# Sparse thoughts on ICANN and the Internet community

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This document contains nothing more than a bunch of thoughts from an individual who has been involved in ICANN in the last years. Some of these thoughts are already mature and well formed, while others are still fresh and require further work, or perhaps to be confuted and discarded, or even to be labelled as a heap of junk. They do not even cover all the range of open issues related to ICANN. So please take this as my own quick and incomplete contribution to a collective brainstorming.

## ICANN's failure and its consequences

The whole ICANN experiment was meant as a trial of the concept of centralized management of the DNS root server system in a way to satisfy the vital needs of the worldwide Internet community. Under this point of view, this experiment has been a failure. With an huge increase in money and time devoted to the DNS governance from all the interested parties, and an huge increase in budget and headcount of the organization set up for this purpose, the results were very limited, if any:

- a small step forward in terms of new global top level domains but very small, due to the slow and controversial process of selection set up by ICANN, the failure in market and customer acceptance for many of the new domains, and the failure to foster the creation of other gTLDs for which there was clear demand;
- the setup of dispute resolution procedures which have worked well in some cases but have given way to very controversial decisions in others, and are often claimed not to defend properly the rights and interests of individuals if compared to those of businesses and intellectual rights owners;
- no significant advance in establishing other features that are highly desirable for most part of the Internet, such as internationalized domain names;
- no result in creating open and wide ways of participation for the worldwide Internet community, with the withdrawal of the At Large representation mechanism and the failure to support discussion and to receive input in non-English languages from non-English-speaking communities.

This failure to meet the needs of big parts of the worldwide Internet community, especially the non-US and non-business ones, was strengthened by the persistent refusal by ICANN's Board of allowing representatives from such parts inside itself. Such representatives were meant to be provided in good part by the At Large election mechanism, which the Board first failed to support and organize properly, and then, using such failure as a justification, decided to practically delete. Anyway, there were other ways through which ICANN could have gained at least a part of such support – for example, by establishing a fruitful and positive relationship with the ccTLD managers and communities. But even in this, ICANN failed, with only a handful of ccTLDs having signed contracts with it, and many not paying their dues.

Consequently, ICANN has failed to obtain consensus from those big parts of the Internet community that feel not to have any reasonable chance to be represented in it, and feel that their needs are persistently ignored by the current ICANN management. (Direct representation could even have been felt as not strictly necessary, if the mechanism had been working well – but it never worked.) Thus, such parts of the Internet are more and more pushing for the end of ICANN's governance of the central root system – or for the end of the central root system itself.

So, in my opinion, the central question that has to be answered before deciding how ICANN should change, is exactly the following: does ICANN's history show that a centralized and unique root system is still the right choice, as the problem is that such unique root has just been mismanaged, so that a change in ICANN's structure could solve this problem; or does it instead show that a worldwide root system will never be able to meet everyone's needs, so that more root systems would be a better answer to the world's necessities?

If the first option is the right one, the solution is indeed to proceed in reforming ICANN to make it better represent all the interested parties; if the second one is to be preferred, then some of the parties unsatisfied with the present ICANN should set up alternative root servers and try to have them used by a subset of the Internet users (an action, it must be remarked, that might likely happen even in a situation of general disagreement over ICANN's future and decisions, and in fact it has already happened – see new.net for example), and ICANN should re-position itself either as the manager of the US root server system, or as a very light instrument of coordination among the different root systems (in this case, possibly dismissing its staff almost completely and reducing its budget by a factor of 10 or 20).

### A clash of national interests

Some hints for answering this question can, in my view, be found in some of the events of the last years.

Since ICANN's creation, the Internet has come to a maturity, and then to a crisis. There has been a huge investment rush which in turn has made the Internet grow at an amazing pace, and then the burst of the bubble, which on one side has provoked the end of many services and many job places, but on the other has somewhat reduced the pressure on making a business of the net, and has given back some more space to the original cultural and social activities which were prevailing in the 90s.

But in the meanwhile, the Internet has become a vital instrument of communication both among individuals and among businesses; so it is now an infrastructure that, if disrupted, could put at risk a whole nation's wealth and organization. In other world, the correct functionality of the Internet has become a primary point for the national security of any country of the world, both in war and in peace.

For these reasons, especially after September 11, the US has started to feel the need for a stricter control on this infrastructure – a need which, in turn, seems to have been collected very well by the current ICANN Board, up to the point of revolutioning priorities and schedules for the organization's work. It seems now much harder than it was one year ago that the US government will completely release or even just lower its basic control on the root server system, which it still has. In fact, ICANN's push for getting proper (and binding) agreements with the actual operators of the various root servers is clearly a way to formalize and strengthen this control.

On the other hand, there has always been frustration about ICANN among many of the non-US Internet communities, both at the individual user level, at the business user level, at the ccTLD and industry level. Many proofs of this frustration have already been mentioned, from the At Large issue to the lack of full support from ccTLDs, but also others can be added: for example the failure of ICANN being truly international, from the very roots (it being an US organization 100% based in the US, rather than an international treaty one with multiple offices) to practical issues such as supporting participation and translating documents in non-English languages. More and more frustrations can easily be foreseen in the present situation: for example, the European Union having to eventually ask the US government permission for the creation of the .eu domain, or – if it will ever happen – the US Congress passing a law to force creation of a new gTLD such as .kids or .xxx, which, in the present situation, would de facto affect the whole world.

This sort of reasoning makes me draw the conclusion that there is an increasing need by each country to have a control as direct as possible on the roots of the Internet that connect its own citizens and companies. This will in the next years – especially if the world economical and political climate does not start to get better – constitute an ongoing pressure for having more than one root server system, unless the organization that manages the unique root servers can prove to really be super partes and gain the trust of everyone.

This conclusion will definitely look sad. However it must be noted that, even if many of us – call us "utopians", if you wish – think that it would be possible to manage the Internet with a truly international spirit, without perceiving ourselves as representatives of our own country's interests, this was not the truth even for the At Large elections in year 2000, in which a vast majority of the votes were cast with a national principle, each voter supporting candidates from its own country, and with those few media which showed interest for the matter doing so on the line of "you have to participate to push your own country high in the world government of the Internet".

This was mostly due to the lack of organization in the At Large movement and in the elections, so that the country of origin was the only thing voters and media could use to make preliminary selections among a roll of hundreds of candidates, as proven from the fact that the recent elections on icannatlarge.com were significantly different in regard to this. However, concepts such as "home country" and "nationality" – which, it must be reminded, often reflect "language", the highest barrier to participation – still seem to be relevant for the individuals.

Thus in my opinion it is not realistic to build a system that does not take into account the need to have some sort of established representation and official statement at the country level, at least for the next ten or twenty years; it is advisable to leave to each country the management of those issues that do not need to be managed centrally.

### National governments and the Lynn Reform

Another reason that brings the issue of countries representation on the table is that laws are still made at the national level; so if laws want to be passed to regulate issues related to domain names and other Internet administration issues – for example, UDRP and similar practices that are being adopted at the ccTLD level – it is necessary to be able to either limit their application to the nation that makes them, to establish international conventions about which country has the right to regulate each TLD – easy when we talk of ccTLDs, but which legislation will you apply to gTLD quarrels where the registry, the two litigants, and their registrars, could all be located in different countries? – or to get to a true international body, whose acts are recognized as mandatory by all governments, to regulate international Internet issues (intriguing but almost impossible to obtain).

Paradoxically, the problem of the coexistance of national legislations with the international and virtual character of the Internet, though well present to all those who worked in international Internet ventures in the last years, has been made easier up to now by the fact that it was limited to porting on the Internet the "real life" legislation, mainly about commercial and fiscal issues (ie, to which country do I pay VAT on international e-commerce, or royalties for intellectual property?). But almost all nations of the world have not been ready to produce laws on the new issues raised by the Internet, such as domain names management, because it takes some time for these new problems to be brought to attention, understood, and then agreed upon by national Parliament members. Unfortunately, it is easy to foresee that in the next years more and more national Parliaments will want to have their say on "virtual" issues like the ones ICANN is managing.

In this respect, it is correct the need for a higher involvement of national governments, expressed by Stuart Lynn. However, this does not necessarily mean that governments have to take direct control of ICANN; it is exactly the opposite, as they should be led to recognize that the Internet is an international entity that should be ruled at a worldwide level for a certain limited number of issues that cannot be solved at the national level.

But as we have seen, in fact, national governments, whose role in the world scenario is mainly to protect the specific interests of their own country – often even not of all of it but only of those social layers who support the specific political party that has won the last elections – are perhaps the most powerful factor that menaces to break the international unity of the Internet. So if ICANN wants to preserve its role, and more generally, if the Internet community wants to maintain an independent world-level administration over the network, it has to keep governments as far as possible from the command levers, or better, to come to a situation that satisfies their more than justified need for a certain degree of local control, while having them agree to delegate the international administration level to an entity that does not have to protect national or particular interests. On the other hand, a government-ruled ICANN could end up in being more like a battlefield for the different cultural and economical views of the world, as it often happens in world trade or environmental summits, rather than being productive and forward thinking.

But for this to happen, national governments have to be confident that those who administer the Internet will not act in the interest of other governments or limited lobbies and business interests, and that the mechanism for selecting these administrators is open and cannot be easily captured by any of such interests.

This is exactly the opposite of the direction in which ICANN has been heading in the last years, when the diversity in its Board has been narrowed more and more, and a vast part of the stakeholders of the Internet has not been given a chance to have their requests considered, or to get proper representation in the Board. The Lynn Reform would bring this further, by creating an "aristocracy of the Internet", mainly centered around US-minded business interests, that would mostly keep the power of administering the Internet inside itself, by using "Trustees" and "Nominating Committees" to ensure that the administrators of the Internet are chosen by a closed group; and to do so, it would keep to gain support from the governments by giving them more power than before.

However, the proposed architecture would not solve the problem of the pending conflict between national interests represented by the governments and the unique and centralized management of the Internet; thus, it would be doomed to fail, as at the first serious conflict of interests, the losing side would likely decide to stop supporting the organization (many countries, de facto, have not yet started to support it...). Moreover, by furtherly increasing the narrowness of its Board

representation, ICANN would never be able to solve its conflict with ccTLDs and non-US communities, because it would still put them in front of the choice between accepting a subordinate position towards ICANN and the US government, or getting out of the ICANN system.

### Breaking the Internet

I have already said that, in my view, an unified international administration of the Internet, notwithstanding ICANN's failure, is desirable and still possible, provided that ICANN completely reverses its direction and widens its base of support by increasing the openness of its Board; and that the Lynn Reform would not solve this problem, but radicalise it, as it would likely increase the narrowness of the Board and so, in the end, give more strength to the forces that could potentially break the uniqueness of the root server system of the Internet.

Now, I want to examine the other option: what would happen if the Internet actually got broken into sub-networks, each one in a certain way tied to a country or to an economical area of uniform countries?

Traditionally, this hypotesis has been frightening most of those who care about the Internet. Problems would not be technical, but at the content level: users typing the same URL or e-mail addresses while being served by different root server systems would not necessarily be pointed to the same website or mailbox – and this is obviously not desirable, both for those making business from websites and other Internet services, who would be forced to cope with the increased complexity and difficulty for their customers to reach them, and for advocates of the free speech, who see in national root systems a chance for non-democratical governments to censor the content of the Internet and prevent access to undesirable information.

However, it must be noted that multiplying the root server systems will not necessarily bring such problems; if those systems are kept synchronized, so that the same TLD points to the same registry in both systems, then none of such problems will occur. In fact, this already happens every time someone caches a copy of the root DNS zone! So the issue is not that all root servers must be owned or managed by the same entity, but that there must be an agreement among all root servers not to point to different registries for the same TLD.

Now, this is exactly what ICANN in its original inception was meant to be in the name space: an instrument to agree uniformity among the different root servers. However, an organization with budget figures that have seven zeros in dollars is not necessary to do this; it could be done by a council of representatives of the owners and managers of the different root servers, that meet once or twice a year, or perhaps discuss and come to everyday agreements by online means.

A more complex organization is necessary only if you decide that people other than the root server owners – ie, not only the private operators of this market, but the general public – have to be involved in deciding policies. Under this hypothesis, the relationship reverses: root servers should be owned and run, either directly or indirectly, by the central organization, that should also provide the system for ensuring participation to all stakeholders, and support the costs by taking a share of the profits of those who make profit out of the infrastructure it maintains, and that could not make it if such infrastructure was not managed effectively. This was why ICANN was conceived; but if ICANN gets to be monopolized by the business interests of the industry, its very necessity starts to be questionable.

But then, why would it be an advantage to have different root server systems, if all of them were to be kept strictly synchronized?

In my view, the advantage would be the introduction of competition even in the very particular "market" of the root servers. ICANN has proven that any entity that acts in this market can fail. Having only one of such entities is exactly why we are stuck here after years of disagreement. If ICANN had succeeded to be a highly esteemed "world forum", it could claim some right in being unique, but since it has failed to adequately involve public interest and has become a private interest lobby, it has become a "world monopoly". Since it seems that such shift and capture is not easily avoidable, perhaps the best way to ensure that it will not happen again is to have more root server systems in competition, and let the ones whose policies are most appreciated survive.

This principle of "protection of the diversity" does not only apply at the industry level, but also at the country level. While as an international Internet user I think that the network should be one and worldwide, as an European citizen I think that the EU should take any possible action to fill the gap it has in respect to the US about all aspects of the Internet technology, culture and politics; which, in this field, means that it should never accept a narrowly managed ICANN with close formal and substantial ties with the US, but rather establish its own root server system, ask all European Internet providers and users to use it, and, if succeeding, negotiate an agreement with ICANN, so to keep the two systems synchronized, starting negotiations from a much stronger position.

So, allowing for country- or region-based root server systems, while getting agreement on the fact that they should be kept synchronized by a truly supernational organization, could be an intelligent way to give some satisfaction to the push for control by the governments, without necessarily breaking the net or starting a cycle of clashes about its control. National security officers could be happy for the fact that, in case it is ever necessary, they could regain control of their national network and/or survey and preserve its functionality from attacks, and could then recognize that international agreements to keep worldwide visibility are usually desirable.

On the other hand, it must be noted that if privately owned root server systems are to be allowed, there should be very careful protection to avoid that their market share is gained through indirect means – for example setting one particular root server system as default in the configuration of your favourite operating system <sup>(i)</sup> Private root server systems are welcome if they help in keeping public ones under the pressure of competition; anyway, we already have a number of non-ICANN private systems without significant success, and it would be much more difficult to convince private systems to be synchronized.

### The At Large mechanism

It should be now clear why the idea underlying the At Large mechanism is necessary for any organization claiming control over the DNS to succeed. In fact, we are talking of an organization that has to control a resource that is not located in any single country; so it cannot be established or recognized by legislation of a single country, nor its managers can be chosen by the government of that country. In other words, if we had a world government, ICANN would possibly be a department in a ministry of such government, but unfortunately business and technology are far beyond politicians in unifying the planet, so we do not have this option now.

However, we have also shown that national governments naturally tend to break worldwide resources into national slices, so, even if they should be involved in the process, they should not be

expected to be the founding core of this organization. Moreover, if ICANN is founded on a too narrow basis, it will not resist to such breaking tendencies.

So, the only unifying and strengthening force that ICANN has as its disposal is the Internet community at large: a layer of open minded and forward thinking people, very different in profession, social position, culture, but kept together by a similar interest in keeping the network united, and able to conceive 21<sup>st</sup> century answers to 21<sup>st</sup> century problems. It is amazing to see how many brilliant people and how many innovative ideas have appeared in the last years on the Internet and in the very world of the At Large activists, and to see how they have been disguised and wasted; however, the history of the last years shows that in most fields new instruments have to be invented for the Internet, as the old ones usually don't work.

Now, I will not enter here into the problem of structuring a successful At Large membership, or, more generally speaking, an instrument for bringing good people and good ideas at the centre of the stage, let them gain support and consensus, and let them be then adopted by those who can. This will be the subject of discussions in the next months, when hopefully the Board of ICANN will realize that a successful At Large mechanism not only is possible, but is the only way for it to win some support and thus to survive. However, it must be said that such mechanism should not be imposed from the top, but it should be let flourish in many different ways from the bottom; there should only be a light overall mechanism for harmonizing all views and getting to a consensus. Those different ways should encompass differences in culture, language, instrument, and other factors. Each group should self-organize as it wishes, and then get recognition and a voice in the process, weighed by the number of individuals that are part of such group.

Such mechanism is possible, and the success of the embryonal effort at icannatlarge.com supports this statement. When kept into a well organized and manageable size, online elections work well, and phenomena such as national capture or bulk registration rush do not happen. Problems such as identity verification can be solved by delegating them to the lowest possible level, ie asking to well known organizations to act as identity registries. It is fair that the Board asks for some proof of working self-organization to the supporters of the principle of the representation of individuals – and it is being worked upon. However, the Board should also be ready to support such efforts and to reward them with a worthy prize: if a working mechanism can be supplied, the Board should accept to use it to elect a part of itself, even in the short term, and to supply input to its decisions.

In other words, as the Board has asked to the individuals of the Internet to self-organize, it should be then ready to establish formal relationships with their self-organizational structures, as soon as they work and are supported, and have them select a part of itself and act as representatives of the individual users of the net inside the decision-making process.

### **Conclusions**

For a constraint of having one single worldwide root system to be justified, there is a clear need for it to be managed in the interest of the worldwide Internet community, in all of its facets – political, cultural, social and economical. If this need is not met, apart from any ideal of democracy and rights that one might consider broken, pressures for different root systems will in the long term become too high and non-ICANN root systems will begin to flourish.

Thus, ICANN has two choices in front of itself.

It can proceed on its current way, as a "world monopoly", likely being then forced to compete, even if this could mean breaking up the Internet; ICANN could aim to become the manager of one root server system, perhaps the US government one, and accept that others will enter into play.

Or it can try to change into a "world forum", accepting all those who want and need to participate, showing an increase in effectiveness and support, and claiming a role of international solver of those issues who cannot be solved at the local level. The second way necessarily means that a considerable part of the Board – ie the original half – has to be made of representatives of the wider base of the individual users of the Internet, and that the internationality of the organization must be greatly increased, not in terms of Board members, but in terms of actual perception and workflow among the local Internet communities.

Even in this second option, having coordinated root server systems, rather than a monolithic central one, could help both in fostering representation and organization at the regional and national level, and in satisfying pushes for national control of the network without breaking it.