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## **ccTLDs and the local dimension of Internet Governance**

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## Abstract

This work explores the role of ccTLDs<sup>1</sup> at three institutional levels: a) global information society; b) regional; and c) national level for Argentina and Brazil. It incorporates institutionalism as a framework for mapping the main players which are determining the particular organizational field of national Internet Governance and the role played by ccTLDs. The analysis shows that the Internet organizational field is highly politically dependent from a domestic/local perspective and that the institutions which are involved in Internet Governance, including ccTLDs are pursuing active policies in trying to configure a field that is not yet institutionalized. These findings are intended to reflect upon the dimension of national / local Internet Governance approaches, a field that is not yet consolidated in the literature.

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<sup>1</sup> Country-code Top Level Domain Names are the organizations responsible for the management of the national Internet domain names. (For example, .br, which is run by the *Comite Gestor da Internet* in Brazil and is the ccTLD of that country).

## 1. Introduction

One of the first features that emerges from the analysis of Internet Governance (IG) issues is the global dimension of the field. Usually global issues have little chances of being well discussed and implemented in developing countries, due to the difficulty to following the debates and attending international forums. The configuration of an emerging field requires further research as to the understanding of how policies are adapted and translated in these countries.

The study of ccTLDs as brokers between the global and the local or national dimensions of Internet Governance deserves special attention, as it is a clearly identified stakeholder with responsibilities for representing the national level at global forums, particularly at ICANN<sup>2</sup>. A less developed research subject is the role that ccTLDs play at the national level in the configuration of Internet policies and their interplay with other institutions that are also involved in their development and implementation.

This paper attempts at structuring a preliminary map of Internet institutions in two South American countries (Argentina and Brazil)<sup>3</sup> in order to envisage relationships, and influences amongst the players of Internet policy-making

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<sup>2</sup> Internet Corporation for Assigned Names and Numbers.

<sup>3</sup> Together with Paraguay and Uruguay they are the four full members of the economic block "MERCOSUR".

## 2. Global information society: regime theory and institutionalism

The Internet field seems disorganized in terms of the lack of a central, organizational force. According to some authors, (Braman 2004; Chadwick 2006) the current global information society regime is in its early stages of development and there are no final answers as to which institutions will emerge as the most powerful and/or legitimate. These works are attempting to understand the emerging players of a field at a global level, where the International Telecommunication Union (ITU), the World Trade Organization, the Internet Corporation for Assigned Names and Numbers (ICANN), the Internet Society (ISOC) or the Association for Progressive Communications (APC) to mention just a few, are the institutions that emerge as the most relevant.

Although these analyses are highly relevant from a global perspective, there are no studies on the impact they have at national levels. Most of them are also constructed from a regime-theory view, which is very useful to understand how new rules develop at the international level to govern specific policy areas, but the disciplinary bias towards international relations poses difficulties for understanding the domestic politics of these issues. Stephen Krasner's overarching definition of regime theory provides a broad view to the concept as the "principles, norms, rules and decision-making procedures around which actor expectations converge in a given issue area" (1982:185). This ample perspective has conceptually accepted corporate players, governments and non-governmental organizations as stakeholders that have the chance to exercise legitimate forms of authority. This seemingly complex pattern of interactions between different stakeholders (where some of them are relatively new or non-traditional, as non-governmental / civil society organizations for example) is seen in many of the institutions which form the global information society map. 4

These theories are overlooking the shaping of the national or local dimension of policies, particularly with regards to the Internet, and the extent as to how much these are influenced by the international regime. The first task is then to map the institutions that are responsible for setting Internet policies in different countries. By analyzing the Latin American context in general and two countries of the MERCOSUR block in particular, the work attempts to identify the most relevant stakeholders to find emerging trends.

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4 Chadwick, A. (2007) offers a complex characterization of the global information society regime where organizations are discriminated by their type (global, governmental, etc) and by their main foci in figure 9.1.

## 2.1. Isomorphism

The observation that organizations are structured by phenomena in their environments and tend to become isomorphic is not new. Meyer and Rowan (1983) emphasize the exchange component for this behaviour, whereby technical interdependencies are taken into account.

Some predictors of isomorphic change have stressed the study of organizations with unpredictable relationship between means and ends, the more they will try to model other organizations that are perceived as successful. (Di Maggio, Powell. 1991:74).

The studies on formal organizations, generally understood to be systems of coordinated and controlled activities that arise when work is embedded in complex networks of technical relations and boundary-spanning exchanges, is an account of current formal organizational structures that arise in highly institutionalized contexts. "Professions, policies, and programs are created along with the products and services that they are understood to produce rationally. This process permits many new organizations to spring up and forces existing ones to incorporate new practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society. Organizations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures". (Meyer & Rowan, 1983: 41.)

The "formal" organizations that provide order and stability to this regime would be the ccTLD and other regional organizations that deal with IP management and allocation and LACNIC in the case of Latin America. <sup>5</sup> Is there a social reproduction effect of the models of Internet Governance following a "top-down approach" from global Internet Governance institutions such as ICANN or the ITU? How do these ccTLD perceive their role in terms of articulating technical global policies and developing their national Internet communities?

The novelty of this new field seems to provide a testing ground for innovations in the management and driving forces of these institutions. But the lessons from other range of institutions and technological developments is an asset that these players would likely turn to. In ccTLD management the legacy of Jon Postel is undisputed. By providing a rationale for the initial management, albeit changes with the emergence of ICANN, it has managed to retain some of its distinctiveness by making ccTLDs a locus of Internet IP allocation with independence from other bodies that govern the Internet.

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<sup>5</sup> LACTLD is another relevant institution that unites all the ccTLDs in the region.

There is also evidence in the literature on multistakeholder governance processes that the Internet debate has incorporated climate change arguments in the late 1990's as an example.<sup>6</sup>

## 2.2. Institutionalism and the Internet organizational field

For Di Maggio and Powell (1991), the process of institutional consolidation consists of:

- 1) an increase in the extent of interaction among organizations in the field;
- 2) the emergence of sharply defined inter-organizational structures of domination and patterns of coalition;
- 3) an increase in the information load with which the organizations in a field must contend;
- 4) the development of a mutual awareness among participants in a set of organizations that they are involved in a common enterprise.

Efforts to mould institutional environments proceed along two dimensions, which are characterized by the presence of powerful organizations. In one case these force their immediate relational networks to adapt to their structures and relations. A second dimension is that they attempt to build their goals and procedures directly into society as institutional rules (Meyer and Rowan, 1983). This description might be especially true of the influence exerted by the international regime (i.e. ICANN on the ccTLD), or the global telecommunications companies on the incumbent state-run company in a country, or global civil society organizations on domestic organizations (such as APC).

ccTLDs are one of the few institutions that exist since 1985, 13 years before ICANN's creation. Since institutionalist perspectives have dwelled on the effects of the lack of institutions and entropy (Scott and Meyer, 1991; Meyer and Rowan, 1983), it is relevant to attempt to define the role that such organizations play when attempting at policy-making, which will be analysed in the following section.

These rule-setting functions are acquired once the "organizational field" is established. Defined as "those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (DiMaggio, Powell: 1983, 65).

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<sup>6</sup> See Levinson, Nanette (2006, 2007).

<sup>7</sup> In 1985 Jon Postel created two ccTLDs: the .us and .uk. In 2008 there are 251 such organizations operating the Internet at country level domains.

This concept is useful to identify some of the most relevant organizations in the local sphere of Internet institutions, but most importantly to help understand why it is yet very difficult to see one dominating player.

The following is a preliminary map which attempts to identify the institutions that belong to the organizational field of the Internet. As these authors contend, the structure of an organizational field cannot be determined a priori, and should be defined on the basis of empirical investigation.

### 3. The political economy of ccTLDs

ccTLDs emerge as a relevant stakeholder inasmuch as they act as brokers between the international Internet Governance regime and the country's own political, economic and social institutions. Particularly since 1998, when ICANN took over responsibilities of the administration of the DNS root, ccTLDs have become political and economic institutions.<sup>8</sup> It was then that they started to become more crucial for countries' authorities and private sector, as they represent a country's "Internet identity" (Muller, 2002, Park, 2008).

Since the late 90's, country-codes were managed by non-state players, but then governments started to emerge as a competitive power to manage the ccTLDs. The practice of collecting domain name registration fees meant a fundamental change in ccTLD administration. ICANN originally treated ccTLDs as peers of, or the same status as, the globalized or generic TLDs such as .COM, .NET, and .ORG. Therefore, the ccTLD constituency was one amongst many within the Domain Name Supporting Organization (DNSO), together with gTLD registries, registrars and user constituencies. "The early designers of ICANN approached country code spaces with the global market for domain names in mind, instead of the concept of state and political identity. ICANN's insensitivity about gTLDs and ccTLDs often led ccTLD managers' to consider setting up another forum outside of ICANN". (Park, 2008:16).

In general, ccTLD and GAC actors have maintained different approaches as to the ICANN regime.<sup>9</sup>

At the beginning of the ICANN regime there was still little public recognition of governments' ultimate authority over ccTLDs. This has changed steadily since 1998, where nowadays more than a third of the countries either control directly or have a good amount of decision power over them.

The fact that there have been disputes on the control, regulation and overall management of ccTLDs, addresses their national and political implications and how they have become the symbols of a country's market orientation or state interventionism (Park, 2008). This perspective could be enriched, following broader studies on Internet policies and their

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<sup>8</sup> Some of this has been studied recently by YJ Park from a ccTLD - ICANN perspective in her PhD dissertation "The political economy of country code top level domains", May 2008. Syracuse University.

<sup>9</sup> The ccTLD Registries have the opportunity to participate in the ICANN Policy Development Processes through the Country Code Names Supporting Organisation (ccNSO). The GAC encourages the ongoing extension of the ccNSO's membership. Principles and guidelines for the delegation and administration of country code top level domains. Presented by the Governmental Advisory Committee (GAC). Mar del Plata, 5 April 2005.

contribution to economic growth, such as the social welfare and the e-commerce approaches, which have divided the waters of this debate. (Cogburn, 2004; Chadwick, 2006).<sup>10</sup>

The implications are that ccTLDs are not only technical institutions, but that they do have an impact on the Internet's development inside a country.

In order to construct a local dimension for Internet Governance, one should resort to mapping the main stakeholders. In doing so, I will use Venturelli (2002), Cogburn (2003) and Chadwick (2006), who have identified the core themes of the global information society:

- Liberalization and privatization of infrastructures
- Encouragement of private investment
- Creation of standards (particularly for areas such as privacy and data-protection).
- Protection of intellectual property rights (of those who innovate in information-based products and services)
- Promotion of administrative modernization (through e-government)
- Promotion of diversity of applications and online content (tailored to specific local contexts)
- Promotion of universal access to information services
- Promotion of global cooperation in technological research and development.

These themes are daily approached by global organizations such as the World Bank, ITU, WTO, WIPO, WEF, private corporations (Google, Intel, Microsoft) and non-governmental institutions (APC), but they need to operate at national levels in order to enforce them. The extent to which these organizations interact, are immersed in power struggles, increase the information load internally and externally and develop a mutual set of recognitions amongst themselves is determining the extent of consolidation of this organizational field. The examples of the Internet Governance Forums of Athens, Rio and Hyderabad are showing that

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<sup>10</sup> *"The social welfare approach stresses public forms of regulation to overcome the digital divide but is also based upon the Net's potential to promote welfare and increase levels of socio-economic development, particularly in the developing countries but also among the poorer sections of developed societies(...)The second vision, the e-commerce approach, is preoccupied with economic development. This much narrower approach stresses private forms of self-regulation and the importance of opening up developing countries to e-commerce by providing the tools and infrastructure necessary to compete in the global market for electronic information services..." (Chadwick, 2006: 225)*

there is a growing trend of organizational exchange and recognition at an international level. ICANN meetings are another example.

When trying to match the increasing consolidation of the international organizational field on Internet Governance and the agenda of a global information society mentioned above, the Internet Governance Forum has clearly a greater role to play rather than ICANN meetings. By this I do not mean to measure purely outcomes, but institutional processes and exchanges.

When analyzing this from a country perspective initially one would agree with the fact that the field is less diverse in organizational terms and less exchanges and information load. But the role that ccTLDs play as in-country political and economic institutions is yet to be assessed. For this reason, the new institutionalism provides an interesting perspective from where to start at a national level, in the identification of institutional stakeholders and their normative and symbolic power.

On domestic grounds ccTLDs are not immune to the pressures exerted by the international debate in terms of: a) the definition of the broader policy issues which ccTLDs should engage in; b) the recognition that there is an emerging field of different types of corporate, social and state organizations involved and that they have a role to play.

The governance model proposed by E.J. Wilson III with QUAD is an interesting example whereby the development of the relationships established amongst the different agents is symbolized in a network figure that distinguishes the public sector, the private sector, the R&D organizations and the NGOs. This model is a starting point for the institutional research of a national local Internet map.

Who are the organizations involved in these countries? Are they coming basically from the private, public or non-profit sector? Who is interested in which issues? Is there a bias towards a social welfare versus an e-commerce approach (or viceversa)? Does the ccTLD have a role to play in this field? Is it interacting with the institutions that are engaging with these themes? These are all questions that have no answer in this work, but they are part of my ongoing and future research.

## 4. The Latin American ccTLD context

Latin America, and particularly the two chosen countries - Argentina and Brazil - provide a fruitful setting to explore the conformation of the organizational field of Internet institutions for a variety of reasons. In the first place, Argentina and Brazil comprise 85% of the total registered domains in the region, providing a large, trend-setting sample. Secondly, for the purpose of comparative research, the generation of information on national processes is useful to understand the capabilities of developing societies, and their efforts to translate global Internet policy-making under their domestic contexts. The local Internet Governance in contexts other than developed countries is a relevant factor for an international regime.

The most general and all-encompassing institution is LACNIC, which has acquired a representational status of the region, not only as an overall IP address manager, but also claiming some of the spaces of a non-profit organization in terms of supporting projects which expand the concept of Information Society, particularly the Internet, in the region. This has lead other non-Internet organizations such as the European Commission and national states, to find in LACNIC a partner for initiatives that do not correspond technically to the role of a Regional Internet Registry, but which have greater implications for the development of digital inclusion policies, e-government and other initiatives typical of the information society agenda described in page 5.

A more limited and less well known regional organization, which nevertheless has a longer date of existence (1998) than LACNIC (2004) is the regional association of ccTLDs – LACTLD. It was created with the aim of representing “the interests of the Latin America & the Caribbean ccTLDs, as well as promote communication and cooperation between ccTLDs' managers”.<sup>11</sup>As a not for-profit organization its objectives are centred in the coordination of policies and strategies to develop the domain names at the regional level, representation in international forum and the promotion and development of cooperation and joint experiences.<sup>12</sup> With 22

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<sup>11</sup> Source: [www.lactld.org](http://www.lactld.org)

<sup>12</sup> LACTLD Goals: a) *To coordinate joint policies, as well as strategies to develop de domain names at the regional level.*

b) *To represent member interests in the proper forums.*

c) *To promote the development of the ccTLDs in the region.*

d) *To foster cooperation and sharing of experience among their members, regarding ccTLD issues.*

e) *To establish collaboration links with similar organizations in the world.*

f) *To develop the goals the membership decides. Source: [www.lactld.org](http://www.lactld.org)*

ccTLD members, and associate member organizations such as AlfaRedi (an institution with a legal background that deals with privacy, IP's, Domain Name Governance, resolution of disputes), Centr (Council of European TLD Registries), ICANN, Consulintel (Telecommunications consultants) it attempts to perform the basic ritualistic functions of chambers or member associations, with diffuse outputs. It sponsors a sister organization, LatinoamerICANN.org, which provides the statistics and other research on ccTLDs in the region.

LatinoamerICANN presents itself as the natural space for dissemination of information and dialogue in Domain Names, IP numbers and IG in general in Latin America and the Caribbean and provides information in three languages (Spanish, Portuguese and French). Their potential lies in the fact that they are the only institution that provides statistics about Internet domain names in the region. Most of the information is concerned with domain name registration, from number of subscriptions to fee adoption, as well as second and third level domain options.

The issue of fees is of particular interest in this region, not only because of the diversity of pricing schemes, but mainly due to the policies that sustain them. This is of particular relevance when analysing in-country policy implications of ccTLD management, as some models tend to favour a market approach whereby commercial domains and non-profit, governmental or educational ones are treated in the same way. This applies to countries such as Colombia, Peru or Chile. Countries who discriminate between commercial and other organizations or holders tend to favour the education, government and non-profit sector (such as Brazil, Uruguay, Mexico). But pricing discrimination also takes into account the nationality of the holder. Cuba and Trinidad & Tobago are an example of this.<sup>13</sup>

#### **4.1. E-commerce and developmental strategies in regional domain name policies**

The decision to come up with the .lat domain is but an example of a commercially-driven institution that envisages the potential of a Latin American market. It was based on the perceived need for a common domain name for the region, such as .eu or .asia and was

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<sup>13</sup> According to latinoamerICANN, the median prize for two years of a domain name is 60 US Dollars. The nine most important ccTLDs of the region in terms of number of registries are:

Argentina (.ar): free; Brazil (.br): \$27.08 USD, Mexico (.mx): \$66.00 USD, Chile (.cl): \$34.13 USD, Venezuela (.ve): \$23.24 USD, Belize (.bz): \$34.00 USD; Peru (.pe): \$64.72 USD and Colombia (.co): \$70.97 USD.

presented at the Internet Governance Forum in Rio 2007. Two powerful regional institutions back this initiative: eCOM-LAC14 and the Mexican ccTLD and, although ICANN has not yet officially approved it, it is worth noting that the Mexican ccTLD is very active in the Latin American region and is the third largest manager of domain names. Despite the size of its population and Internet penetration, it has not been able to compete with the largest two ccTLDs in the region, Argentina and Brazil. This initiative will not only position their organization, but will also imply more revenue. Although the arguments claim cultural and identity issues such as those used by .eu and .asia, if this would be approved it will create a new regional Internet brand: .lat.

Another regional attempt to create an Internet identity for a section of South America comes from .mcr (acronym for MERCOSUR). This is a common market area comprising four member States (Argentina, Brazil, Paraguay and Uruguay) and Venezuela (which is not yet a full member). This initiative is more political than .lat and is trying to create a brand for the region. The work has been divided and each country will focus on specific tasks: legal, administrative, technical and participatory dimensions. 15

These two initiatives embody not only the variety of stakeholders, but also the different motivations that underlie them and which foster Cogburn's conception (2003) of different, sometimes conflicting views, not only of the management of Internet resources, but also of more global information society trends, such as the e-commerce and the social welfare approach stated previously.

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<sup>14</sup> *The Latin America and Caribbean Federation for Internet and Electronic Commerce, founded 1988 support initiatives that reduce the digital divide in this geographical area, and represent the ICT private sector of this region in the corresponding international fora, such as:*

• WSIS • IGF • ICANN – Internet Corporation for Assigned Names and Numbers • LACNIC – Latin American and Caribbean Internet Addresses Registry eCOM-LAC was a founder of LACNIC, the Latin American and Caribbean Internet Addresses Registry, which was formally established in late 2003, after four years of negotiations with ICANN in order to obtain approval of this initiative. This was a genuine Multisector Partnership which included participation of the private, academic, NGO and Civil Society sectors in the region. The “deliverable” was a non-profit entity, with policies defined by the regional Internet community, and which manages the IP address blocks for Latin America from its headquarters in Montevideo (Uruguay). Based on eCOM-LAC's website: <http://ecom-lac.iplan-nt5.toservers.com/about.htm>

<sup>15</sup> *Brazil would be in charge of the technical aspects; Argentina of the management and fees; Uruguay of the legal aspects and Venezuela on participation and dissemination. Paraguay has not provided an opinion yet. This information was provided by Gustavo Soliño, Argentine NIC manager in an interview in October 2008.*

Most importantly, these diverse strategies are consolidating certain stakeholders as more relevant than others. Taking into consideration that it is well known by now that the pricing scheme and fees of a ccTLD are vital financial components of the whole domain name system, some countries choose a more government and political orientation, as the .mcr strategy suggests, while the .lat is a program sustained by the private sector. The capacity to impose norms and names in this regional context is one where the consolidation of some institutions, in this case between the government-oriented pole and the commercial one, is a power-struggle not just over an identity, but also between the financial resources generated by the subscription fees for domain names.

## 4.2. State orientation .ar

The Argentine ccTLD is located in the Ministry of Foreign Affairs, which is a salience when compared to others in the region. It was created in 1987 and since then it has managed the national domain names. But the most prominent policy feature is that it is the only ccTLD that provides domain names for free.<sup>16</sup> It is the most numerous and powerful ccTLD in the region with 1.553.492 registered domains (see table 1). According to its coordinator, “the management of domain names is a scarce and strategic resource, particularly more so when IPv6 becomes finally adopted and I consider that it is best to maintain the policies and strategic functions within the state”.<sup>17</sup>

It does not provide statistics on its site and the information provided is strictly related to the standard procedures for users who want to register a domain name. The domain name edu.ar is managed by the largest public university in the country, the Universidad de Buenos Aires. The other seven second level domain names are run by the NIC (.com.ar; .gob.ar; .mil.ar; .int.ar; .net.ar; .org.ar; .tur.ar). During 2007 and 2008 the ccTLD has began a transition to introduce Spanish characters. <sup>18</sup>

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<sup>16</sup> As to the present date, there is no other ccTLD following this strategy.

<sup>17</sup> Gustavo Soliño, nic.ar coordinator (October 2007). Translated from: <http://www.latinoamericann.org/modules.php?op=modload&name=News&file=article&sid=1560&mode=thread&order=0&thold=0>

<sup>18</sup> *Introducing the character “ñ” and at the domain level of .gov that has now been changed to .gob to reflect the national language. Portuguese is also being incorporated, in a clear sign of a view to extending the regional identity on the Internet.*

As from 2009 the ccTLD will be implementing an overall new system to guarantee a smooth transition to IPv6. There will be more devolution to interested parties and to those clients with the DNS.ar which will change the role of the registrar.

The ccTLD managers see gaps in the awareness of domain name issues in Argentina and for this purpose they will attempt to fill this vacuum by providing training programmes for the Judiciary and Parliament. One of the greatest gaps in the current Internet regime in Argentina, as well as in many South American countries is the absence of specific legislation for domain names. The only law that has any relationship with the current digital environments on cyber – crimes and online child pornography was approved in June 19. But it does not contain a single reference to domain names which is a demonstration of the distance between these and public institutions.

**Table 1:** A generic overview of the ccTLD and its institutional context.

ccTLD properties					
	Organizational location	Fees in US dollars (annual, for .com.COUNTRY)	N° of Domain Names (29/02/08)	N° of 2 <sup>nd</sup> level domain names	% registered domain names / population
Argentina	Ministry of Foreign Affairs	0	1.553.492	7	39.356.383 (3,9%)
Brazil	Multi stakeholder (QUAD Model)	12	1.249.769	67	189.600.000 (0,65%)

**Source:** Own construction and web data from Latinoamericann.org (February 2008).

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<sup>19</sup> "Ley de Delitos Informáticos 26.388". Approved in June 2008.

### 4.3. Brazil: an example of multistakeholderism

The Brazilian ccTLD is a novel example of domain name management and has been highlighted as one of the most innovative initiatives in Internet Governance. It attempts to follow a multi-stakeholder approach, similar to the experiences of the World Summit Information Society (WSIS) and the IGF.

The Brazilian Internet Steering Committee has 21 members<sup>20</sup>, comprising nine federal government representatives, four from the private sector (ISPs, telecommunications infrastructures providers, hardware and software industries and general business sector users); four representatives of non-governmental organizations, three members of the scientific community and one "Internet expert".

CGI.br comprises a variety of organizations and initiatives among its umbrella protection:<sup>21</sup>

- NIC. Br for Internet operation and coordination amongst the different working groups;
- Registro.br executes some of the Brazilian Internet Steering Committee attributions, such as the activities of domain names registration and the administration and publication of DNS for the .br domain. It also provides the services of distribution and maintenance of Internet addresses and for LACNIC it offers the services of engineering and hosting.
- PTTMetro (PTT- Internet Exchange Point) is a project that provides infrastructure for the direct interconnection between the diverse networks that operate in a metropolitan region. PTT is maintaining exchange points in regions of the country that have big interest in exchanging Internet traffic, as Sao Paulo, Brasilia and Rio de Janeiro, interconnecting commercial and academic networks with a centralized management.
- CERT.br: Internet security is one of the major concerns of the Brazilian Internet Steering Committee. Since 1997 the - Brazilian Computer Emergency Response Team is in charge of Internet security. It offers support to network administrators and Internet users in Brazil, writes documents in Portuguese about network security and

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<sup>20</sup> For more information: [www.cgi.br](http://www.cgi.br)

<sup>21</sup> Heavily adapted from website: [www.cgi.br](http://www.cgi.br)

produces statistics about security incidents and spam. It also maintains an early warning project with the goal of identifying new trends and alerting Brazilian networks involved in malicious activities.

- CETIC.br (Center for Studies on Information and Communication Technologies) is responsible for the collection, analysis and dissemination of data about the use and penetration of the Internet in the country.

This provides a view on the dimensions that country domain governance can take, where the operational, technical, political, social and commercial aspects are all part of the Internet Steering Committee.

The challenge of such an organization is how to become operative with so many different perspectives and claims in a multi-stakeholder approach. Voices of criticism coming from more vertical and centralized ccTLD management in the region claim that these examples end up paralysed, which is seen with the lack of investment of the domain name fees.

## 5. National Internet organizational fields

The national, political and institutional models that might favour certain practices to promote and/or inhibit in-country development of Internet policies are different in both models.

Contrary to the current trend at ICANN where GAC and ccTLD constituencies tend to represent different interest groups, in the two cases that have been explored, the ccTLD is heavily influenced and represented by the government. Although the aim of this work was not centred in the relationship between ccTLDs at ICANN level, it is worth noting that there is an underlying general consensus in both cases that the Internet naming system is a public resource and that it must be managed in the public or common interest. <sup>22</sup> This is a relevant note for a comparative analysis of both country models, particularly because both ascertain a role to the State in the conformation of the ccTLD.

In the case of Brazil, the institutional conformation of the Internet Steering Committee (CGI.br) has set up a common platform for all the relevant stakeholders. In principle, a common institutional setting would allow for a greater coherence in the representation of the country in international forums, but most importantly for this work, it establishes the field by aggregating them together.

Following the features that DiMaggio and Powell (1991) promote for the analysis of an organizational field, the institutional map of Brazil encourages the interaction of organizations as players in the field, increasing information load and a development of a mutual awareness among participants that they are involved in the common enterprise of developing the Internet community in that country from many perspectives. The weaknesses of this might be an over-rapid institutionalization which might lead to the creation of formal structures with ritual significance but little impact on the development of the Internet community in the country.

In Argentina, the ccTLD has a narrower definition of its scope, claiming technical efficiency as its main achievement. Yet its institutional role is much more confined than the one in Brazil, and there is a greater dependency on external State figures (from the Ministry of Foreign

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<sup>22</sup> Following the WSIS Declaration of December 2003 states that "policy authority for Internet-related public policy issues is the sovereign right of States. They have rights and responsibilities for international Internet-related public policy issues." This is in the context that, "Governments, as well as private sector, civil society and the United Nations and other international organizations have an important role and responsibility in the development of the Information Society and, as appropriate, in decision-making processes. Building a people-centred Information Society is a joint effort which requires cooperation and partnership among all stakeholders."

Affairs and other state organizations such as the ONTI<sup>23</sup>) and the private sector (leading the telecommunications and infrastructure development), which imply great coordination efforts. Yet, this confined organizational nature and scarce resources do not have an impact on technical efficiency, which shows that it is not yet institutionalized. The current asset of the largest ccTLD in Latin America rests on technical validation. It is yet to be assessed whether this is enough of a condition for the near future.

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<sup>23</sup> Oficina Nacional para las Tecnologías de la Información



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## **Keywords**

**ccTLD, Internet Governance, global information society, institutionalism,  
organizational field.**