ways and means for greater collaboration and coordination between ITU and relevant organizations [footnote: Including, but not limited to, the Internet Corporation for Assigned Names and Numbers (ICANN), the regional Internet registries (RIRs), the Internet Engineering Task Force (IETF), the Internet Society (ISOC) and the World Wide Web Consortium (W3C), on the basis of reciprocity.] involved in the development of IP-based networks and the future internet, through cooperation agreements, as appropriate, in order to increase the role of ITU in Internet governance so as to ensure maximum benefits to the global community. ITU Management has suggested an MoU between ICANN and ITU. In the past there were informal meetings between the ITU Secretariat and the ICANN Secretariat. Membership of ICANN in the ITU Sectors is also an option. (Reinhard Scholl)	(see left box)
NOGs	regional operational forums for coordination and dissemination of technical infromation about networking infrastructure	1) support for grassroot organizations that educate on operational issues 2) introduction to operators worldwide 3) demonstrate ICANN's technical expertise	1) do not recommend sponsorship or memebership in *NOGs: too many; difficult to create criteria to select where to invest 2) offer presentations on current and timely operational topics, 3)selected attendance when relevant operational topics are on the agendas	No reason for reciprocity. (Elise Gerich)
RIRs	Manages the allocation and registration of Internet number resources	N/A	Out of scope since a relation ship already exists.	N/A
Root Server Operators	Diverse group of 12 operators - voluntary coordination and collaboration to operate root servers - RSSAC	N/A	Out of scope since a relationship already exists.	N/A

The Internet Engineering Task Force (IETF)	RFC Series and IANA oversight - architectural oversight of Internet protocols	Much of ICANN's core mission (particularly related to the Domain Name System (DNS) is directly built on standards developed by the IETF. Some of the standards are mature, but some are still being revised or continue to have operational aspects discussed in the IETF. It is important that ICANN follow (and even participate in) relevant discussions closely as numerous on-going ICANN policy discussions are directly influenced by the underlying technology on which policies are implemented or built (e.g., IDNs). ICANN decisions and policy making needs to be firmly guided by the correct understanding of relevant standards, how they work, and any limitations they may have. ICANN also houses the IANA function. Proper operations of the IETF Protocol Parameters registry is of critical importance to the IETF and directly impacts the IETF's day-to-day work.	ICANN decision making at all levels (Geberic Names Supprt Organization, WGs, Board) needs to be guided by a solid understanding of how the relevant technology and standards actually work and how they are evolving. ICANN participates in individual IETF WGs on an as-needed basis. IANA staff meet with the IETF regularly (and at each IETF meeting) to discuss operation of the IETF Protocol Parameters registries. The IETF is also indirectly bound to ICANN and IANA via the DoC's IANA contract.	ICANN needs to follow and participate in IETF WGs that directly impact their core mission. ICANN needs to understand relevant developments, and also needs to supply protocol requirements where ongoing technical activity potentially impacts ICANN's mission (e.g., DNS, IDNA, etc.) ICANN needs to work with the IETF (as a customer) to ensure that operation of the Protocol Parameters registry function operates smoothly. (Thomas Narten)
Unicode Consortium	Software internationalization standards and data - Unicode Standard specifies representation of text in all modern software products	1. unicode addresses needs of all languages; 2. have expertise to offer to IDN Top Level Domains rollouts; 3. fills gaps in technical knowledge on unicode	Recommend a non-profit associate membership (\$1,500/year). Provides to documentation, email lists, technical meetings allowing us to contribute. Non-voting membership.	Access thru membership is sufficient for reciprocity. (Elise Gerich)
World Wide Web Consortium (W3C)	Develops standards to ensure long term growth of the web	W3C is the core standardization organization for the World Wide Web. In addition to having enabled the early .com boom, the Web has evolved into the platform of choice for the delivery of interactive, innovative applications. This development is enabled by technologies developed and standardized at the W3C, in close cooperation with its partners in the general Internet ecosystem, in particular the IETF. An understanding of the Web ecosystem and the relevant vendor landscape is increasingly critical for innovation on the Internet, and benefits ICANN directly.	There is benefit for the ICANN board in understanding the future direction of Web technologies and the thrust of innovation on the Web, as this will shape the domain name market place and the viability of DNS-based services. Conversely, it is useful for the W3C to acquire an in-depth understanding of the Internet governance landscape. The link to W3C helps ICANN to show credibility both in terms of access to technical and strategic understanding of an important segment of the overall environment, and in terms of organizational ties to a core player in the overall Internet ecosystem.	None so far. (Thomas Roessler)