A proposal to Downsize and Restructure ICANN

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Izumi Aizu Asia Network Research, Tokyo <izumi@anr.org>

Summary:

ICANN should be downsized and restructured into four major components as independent bodies: Technical Operational body, Address Management Body, Global TLD Management Body and ccTLD Management Body. ccTLD Management Body should be established as an independent entity outside ICANN mandate.

Overall coordination function for these four entities can be performed in a loose, non-binding mechanism. The principle of autonomous, distributed and cooperative operation of the Internet should form the basis of these restructuring. The beneficiaries of these functions should bear the cost of operation of these bodies. Public interest should be respected and exercised in these four bodies in proportion to the real values they produce. Clear guidelines to internationalize the activities should be enforced. To avoid fragmentation, regional activities should be promoted.

Problem:

For us, ICANN is already too large and complex in its size and scope as a single institution. It became too difficult for anyone to grasp the whole picture. The decisions are often very slow in process, yet when they are made they made so hastily and shallowly that leave many real stakeholders frustrated.

Current 19-member Board is not working

The real issues ICANN deals with today are very diverse and often not relating each other. The 19 members of the Board come from diverse background and often seem inappropriate for them to judge the issues on the table unless the issue is in their own expertise. Since there are many issues they have to consider at any given time, sometimes they can spend little time and effort to make

important decisions that affect so many stakeholders. That is at least a general impression of ICANN Board at ICANN meetings and in-between these meetings¹.

The original assumption of ICANN when it was established with 3 Supporting Organization (SO) structure was that SOs will make policy decisions based on their own expertise and consensus among their constituencies, and the Board will make the final decision only by recognizing the existence of clear consensus and thereby making it a legitimate "ICANN decision" – merely endorsing them. However, over time, what has happened in reality is that the ICANN staff, not the SOs, is tasked to form drafts or evaluate the proposals from SOs and make recommendations to the Board, often including changes to the policies sent from SOs or their committees, and the Board then will mostly listen to the staff recommendations and follow them.

ICANN CEO Mr. Stuart Lynn proposes to reform ICANN into a larger and stronger organization. This direction may lead into a more complex ICANN that relies on its staff more heavily. To make it "effective", it will become "top-down" and "business" oriented institution rather than a "bottom-up" and "public-interest" oriented institution.

Stronger ICANN?

ICANN already employ quite a few full time staff for technical, legal, administrative and other duties yet Mr. Lynn describes that they are still far short of workforces and funding to perform the duties he sees necessary. He therefore proposes to increase the size and the budget to make it a stronger ICANN.

Mr. Lynn also proposes to strengthen the contractual relationship with other key entities, such as root server operators, ccTLD administrators and Regional Internet Registries (RIR). This will further lead to a more complex and troublesome direction as many ccTLDs and RIRs and their constituencies seem not to like powerful ICANN imposing policies and overstepping into their own area of jurisdictions. Mr. Lynn's proposal first tries to put root server operators into tight contractual agreement under ICANN, thus ICANN will become a legitimate and authoritative operator of the global root server, and use that authority to coerce and obtain the contractual relationship with

¹ This is NOT to say that the current Board members are doing the bad job. On the contrary, at least most of them are working hard, sincerely trying to find the best solutions. However, it does not make much sense now that business people who have little clue on technical matters have equal voting right to technical experts on heavily technical issues; equally, technical people making public policy-related decisions with little understandings of public interest seems very troublesome. Ideally, there still can be a room for them to exchange different views and come to wiser conclusion, but in reality, ICANN Board members are too busy to take care their own fields of expertise and have less time to discuss with each other, not to mention the discussion with larger community members.

ccTLD operator and RIRs. The intention may not be that way, but if the reform plan is implemented as proposed, it will result like that.

This is a very top-down approach and will not make the Internet operation neither stable and robust nor effective and efficient.

As described later, Internet has been operated under the "autonomous, distributed and cooperative" principle, including the root servers. Voluntary cooperation among diverse, heterogeneous entities make it more robust and resilient, yet flexible and efficient.

DNSO structure not working

It is well known that current DNSO structure is not functioning well. So-called "Business-ISP-IPR block" tends to determine the important decision-making no matter how other constituencies try. The intention of ccTLDs to form a separate entity within ICANN structure is clear and passed the point of no return. Since most of the issues ICANN actually have been dealing with are around Domain Name System relating to DNSO stakeholders, this malfunctioning of DNSO is a serious problem.

Compared with DNSO, PSO and ASO have relatively little trouble.

The Role of Government

To invite governments to play more proactive roles including nominating the directors and bearing the funds are also in line with "strengthening the ICANN". But even though the current experiment of private sector self-regulation seems to be so far failed, governments should remain in the friendly and non-binding relationship with ICANN. The so-called "New Public-Private Partnership" has more danger: making responsibilities unclear, different governments insert different agendas, relying the funding means giving more control, to name a few.

Value-based approach

Here we propose to first "downsize" ICANN, that is to redefine its core missions, stick with them, and avoid making into a lager and more complex institution to make it effective, efficient and accountable.

It would make more sense to separate the ICANN functions clearly and restructure its organizational structure according to the values produced by its activities and functions.

Let us try to analyze what kind of "values" the functions of ICANN produce. Broadly speaking, ICANN deals with the following technical and operational values as well as economical and sectoral social values.

Technical and operational values

First, ICANN is tasked to perform the management and coordination of technical resources that provides stable and convenient functions of the Internet globally.

These technical and operational values include management of protocol and port numbers, delegating AS and IP address numbers to Regional Internet Registries (RIRs). It also includes the management of DNS Root zone files, coordination of 13 global Root server operators. Here the operational stability, consistency and technical innovations are important values to maintain and develop. These areas require some kind of governing mechanism for public interest, but may not have to be directly exercised unlike the social arena.

Social values - Economic and other Sectoral values

Second, there are social values that require policy coordination and decisions in addition to technical and operational arena. These social values must be governed in a fair, open, transparent and accountable manner with the strong public interests in practice. Direct participation to the governance by the public is strongly required.

Economic values include global Top-Level Domains that have commercial values – the TLDs primarily used for commercial activities such as com, .net, .info, .name, and .biz. They require fair and open environment in which healthy competition supported by market principles should be performed. Adding TLDs, delegating and redelegating the management of these TLDs as well as setting fair competition rules and enforcing them will be required to perform.

Sectoral values include management of global TLDs such as .org, .edu, .int, .museum etc. Again, adding TLDs, delegating and redelegating the management of these TLDs are required with enforcing fair practices, but competition rules may not be required as much since these are outside the ordinary market principles.

These values somewhat inter-relate to each other, but they are also quite different in nature. Coordination of technical and operational matters is very different from economic and social matters. Many of the current problems ICANN is facing seem to be caused by mixing these different value matters and throwing them into one basket.

ICANN currently also deals with country-based geographic TLDs, most ccTLDs which have their own social values. This should be dealt outside ICANN process in a narrow sense.

Principles of Internet Operation

The Internet is often defined as "network of networks". No one has any central control, but each autonomous network that needs to be interconnected with other networks voluntarily form interconnection, coordinate each other to become interconnected and interoperable. The core working principles that allow this flexible and practical operation to allow global interconnectivity seem to be "autonomous, distributed and cooperate". We should not forget these working principles when making the restructuring effort of ICANN.

Cost sharing principle - beneficiaries should cover the cost

In principle, funding to run these organizations should come from the entities that receive the services and the values: *beneficiaries should cover the cost*. This direct tie will make clear connection between the provider and receiver of funds, making it more accountable, stable and effective management for all parties concerned.

For the overall general management cost, as a kind of overhead cost, cost sharing by different new bodies should be considered.

Proposed New Structure

Based on above analysis, current functions of ICANN will better be downsized, separated and restructured into the following new entities. Each will become an autonomous legal entity with its own decision-making process and oversight structure for clear accountability.

A) Technical Operation Body – ("New IANA")

In essence, following so-called IANA functions will be put together and established as an autonomous and independent entity, an independent legal and functional entity separate from other bodies.

Management of DNS Root Zone File

Management of Protocol and Port Numbers

Assignment of AS numbers and Delegation of IP numbers to RIRs.

This body will deal with Address Management Body, Global TLD Management Body and ccTLD Management Body separately and independently. Voluntary cooperation and coordination each other with MoU should become the core arrangement.

The funding should come from those who receive services from this entity:

ISPs – international backbone providers

RIRs, Domain Name Registries and Registrars

The funder can seat their representatives on the Board of Trustees of this entity.

B) Address Management Body (New ASO)

Current functions performed under ASO/RIR will be performed under an independent legal entity. They handle the development and coordination of address management issues globally. To ensure public participation and open governance, the open policy meeting exercised now should be continued and further promoted.

Funding should primarily come from RIRs and their members.

The core funding should come from ISPs – international backbone providers, RIRs, Domain Name Registries and Registrars. The funder can seat their representatives on the Board of Trustees of this entity.

C) Global TLD Management Body

Develop and coordinate policies among global TLD issues.

Promoting fair and open competition of global TLDs used in commercial sector

Promote social and public interest around non-commercial sector issues.

Develop Internationalized Domain Name System

This will perhaps become the core body of new, downsized ICANN. Since this area requires strong public interest participation, individual users, or "At-Large" will form a constituency here and will have their representatives on the Board of Directors.

One of the main tasks of this new body is to promote healthy competition among commercial TLDs, its registries and registrars for the benefit of the end users. Certain amounts of self-regulatory functions and their enforcement mechanisms by the industry players are needed.

Another important task is to promote fair and open use of global TLDS used for other sectors than commercial activities. This will deal with .org and other socially used TLDs including .edu, .int, .museum, and possible new TLDs such as .pub and .npo.

The core funding should come from registrants of thee TLDs through Registries and Registrars.

D) ccTLD Management Body

Leave ccTLD matters outside ICANN completely. They deal with most issues locally, and let them form global coordination body, independent from other entities.

Funding should come from ccTLDs themselves.

E) Overall Coordination

A loose, non-biding liaison structure can be formed among these 4 different bodies. They are not binding each other, but rather to coordinate and facilitate cooperation, sorting out new or overlapping matters according to the values and functions each body will carry out. This coordination body should not become any decision-making mechanism, should remain only in coordination function.

Since there are inter-related issues among four bodies, and many stakeholders may have to deal with different bodies at the same time, it will be practical to hold meetings as close together as possible, say within same place in close dates. Depending on the sector, co-existing with other events such as IETF for Technical Body and INET or some other regional Internet events for social and sectoral bodies are suggested options.

Equitable participation

Stakeholders from economically disadvantaged parts of the world, even from within developed countries, normally face significant burden to attend ICANN related meetings and participate activities meaningfully even though they have the will and the need. Measures should be taken to support their participation to promote equitable participation globally including some form of travel assistance and information sharing.

Translating major documents into non-English major languages is also suggested.

Governing Principles

The openness, transparency and accountability should be ensured in all of new entities.

Since the degree and depth of public interests vary among these entities, the specific ways and rules should be determined by each entity. In general, there should be general rule-making principles applied and enforced that include the following components:

Notice and Inquiry for public comments, independent supervisory panel (Board of Trustees), appeal-making procedures, proper financial disclosure, and Code of Conduct.

Internationalization of activities

With this proposed divestiture, there should be consideration for the international, or globalization, of these distributed activities. Composition of staff nationality, translation of languages into a number of major languages and internationalizing the practices of holding meetings and setting the information sharing mechanisms should be considered for these new entities.

Each new body should locate in separate places in the world. For example, the root server operation and related tasks, the "New IANA", can still remain in Marina del Ray, USA, perhaps, but the new DNS Coordination Body should locate say in Washington DC, Ottawa, or London; ccTLDs can choose wherever, say Seoul or Amsterdam; while Address Management Body should base in Sydney, Accra or Montevideo. This distributed location will facilitate further internationalization or globalization of ICANN related activities, a real merit.

More emphasis on regional coordination activities

With this proposal, each body will be smaller in size, more agile in performance. To avoid fragmentation, coordination activities in regional levels should be strongly pursued². For example, RIRs will function as a core entity to host regional Names and Numbers meeting, along with ccTLD operators and new AtLarge member body for global TLD management. This way, information sharing and interactions among different, but overlapping issues can be performed efficiently.

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² Annual meeting of APRICOT (Asia Pacific Regional Internet Conference on Operational Technology) for example, which has been organized since 1995 with most Asian Internet groups form steering committee together and cover both technical and non-technical issues, is a good model to follow.