

Internet Corporation for Assigned Names and Numbers (ICANN)

Jeanette Hofmann

Introduction

Objectives and main activities

ICANN is responsible, at the overall level, for the administration of three sets of unique identifier systems for the internet: domain names, numerical internet protocol (IP) addresses, and a third type that serves to identify so-called port and parameter numbers.

The administration of the generic part of the domain name system (DNS)¹ forms the core of ICANN's activities. Country code top-level domains (ccTLDs) are predominantly managed at the national level, while policies for the allocation of IP addresses are autonomously devised by the regional internet registries (RIRs).²

At the time of ICANN's inception, the administration of the DNS was regarded as primarily technical. More recently, however, ICANN is seen as a regulatory body whose policies shape the market for the registration of domain names and set the conditions for creating new top-level domains (TLDs).³ Although technical and regulatory tasks may overlap, regulatory bodies require a different type of policy process and membership than do technical organisations.

Legal/constitutional composition

ICANN was founded in 1998 as a California-based not-for-profit corporation. Its mandate derives from two short-term contracts with the United States (US) government. The Internet Assigned Numbers Authority (IANA)⁴ oversees the global allocation of IP addresses, the root zone management of the DNS, and the assignment of technical protocol parameters used in various internet protocols; IANA can be likened to a global administrator of internet protocols. It is operated by ICANN under a contract with the US government, the "IANA contract" (NTIA, 2006). The other contract between the US government and ICANN is a memorandum of understanding (MoU) (NTIA, 1998) that specifies tasks for ICANN to accomplish as a precondition for the privatisation of internet names and numbers administration. Privatisation in this context means the transition of currently public responsibilities to a private, not-for-profit entity. Since 1997, the US government has claimed supervision authority over the management of the DNS and IP address allocation. At present it is unclear when and what part of its regulatory authority the US government intends to privatise.

WEBSITE: www.icann.org
HEADQUARTERS: Marina del Rey (CA), United States of America
FOUNDED: 1998
UN STATUS: No formal status
TYPE: Non-profit private corporation

ICANN implements regulatory policies through contracts with the "rule takers", i.e. businesses providing services related to internet names or number spaces. While all registries for generic TLDs (gTLDs) and all large registrars have signed contracts, other organisations have been more hesitant. Independent actors such as the RIRs and root server⁵ operators, as well as many ccTLD registries, reject the idea of delegating regional authority to a central entity which is ultimately subject to California law and the authority of the US government. The root server operators, in particular, have so far refused to enter contractual agreements with ICANN. Others such as the RIRs were able to negotiate a memorandum of understanding that preserves substantial policy responsibility with the Number Resource Organisation (NRO),⁶ the organisation that represents the internet addressing community.⁷

Key members/participants and decision-making structures

The MoU between the US government and ICANN mandates a bottom-up policy process that involves all stakeholders in the management of the DNS and IP addresses, including users. Reflecting the widespread anti-state spirit on the net during the 1990s, which was even shared by parts of the Clinton administration (1993-2001), the public interest was to be represented by individual users. Governments – with the significant exception of the US government – would be involved only in an advisory capacity. Accordingly, ICANN's original bylaws stipulated that nearly half of the seats on the Board of Directors would be filled through a process to represent individual users. The other half would represent the emerging service industry surrounding the DNS and IP address allocation. Supporting organisations consisting of various stakeholder groups would be responsible for policy development. Individual users would form an At-Large Membership.

In the course of an organisational reform in 2002, ICANN suspended the model of a balanced representation of the private sector and civil society. Individual users' representation on the Board is now reduced to a single non-voting liaison. Figure 1 describes the structure of ICANN and how the various entities are represented on the

1 More information is available from: <en.wikipedia.org/wiki/Domain_Name_System>

2 A comprehensive definition of RIRs is available from: <en.wikipedia.org/wiki/Regional_Internet_Registry>

3 TLDs are the domain names at the top of the DNS naming hierarchy. TLDs appear in domain names as the string of letters following the last (rightmost) period. See <www.pir.org/Glossary/Glossary.aspx> for a comprehensive definition of TLD, gTLD and ccTLD.

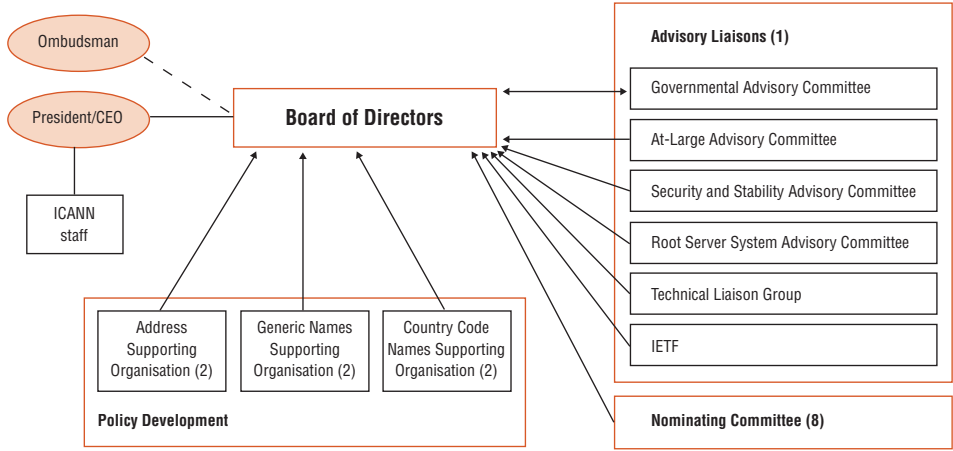
4 <www.iana.org>.

5 See <en.wikipedia.org/wiki/Root_servers>.

6 <www.nro.net>.

7 More information about the stages of the negotiation between NRO and ICANN is available from: <www.nro.net/documents>.

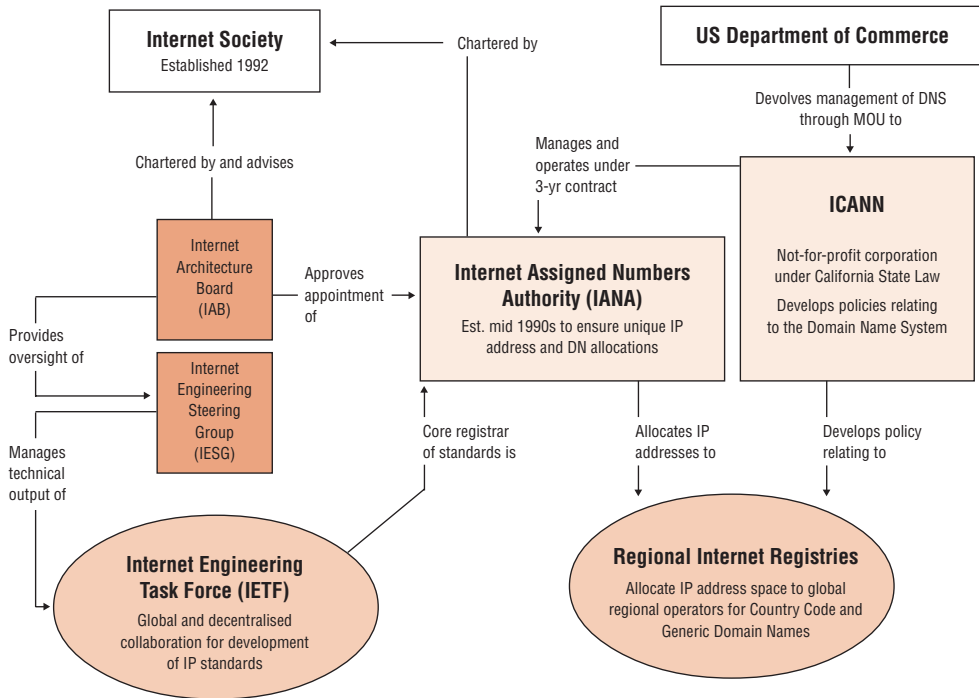
Fig. 1: ICANN structure



() indicates number of board seats.
 President is an ex officio voting board member.

Source: Peake (2004)

Fig. 2: ICANN relations with other organisations



Source: London School of Economics (LSE) (2006)

The diagram provides a general overview of the relationship between ICANN and key global bodies responsible for developing internet technical standards. It is not an exhaustive representation of all organisations active in the technical standards community. The graphical dimensions given to each entity in the diagram do not reflect size or status.

Board of Directors. The Board consists of fifteen voting members, eight of which are chosen by a Nominating Committee and six by the supporting organisations. The number of non-voting liaison members can vary.⁸

Relations with other international institutions and the multilateral system

ICANN is a corporation subject to California law and reports to the US government. There are no formal relations between ICANN and other international organisations. However, some intergovernmental bodies such as the International Telecommunication Union (ITU) and the World Intellectual Property Organisation (WIPO) participate in the Governmental Advisory Committee (GAC)⁹ of ICANN. The technical standard-setting bodies¹⁰ also appoint one liaison to the ICANN Board of Directors. As a consequence of its participation in the World Summit on the Information Society (WSIS), ICANN pays more attention to international organisations and actively supports their work where it touches upon ICANN's ambit. However, ICANN forms an important node in the network of organisations responsible for the development and coordination of the internet infrastructure, as Figure 2 shows.

Commitment to development

ICANN, together with its supporting organisations, is involved in national capacity-building regarding operational functions related to IP addresses and the DNS. Examples are assistance in the operation of ccTLD registries and the establishment of LACNIC and AfriNIC, the regional registries for allocating IP addresses in the African and Latin American and Caribbean regions respectively.¹¹ ICANN has also established "regional presences" or liaisons in Africa, Asia, Latin America and the Middle East to strengthen its outreach and educational activities.

Commitment to gender equality

ICANN bylaws contain provisions for regional balance but not for gender balance. The term gender does not appear in its bylaws. However, due to the establishment of ICANN's Nominating Committee four years ago, the number of women in decision-making positions has increased.

Southern actors and civil society participation

Developing countries are underrepresented in all of ICANN's stakeholder groups. ICANN meetings do not take place at UN locations, which makes them expensive to attend for governments from developing countries. For civil society organisations, participation in international meetings is generally difficult to finance. ICANN has no budget for supporting participants from developing countries to attend its meetings.¹² Lack of capacity and competence is another reason why developing countries may not participate in ICANN or attend meetings even when they take place in their regions. From a developing-country perspective, there might also be more pressing issues to attend to – such as access to the internet – than participating in ICANN.

Civil society participates in ICANN through the At-Large Advisory Committee and the Non-Commercial User Constituency of the Generic Names Supporting Organisation. All in all, civil society participation in ICANN is rather low. Reasons for unsuccessful outreach efforts may have to do with the very specific and not easily comprehensible mission of ICANN, and the low interest of most users in the administration of the net's infrastructure, but also with the disenfranchisement of individual users. Individuals have no votes in any of ICANN's decision-making bodies. They can achieve policy goals in ICANN only indirectly through the Nominating Committee or through lobbying other constituencies and supporting organisations.

Role and responsibilities in ICTs

General orientation and responsibilities towards ICT policies and actions

ICANN's communication services are based on addressing systems that carry out two crucial functions. First, they provide users or their communication devices with a unique identification; second, they provide information about the location of communication devices. The allocation of such identifiers requires global coordination to ensure that addresses are assigned only once and also in an efficient manner. The internet has two such identifier systems: IP addresses and domain names. ICANN is responsible for the overall coordination of these identifier systems. The term "coordination" refers to the fact that the actual assignment of numbers and the delegation of names is carried out by registries which are linked to ICANN through contracts.

ICANN's mission specifies three types of coordination related to internet names and number spaces. ICANN:

1. Coordinates the allocation and assignment of the three sets of unique identifiers for the internet, which are
 - a. domain names (forming a system referred to as the DNS);
 - b. internet protocol (IP) addresses and autonomous system (AS) numbers; and
 - c. protocol port and parameter numbers.
2. Coordinates the operation and evolution of the DNS root name server system.
3. Coordinates policy development reasonably and appropriately related to these technical functions (ICANN, 2006a).

ICANN's responsibilities and orientation in the overall field of ICT policies were defined in the late 1990s and thus reflect a specific period in the evolution of the internet following the privatisation of the backbone, the central network that linked all the parts of the internet together, and its opening to the general public in the mid 1990s.¹³

The engineers who developed the DNS conceived domain names as arbitrary strings of characters without any direct relationship to names or marks in the real world. Domain names were meant to be "NOT natural language expressions" as Vint Cerf (2006) emphasised again at the first Internet Governance Forum in Athens in 2006. As Jon Postel (1994) put it in a memo that explains the DNS: "Concerns about 'rights' and 'ownership' of domains are inappropriate. It is appropriate to be concerned about 'responsibilities' and 'service' to the community." However, with the growth of the World Wide Web in

8 The present composition of the ICANN Board of Directors is available from: <www.icann.org/general>.

9 <server.gac.icann.org/web>.

10 ITU, European Telecommunications Standards Institute, World Wide Web Consortium and Internet Architecture Board.

11 More information is available from: <www.iana.org/reports>.

12 Travel expenses are only borne for members of the Board of Directors and for members of councils who have been appointed by the Nominating Committee.

13 For a comprehensive account of the regulation of the internet infrastructure see Mueller, 2002.

1992, domain names became very popular and quickly turned into tradable goods. Equivalents to famous names and protected marks in the name space became subject to escalating speculation and property rights conflicts. An informal market for domain names was emerging in the second half of the 1990s but there was no authority nor any rules to govern this new trade. The founding of ICANN in 1998 was the response to this lack of regulation.

The MoU specified the following tasks for ICANN to accomplish in collaboration with the US government:

- Develop policies for the allocation of internet addresses (IP numbers) and the assignment of other technical parameters
- Develop a plan for the introduction of competition in domain name registration services including an accrediting system for registrars
- Develop standards for the operation of generic TLDs
- Develop policies for the operation of root servers
- Develop a consensual mechanism for the delegation of new TLDs
- Establish a uniform procedure for the resolution of property rights conflicts over domain names
- Develop a review process that allows members of the internet community to appeal decisions by ICANN
- Develop a process for affected parties to participate in the formulation of policies regarding the technical management of the internet
- Develop membership mechanisms that “foster accountability to and representation of the global and functional diversity of the internet and its users” (NTIA, 1998).

Competition, “private bottom-up coordination” and international representation were some of the founding principles issued by the US government that have shaped ICANN’s coordination tasks.

Throughout its founding years, ICANN stressed the operational or technical nature of its functions. More recently, its policy-making activities have become so predominantly visible that they can no longer be denied. For at least the “generic” part of the DNS, ICANN has evolved into a regulatory agency with price-setting and service-related standards defining responsibilities. While the ccTLDs are typically administered and regulated at the national level, ICANN sets contract-based policies for gTLDs such as “.com”, “.org” or “.net”.¹⁴

However, ICANN’s self-governance approach differs in several respects from traditional regulatory mandates in the telecommunication area. Most importantly, ICANN is not independent of either its “regulatees” or its supervisory agency. The regulated organisations – registrars and registries – not only participate in ICANN’s policy-setting efforts as members of ICANN’s constituencies, they also contribute significantly to ICANN’s budget.¹⁵ As a regulatory agency, ICANN is thus interwoven with and accountable to several actors with diverse or even antagonistic interests, the most influential of which are arguably the US government and the DNS service industry.

Specific responsibilities in relation to the WSIS

ICANN participated in the WSIS, though without any specific responsibilities. However, internet governance and the private self-regulatory approach that ICANN represents evolved into one of the major controversies in the first phase of the Summit. For this reason, ICANN attended the preparatory conferences, explaining its role, mission, guiding principles and organisational structure. ICANN also participated in the UN Working Group on Internet Governance and supported it financially. In its own ambit, ICANN launched a temporary working group on WSIS and organised several WSIS-related workshops at ICANN meetings.

Description and analysis of ICT activities

WSIS-related activities since the Tunis Summit

ICANN’s post-WSIS activities have focused on the Internet Governance Forum. ICANN has participated in and allocated money in its budget to financially support the Advisory Group that assisted the UN secretary general in launching the first Forum meeting.¹⁶ ICANN also co-organised several workshops at the first Forum meeting, which dealt with building capacity for participation in internet coordination and with multilingualism on the internet.

WSIS has clear repercussions for ICANN’s further orientation. Its strategic plan for 2006 to 2009 reflects the outcome of WSIS both in terminology and concrete goals. It describes as future “challenges and opportunities” the development of appropriate structures and processes for a “post-WSIS ICANN” as well as “an appropriate role” for ICANN “in the broad group of international entities involved in internet functions” (ICANN, 2006c). As a result of WSIS, ICANN takes more notice of other international organisations related to information and communications technology (ICT) policies and may thus become more responsive to policy concerns outside its own mission. The same might be said of other organisations, so that regulatory competencies affecting the internet may in future interact on a more regular basis.

On a concrete level, ICANN plans in the near future to:

- Increase international participation in ICANN processes and offer translation into other languages
- Support regional capacity-building in the field of internet addressing and the DNS
- Improve and monitor ICANN’s overall operational performance and that of its supporting organisations
- Audit its own openness, transparency and inclusiveness
- Deal in a systematic way with “end user issues” (complaint handling regarding registration of domain names)
- Pursue the deployment of internationalised domain names (also on the top level), and facilitate the introduction of new TLDs and a consensual WHOIS policy (see below).

¹⁴ The allocation of domain names on the second level of ccTLDs is subject to national regulation. However, the US government claims final authority over the DNS root zone file and thus over what appears in the root (Peake, 2004).

¹⁵ Registries operate the database of top level domains. Registrars are responsible for the registration of domain names. About USD 20 million of ICANN’s USD 34 million budget for the fiscal year 2006-2007 is expected to come from accredited registrars. Registries for gTLDs are budgeted for roughly USD 15 million. The address registries contribute USD 800,000, and the registries for ccTLDs account for USD 1.5 million (ICANN, 2006b).

¹⁶ With USD 200,000 according to the annual operating plan for the fiscal year 2006-07.

Other ICT-related activities

ICANN's regulatory activities centre on the provision of services particularly in the generic but also partly in the country-code domain name space. Examples of the regulation of existing services are the Uniform Dispute-Resolution Policy (UDRP)¹⁷ and the WHOIS policy.¹⁸

The UDRP was introduced in 1999. It consists of an international online arbitration process for settling conflicting claims to domain names without resorting to national courts. The goal is to provide conflicting parties with a quick and low-cost resolution procedure. The scope of the UDRP is limited to domain names under gTLDs and a few ccTLDs. Furthermore, the UDRP only applies to claims made by trademark owners to domain names which have been registered and used in bad faith. Evaluations of the UDRP arbitration process (Froomkin, 2002; Geist, 2002) point out a systemic bias towards the complainants and thus a privileging of trademark-based claims over other rights.

The WHOIS policy pertains to a database that contains contact information of domain name registrants. For several years ICANN has struggled to consensually define mandatory rules regarding essential registrant data elements that must be made publicly available by registrars. Intellectual property organisations and some public authorities wish unrestricted access to the WHOIS database. However, the publication of WHOIS information potentially conflicts with data protection laws, which vary widely across countries. A report by the London School of Economics (LSE) estimates that volunteers in ICANN have spent approximately 39,000 hours on this issue since the first task force was initiated in 2001 (LSE, 2006, p. 66).

Examples of regulatory policies aimed at expanding or creating new markets are the delegation of new TLDs and the introduction of internationalised domain names (IDN). The 1998 MoU between the US government and ICANN already specified one of ICANN's tasks as the consideration of a process for the introduction of new gTLDs. In various pilots and trials that took place in 2000, 2004 and 2005, ICANN has to date delegated twelve new TLDs. However, there is still no established standard procedure for the future introduction of new gTLDs. The delegation of new TLDs has been a controversial issue for more than a decade, with some stakeholders arguing vigorously in favour of increasing the number of TLDs up to a technically feasible figure per year, and other stakeholders more or less against any additional TLDs. The supporting organisation for generic DNS issues in ICANN, the Generic Names Supporting Organisation (GNSO),¹⁹ has now completed another policy development process, which endorses the introduction of additional TLDs and recommends policy principles for their selection and allocation (GNSO, 2006).

The DNS is based on the ASCII character set, which supports only Latin alphabet domain names.²⁰ In order to enable international use of the DNS, the Internet Engineering Task Force (IETF)²¹ has developed a converting mechanism that allows for a translation of non-ASCII character domain names into ASCII-based names. Based on the technical specifications defined by the IETF (2003), ICANN devised guidelines for the use of those standards at the registry level.

17 See: <www.icann.org/udrp/udrp.htm>.

18 See: <www.spacereg.com/dc_eurid_whois_policy.pdf>.

19 See: <www.icann.org/committees>.

20 American standard code for information interchange (ASCII) is a code for representing Latin characters as numbers, with each letter assigned a number from 0 to 127. Unicode is an extension of ASCII.

21 <www.ietf.org>.

All operators of an ICANN-accredited TLD (i.e. .com, .net, .org, .info, .biz, etc.) are required to comply with those guidelines in order to obtain approval for the registration of internationalised domain names. Tests for introducing internationalised TLDs are expected to be completed by the end of 2007.

Stakeholder participation

Key areas in which participation of civil society, Southern countries and women is an issue

Diversity in participation is especially important in the area of name space regulation. DNS policy issues such as the introduction of internationalised domain names (IDN) or decisions on data protection directly affect users' interests. Key decision-making bodies for DNS policy are currently the GNSO and the ICANN Board of Directors.

Another relevant area is the evolving structure of ICANN itself. ICANN is a prime example of new forms of multi-stakeholder organisation, but also of the various problems inherent in these new types of consensus-building entities. As the continuous changes in ICANN's sub-structures and procedures show, the goal of fair representation and legitimate decision-making is very difficult to achieve once the traditional UN principle of "one state, one vote" is discarded as a model.

Actions taken to ensure effective participation of all stakeholders

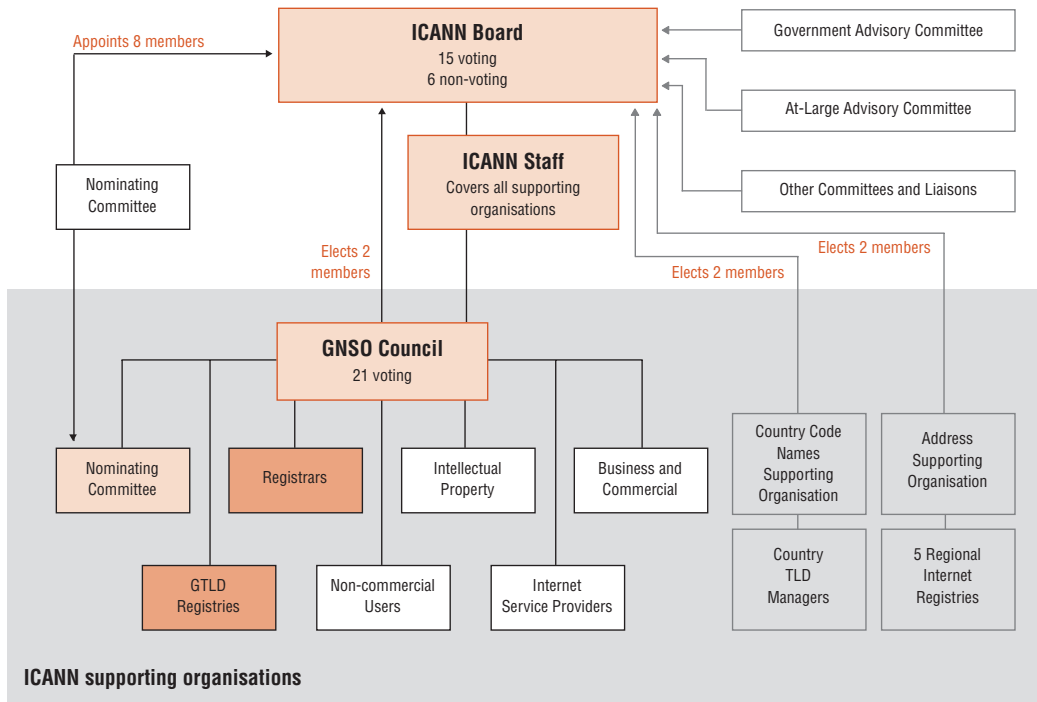
A key element of ICANN's governance model is the principle of bottom-up consensus building.

Stakeholders relevant to the field of DNS and IP address management are involved in ICANN through supporting organisations. The ICANN bylaws identify the roles and responsibilities of the three supporting organisations: the Address Supporting Organisation, Country Code Names Supporting Organisation (ccNSO) and GNSO. They are each responsible for policy development in their respective areas. The structure of the supporting organisations and their relationship with ICANN differ considerably. The GNSO, responsible for gTLDs, is the largest and has the most differentiated structure. As Figure 3 shows, the GNSO consists of six "constituencies", which should represent the diversity of interests involved in or affected by the management of the domain name space. As the chart also shows, ICANN's constituency structure over-represents business interests. The Non-Commercial Users Constituency is the only group in the GNSO Council that articulates civil society interests.

As a result of ICANN's reform, a Policy Development Process (PDP) that covers issues in the purview of the GNSO and the ccNSO has been established. The PDP is part of the ICANN bylaws (Annex A and B) and specifies in detail the roles and responsibilities of the Board of Directors, the GNSO, the ccNSO and ICANN staff to ensure that decision-making processes go forward within a given time, but also that final decisions by the Board do indeed reflect the recommendations of the supporting organisations. In contrast to DNS policies, policies regarding the allocation of IP addresses are more or less autonomously developed by the Address Supporting Organisation.

Civil society groups have two channels in ICANN to influence the policy process. The first channel is the At-Large Advisory Committee (ALAC), which represents self-organising Regional At-Large Organisations (RALOs). ALAC was originally designed for individual internet users. In future it might represent both organisations and individuals. The task of the At-Large Membership is to offer advice on ICANN's regulatory activities. Unlike the other stakeholder groups in ICANN,

Fig. 3: ICANN organisational structure



Source: LSE (2006)

The diagram gives an organisational overview of ICANN and its component parts with emphasis on the Generic Names Supporting Organisation and its Constituencies. It is not an exhaustive picture of all component parts of ICANN. The GNSO Council consists of 21 voting members, with each Constituency represented by three voting members. Registrar and gLTD Registry Constituencies are accorded double weighted votes in the Council. The Nominating Committee appoints three members to the Council. The GNSO elects two directors to the ICANN Board (Seats 13 and 14).

ALAC no longer has decision-making authority.²² It is represented on the Board, as well in the GNSO, through non-voting liaisons.

The second channel of civil society participation is the Non-Commercial Users Constituency (NCUC),²³ one of the six constituencies that together form the GNSO. NCUC constitutes a minority on the GNSO Council, the organisation's decision-making body. The fact that the GNSO Council uses a weighted voting system, which favours the registrars and registries by giving their Council members two votes instead of one, further marginalises civil society perspectives in the GNSO.

ICANN's bylaws (Article VI: Sections 3-5) include "diversity provisions" for international representation. To ensure diversity, ICANN's bylaws specify five geographic regions,²⁴ all of which must be represented by at least one member of the Board, the various councils, and the Nominating Committee. There are no equivalent provisions to ensure gender diversity. For the At-Large Membership, geographic representation will be achieved through the five RALOs, which are intended to be umbrella

entities for non-commercial organisations ("At-Large Structures") and individuals who take an interest and want to participate in ICANN. At present, all five RALOs are in the process of constituting themselves and negotiating a memorandum of understanding with ICANN.²⁵

After WSIS, ICANN has strengthened its efforts to internationalise participation. To facilitate multilingual communication, relevant documents are to be translated into other languages. There are also plans to offer simultaneous interpretation at ICANN meetings. In addition, ICANN has initiated outreach programmes designed to contribute to regional capacity-building in the area of DNS and IP address management and to increase participation from under-represented regions.

Among the post-WSIS regional outreach activities are the newly established regional liaisons for each of ICANN's five world regions, the task of each being to form networks with and across all stakeholders, including national governments. The goal is to promote participation in ICANN but also to foster the emergence of regional DNS service industries and of user groups. In addition, ICANN created the position of a general manager for public participation to foster active participation by the various stakeholder groups.

22 ICANN's original bylaws from 1998 provided that the At-Large Membership would select roughly half of ICANN's Board seats. This provision was changed in 2002, in the course of the reform of ICANN.

23 <gns0.icann.org/non-commercial>.

24 Europe; Asia/Australia/Pacific; Latin America/Caribbean islands; Africa; and North America (Art. 6, Sect. 5).

25 In December 2006, LAC RALO, the Latin America and the Caribbean Regional At-Large Organisation, signed a Memorandum of Understanding with ICANN.

Until 2003, decision-making positions in ICANN were predominantly filled by the ICANN supporting organisations and their constituencies. In 2003, ICANN created a Nominating Committee, which selects eight members of ICANN's fifteen-member Board of Directors, as well as a "portion" of the GNSO and ccNSO Councils and the Interim ALAC. The purpose of the Nominating Committee is to broaden the existing mix of geography, culture, skills, experience, and perspective as derived from ICANN's supporting organisations. Due to the work of the Nominating Committee, the share of "ICANN outsiders" in decision-making positions has significantly increased and ICANN's Board and councils show a slightly increased participation of women, not least from developing countries.²⁶ Civil society has a strong voice in the Nominating Committee, with five of its members being selected by ALAC. Together with the representative of the Non-Commercial Users Constituency, civil society constitutes roughly a third of the voting members.

Effectiveness of efforts to increase stakeholder participation

ICANN's diversity provisions do ensure a degree of regional variety in decision-making positions. Its travel reimbursement policy for Board members and Nominating Committee appointees enables participation from developing countries and from civil society organisations. However, on the level of general participation without decision-making responsibility, both regional and sectoral diversity is much more limited. The majority of attendees at ICANN meetings are from OECD countries and related to the internet industry. ICANN does offer all stakeholders opportunities to participate, but the actual influence on the policy process varies significantly among the different groups. In particular, individuals and non-commercial internet users lack an effective voice in policy matters.

Fair representation and balance of interests is an issue especially in ICANN's most important supporting organisation, the GNSO. The representativeness, transparency and effectiveness of GNSO operations have recently been subject to an extensive evaluation conducted by the LSE. The LSE review comes to the conclusion that the current GNSO structure reflects a "snapshot of the interest groupings most active on generic names issues in the founding stages of ICANN in the late 1990s" (LSE, 2006, p. 423). Its constituency structure lacks the flexibility required to incorporate new stakeholders, and the individual constituencies are not easy for newcomers to find and to join. The report also notes that the majority of constituencies suffer from low participation and a lack of representativeness. Of the altogether 231 members of the GNSO, only a small fraction regularly participate. This means that policy recommendations on vital issues such as the conditions of use of domain names in gTLDs are developed by quite a small number of people.

The review recommends among many other things:

- Establishing a more flexible structure that is open and attractive to new stakeholder groups by reducing the number of GNSO constituencies from six to three (registration, business, and civil society including the now separate At-Large Membership).
- The creation of a primary, fee-based membership in ICANN so that it becomes actually possible to join the organisation and choose a constituency according to individual preferences.

- The strengthening of incentives for reaching consensus across the various interest groups through abolishing weighted voting and raising the threshold for consensus on the GNSO Council from 66% to 75%.

While a restructuring of the GNSO into three groups could well be a step forward to overcoming the antagonistic constellation in the GNSO, it bears the risk of codifying once again the minority position of civil society. By the same token, a membership fee might discriminate non-commercial users, particularly from developing countries. It is thus important that any new consensus-fostering mechanism gives adequate weight to civil society groups so that all views and interests are reflected in policy recommendations.

The WSIS Declaration calls for a multilateral, transparent and democratic management of the internet, with the full involvement of governments, the private sector, civil society and international organisations. The WSIS documents offer no further specification, however, about what is meant by "democratic management of the internet". ICANN has never described its processes as democratic, choosing instead to speak of "bottom-up consensus". Considering that democracy is still primarily a national form of organisation, some core elements of which cannot easily be implemented in transnational environments, it seems understandable that ICANN avoids this term. However, the implementation of and, even more so, the compliance with bottom-up decision-making processes turn out to be fairly ambitious goals, too. ICANN's policy decisions over the past years reveal several examples where the Board of Directors acted despite a lack of consensus in the GNSO or other parts of its constituency.²⁷ However, violations of constitutional decision-making procedures eventually undermine the legitimacy of an organisation. Another problem concerns the unequal distribution of power among ICANN's stakeholder groups. A full involvement of civil society in ICANN would require a restructuring of its bottom-up consensus-building process.

Conclusions and recommendations

General conclusions

ICANN is one of the prominent examples of multi-stakeholder coordination or "self-governance" in ICT. Eight years after its inception, a number of insights can be drawn from this new type of regulation.

Firstly, self-governance does not mean that governments disappear. Even if the US government lives up to its promise and eventually privatises DNS regulation, government(s) will still keep some control over the policy outcome. Private agencies cannot step outside the "shadow of hierarchy". They must comply with national laws, but they may also have to cope with political pressure, as ICANN had to in the battle over "triple X", the proposed TLD that would have created a virtual "red light district" on the internet. Despite political pressure that brought the contract negotiations to a halt in May 2006, in January 2007 ICANN published a new draft contract.²⁸

27 A current example concerns the renewal of contracts with the registries of gTLDs. A pro-competition, presumably user-friendly option would be to offer the registry services for re-bids. While the GNSO is working on a policy recommendation, the ICANN Board has indicated that it might decide on this matter beforehand.

28 After the ICANN Board had principally approved of the application for ".xxx" in 2005, the Board voted in 2006 against the agreement with the ICM registry. Following pressure from religious groups, governments intervened in the negotiation process and asked to suspend it. Parts of the discussion on ".xxx" within the U.S. Department of Commerce are publicly available from: <www.internetgovernance.org/pdf/xxx-foihomepage.pdf>.

26 Three of the four female Board members were chosen by the Nominating Committee. The Nominating Committee has so far chosen eight Board members.

The current public-private arrangement is problematic for two reasons. The first concerns the US government's unilateral control over the DNS infrastructure and ICANN's activities. From a normative point of view, unilateral control over vital internet infrastructure resources is without a doubt less legitimate than an intergovernmental regime. However, as debates throughout the WSIS have shown, it is unclear how political responsibility for a global infrastructure can be distributed in a more equitable manner without resorting to the UN system. The much criticised unilateral control over the DNS may thus persist because governments cannot agree on an alternative and more legitimate solution.

A second problem pertains to accountability. Multi-stakeholder arrangements under public supervision tend to blur the responsibility for policy decisions. Again, ".xxx" provides a good example. If the division of labour between the government and the private agency is not clear-cut, it is difficult for affected parties to determine who can be held accountable for policies. On the other hand, there are limits to the capacity of self-regulation. In the event of a privatisation of ICANN, it will be vital to install reliable checks and balances to minimise the risk of abuses of regulatory authority.

A weak point of private multi-stakeholder organisations concerns issues of membership and representation. While national and international organisations aggregate opinions and interests by means of representation, ICANN has been struggling for years to develop its own approach to inclusiveness and fair representation. The most controversial issue has been the role of individual users. No doubt, ICANN intends to be inclusive and does recognise the legitimacy that derives from openness and broad participation. But ICANN equally fears negative consequences from weak organisational boundaries such as "capture" or manipulation and a loss of control over the process of policy development.

Thus ICANN still has an ambivalent stance on civil society participation. This is demonstrated by the disenfranchisement of the At-Large Membership after 2002 on the one hand and the substantial organisational and financial support for the newly founded ALAC on the other. ICANN supports the development of a complex civil society structure in ICANN but at the same time denies civil society direct influence on the policy process. Like other multi-stakeholder organisations, ICANN faces the challenge of balancing potentially conflicting values such as inclusiveness, consensus-orientation and effectiveness without having at their disposal the means and procedures of governmental institutions.

Compared to national or intergovernmental organisations, ICANN is a remarkably open and transparent organisation. Debates about controversial issues such as the WHOIS database can be observed on the internet. The meetings of most councils and task forces are open, and recordings or minutes are released on the internet. Even the ICANN Board of Directors has made efforts to become more transparent. Detailed minutes of Board meetings are published on the internet, and in the case of critical decisions, the individual votes of Board members are now published. Some directors even offer personal explanations for their votes.

Thanks to this high degree of transparency, the pros and cons of policy options in question are easier to understand and observers have the opportunity to develop informed opinions. What is more, transparency enables some degree of public control over the organisation's performance. ICANN's actions are closely monitored by a number of news services and blogs on the internet. Controversial policy decisions thus need to be justified. Because it enables public

deliberation and some degree of accountability, transparency is at present regarded as a major source of legitimacy for private governance bodies. However, transparency can also turn into a source of delegitimation. In the case of ICANN, transparency has led to a strong public awareness of its shortcomings.

Conclusions on performance in relation to ICT role and responsibilities

In 1998, when the first MoU between the US government and ICANN was agreed upon, the general expectation was that ICANN would accomplish its tasks within two years. However, the road towards privatisation of DNS management has turned out to be more difficult to navigate than expected. While some of the tasks were indeed implemented quickly, others are still on ICANN's "to-do list". In September 2006, the US government therefore amended the MoU for a seventh time.²⁹

In 1999, ICANN introduced competition for the registration of domain names under gTLDs, established the Uniform Dispute Resolution Policy to deal with the "cybersquatting" of domain names of well-known organisations or products, and developed a participatory structure for the internet industry (supporting organisations). In 2000, ICANN approved several new TLDs and began setting standards for the operation of gTLDs. But since then, ICANN has failed to develop a general rules-based mechanism for the delegation of new TLDs. ICANN has also failed to create a membership organisation that fosters "accountability to and representation of" the diversity of internet users.

ICANN's self-governance structure proved able to create a new market for registration services, but it lacks the power to act against vested interests in this market and its own organisation. There is as yet only marginal competition between TLDs, and the existing registries have successfully delayed the creation of a process for the regular introduction of TLDs.

ICANN's overall acceptance depends on its problem-solving capacity, its inclusiveness and its ability to adequately reflect in its policy decisions the existing diversity of opinions. However, ICANN operates under severe restrictions, and the room for altering its structure and performance may therefore be limited. The self-governance approach implies that policies need the consent of the "rule takers". In some cases, this leads to non-transparent decision-making processes and biased results at the expense of users' interests.³⁰

ICANN's current structure privileges the interests of one industry sector over the interests of users and future businesses. The privatisation of DNS regulation would require as a minimum a more balanced representation, a more efficient policy development process and stronger mechanisms of accountability.

Conclusions on the adequacy of modalities and practices of participation

Under ICANN's current structure, voting or decision-making rights are unequally distributed. Some stakeholder groups such as the individual users but also governments (though by their own choice) lack voting rights. Constituencies that have contractual relationships with

29 More information is available from: <www.icann.org/general/agreements.htm>.

30 A recent example concerns the renewal of the contract for the TLD ".com". The draft contract as negotiated between ICANN and VeriSign evoked criticism from other stakeholders and was subsequently amended by the US government. More information is available from: <www.ntia.doc.gov/ntiahome/domainname/agreements/amend30_11292006.pdf> and <www.theregister.co.uk/2006/12/01/usg_approves_dotcom_contract>.

ICANN (registries and registrars) have more votes than those that do not. The method of differentiating political influence and allocating voting rights according to a stakeholder's share of the budget or similar criteria violates basic democratic principles and thus weakens the legitimacy of ICANN. All stakeholders participating in the policy-making process should be granted voting rights, and power asymmetries between constituencies should be avoided. Equal participation rights for individual users, as originally intended, would create an incentive for broader participation by civil society.

Concrete recommendations for improving the modalities of participation

- Non-commercial and individual user-related bodies in ICANN (NCUC, ALAC) should be merged into one civil society membership organisation. Regional chapters should be encouraged but not made mandatory. Hierarchical layers in the civil society body, both regional or functional, should be avoided.
- The GNSO should be restructured along the lines of the recommendations of the GNSO evaluation. However, incentives for consensus-building across the GNSO constituencies must include civil society as a third stakeholder.
- The ICANN Board and ICANN management must ensure that policy recommendations made by supporting organisations and councils are followed when explicitly required under the bylaws. In general, the ICANN Board and staff should respond more seriously to the public comments it invites on its policy proposals.
- In order to become more inclusive and attract new people across all regions and stakeholder groups, ICANN should produce policy briefs on relevant but complex and controversial issues that explain to newcomers the problem at hand and the various solutions under discussion. This would also be helpful for new members of the Board and councils.

Specific recommendations for improving performance

ICANN is still an emerging organisation, as is reflected in the regular modifications of its bylaws. In order to increase trust in the organisation's processes, it is vital to establish an equivalent to the rule of law. ICANN's formal rules and principles need to become more self-binding so that the organisation's decisions will be more predictable and participating stakeholders can rely on the organisation's actions. Another crucial component of the rule of law is a non-discriminatory and effective means to appeal against potential violations of the bylaws.

A possible and desirable side effect of a stronger "constitution-alisation" of ICANN would be a change in the balance of power between ICANN staff and the constituencies and councils working on a voluntary basis.

ICANN's decisions on the delegation of new TLDs, the renewal of contracts for TLDs, and its accreditation policies for registrars have allocation effects. So far, ICANN's policies indirectly favour a small number of mostly US-based registry businesses and large, globally-acting registrars, none of which are located in developing countries. Regional effects of accreditation policies or the selection of new TLDs should play a more important role in ICANN's decisions.³¹ ■

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31 To give one obvious example: the new type of regional TLDs such ".cat", which serve a local community, should be allowed to work with local registrars who cannot afford an ICANN accreditation.