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Internet Policy Formation in Latin America: Understanding the Links Between the National, the Regional, and the Global

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Disciplines

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Internet Policy Formation in Latin America: Understanding the Links Between the National, the Regional, and the Global

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Abstract

Until recently, Internet governance was a relatively obscure topic in most technology policy agendas in Latin America. But in mid-2013, revelations about widespread surveillance of Internet communications dramatically transformed conversations about the issue. The work addresses the institutional consolidation of emerging experiences in national contexts to address Internet governance and policy as well as their effectiveness in shaping regional and global processes. This paper takes a comparative approach, by looking at several national cases; the experience of Argentine Commission for Internet Policy (CAPI) created in 2014; Costa Rica with the Internet Consulting Committee (in 2012) and Mexico with the Initiative Group (2012). These cases were examined against the backdrop of the well documented Brazilian experience and its Internet Steering Committee (CGI) (2005). The research analysed the national Internet governance mechanisms in the early stages of the institutionalization process, looking at the main developments that have shaped actors' strategies as well as the evolution of Internet regulations in these countries. The three cases differ in both the degree of formality, working mechanisms and stakeholder representation in these new bodies. In each national context, it is clear that governments are now working to formalize policymaking arrangements, as the original informal coordination mechanisms that gave rise to the Internet in these countries are no longer sufficient. The bridges between the international and the domestic field will tend to rely on more formally institutionalized spaces as states become more involved with the issue.

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1. Introduction

Until recently, Internet governance was a relatively obscure topic in most technology policy agendas in Latin America. Debates were limited to specialized government agencies, a few academics, and a handful of NGOs. In mid-2013, revelations about widespread surveillance of Internet communications dramatically transformed conversations about the politics of internet policymaking. Today Internet governance issues are discussed at the highest policy levels and are prominently covered by the mainstream media, while key events such as NETmundial (April 2014) are attended by high-level representatives from across the region.

The rapid rise of Internet governance in the policy agendas of Latin American countries raises several questions. What are the institutional building blocks for policy formation and implementation? Which stakeholders are being represented and how? To what extent are institutional models from other countries being replicated? How are these domestic debates articulating within global Internet policy discussions and institutions (IGF, WSIS, ITU, ICANN, and so on)? Are there mechanisms for policy coordination within the region? Have these mechanisms been effective? How can they be improved in order to strengthen Latin American voices in global debates?

This paper addresses these questions by examining Internet policy formation in three national case studies: Argentina, Costa Rica and Mexico. We had to work around the selection of case studies so that they respond to both empirical and theoretical concerns, with a “causes-of-effects approach” in order to enquire into the specificity of these arrangements and their processes. Argentina is a regional leader in Internet infrastructure development and adoption, and yet its presence in global Internet de-

bates has so far not corresponded with the national patterns of adoption and indicators. The case of Mexico – the second largest economy and market in Latin America – is somewhat similar, although its initiative comes as part of a much larger reform package that seeks to unlock competition and diversity in its telecommunications and media industries, while at the same time it is addressing specific Internet governance issues with the initiative “Diálogos de Gobernanza de Internet.” Costa Rica adds the perspective of a small country which nonetheless is considered a regional leader in several Internet-related initiatives (e.g., IT education and training), as well as being one of the most politically defined countries in the region with respect to multi-stakeholder governance. These cases are all examined against the backdrop of the “CGI” (the Brazilian Internet Steering Committee), one of the most successful experiences of a formal, national multi-stakeholder mechanism around Internet governance and its critical Internet resources that has been in place since 1995.

The paper is structured in three sections. The first lays out the conceptual framework that orients the comparative case study analysis. It identifies three interrelated dimensions of Internet governance: the technical, the institutional, and the systemic. These dimensions help to determine common patterns and differences in Internet policy-making in the national cases under study. The second section discusses the national case studies selected (Argentina, Costa Rica and Mexico) against the backdrop of the Brazilian experience. An examination of their various approaches, from the early years of the Internet and the emergence of the first stakeholders to the present, serves to map the different choices and national trajectories. The third section synthesizes the findings of the comparative analysis in light of the questions posed above.

2. Conceptual Framework

Identifying the technical, institutional, and systemic dimensions of the various governance approaches provides an *organizing framework* for the different issues that are at stake in Internet governance. We have drawn these dimensions from the literature on public policy (Knill and Tosun, 2008; Stein and Tommasi, 2006) and governance studies (Kooiman 2002; Rhodes 1996; Stoker, 1998) to conduct a multi-layered analysis of Internet governance approaches at the national level. Authors in these fields have defined the technical dimension of governance as “how things are done” at the *operational level* (Abbott and Snidal, 2008), *first level of governance* (Kooiman, 2002), or have designated it as *operational governance* (Hupe and Hill, 2006). This is the realm of critical Internet resources involving the “logical layer” (Lessig, 2000). Since the Internet is a technology made of “code,” which refers to the nature of TCP/IP (Solum, 2008), the technical dimension bridges the infrastructure (hardware, connectivity) and content layers of the Internet.¹ Our analysis focuses on critical Internet resources involving two basic Internet protocols, the DNS and TCP/IP, since both are borderless technologies, and hence national stakeholders involved in their management must necessarily interact with international institutions and regime-like processes. Yet due to the features of Internet architecture, it will be difficult to outline many of the national players’ strategies without occasionally addressing connectivity, infrastructure, and other regulatory issues.

Institutional governance has been defined as the structural settings that frame interactions among actors. This is the level of *institutions* (Kooiman, 2002), *inter-organizational relations* (Stoker, 1998), *representational governance* (Abbott and Snidal, 2008), or *directive governance* (Hupe and Hill, 2006). In the case of Internet governance, examining the institutional dimension means looking at both the mechanisms and outcomes of the institutionalization process, and the multi-stakeholder, multi-issue, multi-level nature of governance processes. The existence of national focal points for debate and coordination is a feature of this dimension. Some of the approaches proposed since the origins of the WSIS process are oriented toward building national Internet governance capacities and include the

role of ccTLDs as coordination hubs for national Internet policies, building on the model of the Brazilian Internet Steering Committee (Siganga, 2005).

Systemic governance is associated with the concepts of *meta-governance* (Peters, 2010; Kooiman, 2002), *systemic coordination* (Stoker, 1998), and *constitutive governance* (Hupe and Hill, 2006). These share a common feature. They refer not just to who has power or how something is governed, but also to the (re)examination of the rules of the game. This is the most abstract dimension of the framework, and in the case of Internet governance it centers on the interactions between the national and international spheres. Due to the global nature of the technology, international developments are particularly influential on the domestic space. We can operationalize systemic governance by examining the levels of engagement of diverse national stakeholders in regional and global forums in their attempts to revise the institutional rules of the game, – whether they are aligned with or opposed to the regime but also whether they are seeking, for regime changes “from within” by promoting new institutional venues or a reformulation of existing institutional structures. Until now, the strategy of attempting to promote changes to the regime from within have proved to be more successful than those attempts to dismantle it from outside, as exemplified by the WCIT process discussed later in this paper.

In sum, when Internet governance focuses on technical issues, it addresses operational dimensions of governance. When it is oriented toward policies that promote the development of institutions and actors, it touches upon a more complex level where a greater number of competencies are needed - such as independence, representativeness, and experience, rather than just operational skills (Abbott and Snidal, 2008). The third level of governance, in turn, involves systemic approaches to reshaping the global regime and the harmonization of several competencies based on the institutional and technical dimensions.

These levels are interdependent; operational excellence is difficult to achieve without the right institutional conditions. Yet to participate more meaningfully and influence the international Internet governance regime, national stakeholders need to go beyond addressing the technical-operational level of governance, which has been the predominant strategy. They must develop the institutional dimension through national multi-stakeholder coordina-

¹ There is no single accepted definition of Critical Internet Resources, for the term is also connected to a political dimension of Internet Governance (CDT, 2007). Still, most definitions include the following: root servers, Internet backbone structures, IP addresses, DNS management and coordination, protocols, and standards (based on Council of Europe, 2009 and Center for Democracy and Technology, 2007).

tion processes. As the case of Brazil shows, the consolidation of this dimension has enabled the country to address systemic governance at a global level more effectively.

Although NETmundial represented a turning point in the debate about Internet governance in Latin America, policy-making efforts in the region can be traced back to the WSIS process, which led to the approval of the Tunis Agenda in 2005 (Lucero, 2011). Until then, Internet governance discussions had been a by-product of two related processes. The first one was the struggle undertaken by Internet pioneers in each country to overcome the technical and regulatory challenges involved in connecting to the early Internet. These were ad-hoc attempts by early enthusiasts (most of them academics) that progressed in parallel to the evolution of the Internet itself. On the technical side, their primary concern was the management of critical Internet resources, including ccTLDs. On the regulatory side, the key challenge was obtaining cooperation from national incumbents exercising monopoly control over international gateways. This undertaking was closely related to the restructuring of the telecommunications sector during the 1990s. These sector reforms, aimed at opening the market and (in most countries) privatizing state operators, created a more fertile environment for the adoption of technological innovations such as the Internet.

This paper is part of a broader research effort to reconceptualize the role of domestic factors and national institutional arrangements in Internet governance, with a particular focus on nations that did not take part in the early networking initiatives from which the current Internet emerged.² Until recently, Internet governance was conceptualized almost exclusively from a global regime perspective. In other words, it was viewed as a problem of balancing the competing preferences and interests of all the nations involved, which are incapable of exercising control over the Internet individually. Up until the WSIS process, a narrow approach to Internet governance prevailed, which centered on its technical aspects and the perspective of the developed nations that had participated in the early Internet (Drake, 2004). Such an approach marginalized developing countries, since by and large they did not take part in the technological developments that coalesced in the Internet. The establishment of ICANN compounded this difficulty by establishing a California-based, non-profit

organization, under contract with the U.S. Department of Commerce, to supervise the IANA functions.

The WSIS process (2003-2005) openly questioned the institutional legitimacy of these early governance arrangements. Furthermore, it emphasized the political implications of the decisions being made through ICANN and other technical forums. As long as Internet governance was framed as a technical problem, developing countries would continue to play a largely passive role in the decision-making process, since the technology and its basic design principles had already been established. WSIS brought to the forefront debates about institutional design and the roles assigned to different stakeholders in Internet governance, including the recognition of multi-stakeholder governance as a key underlying principle for all related processes. Using Jupille and Snidal's (2005) characterization of the institutional options in international regimes (2005), WSIS opened the door for debates about institutional *use, selection, reformulation, and change* in existing arrangements. One of the most prominent outcomes of the WSIS process was the creation of the Internet Governance Forum (IGF), framed as a space for discussion and agenda-setting of different stakeholders and enshrining the principles of multi-stakeholder governance, based on the equal input from different sectors.

Since then, developing countries have attempted to assert their right to participate in these debates through different strategies. One of these has been an effort to shift the discussion to international organizations within the scope of the UN, where they perceive to be better represented. In particular, the longstanding tradition of the ITU in international communications was perceived as a legitimate forum for Internet policy-making by many governments in emerging countries. These multilateral mechanisms are better understood by many of these national delegations with a bureaucratic culture that is well versed with these processes and the one State - one vote system, which differs from the consensual approach employed by several of the technical organizations of the Internet. Multilateralism is perceived as a much more legitimate venue to address global public policy issues surrounding the Internet by many developing countries. But there has been strong resistance to what is perceived as a top-down, closed environment from most developed countries. This divide was seen most recently during the rather tense negotiations over the adoption of new International Telecommunication Regulations (ITRs) at the World Conference on International Telecommunications (WCIT), organized by the ITU in

2 Other examples are Aguerre (2015). *La gobernanza de Internet. Argentina y Brasil en el contexto global*. Unpublished doctoral dissertation, Universidad de Buenos Aires, Argentina; Lucero, Everton (2011). *Governança da internet: aspectos da formação de um regime global e oportunidades para a ação diplomática*. Brasília: Fundação Alexandre de Gusmão.

Dubai in 2012.³ This was the second treaty-like meeting of the ITU to reform the ITRs after 24 years since the previous WCIT (held in Melbourne in 1988) when the Internet was barely emerging and thus was not even considered. The huge changes in the telecommunications scenario since Melbourne—including mobile communications and the phenomenon of convergence and the widespread adoption of the Internet—were among other key elements to be discussed as part of the new global regulations under the ITU. It provided a testing arena for the strength of these different approaches on the issue of Internet governance. According to Klimburg, after the WCIT in Dubai in 2012 “only a binary world seemed to be left – most of the developing world (minus India) had sided with the cyber sovereignty advocates. WCIT had morphed into a battle that, effectively, resulted in the West against the rest” (Klimburg, 2013, p. 3).

This polarization, and the interpretations that followed the conference, have obscured the nuances in the perspectives of developing countries adopting the new ITRs. In particular, while countries with a poor democratic record tended to favour the new ITRs adopted at the WCIT, this perspective does not explain the positions adopted by different Latin American countries. Many of those adopting the ITRs were countries that have consistently supported the multi-stakeholder model. They perceived the ITRs not as a strategy to destabilize the existing Internet governance ecosystem, but rather as a mechanism to broaden participation by developing nations within an institutional context (the UN system) whose rules are well-known to Latin American governments. In other words, support for the ITRs was a confidence vote in the multilateral approach that the region has long favoured to resolve other complex global issues.

In addition to global debates, several regional governance mechanisms introduced and developed by the OAS and ECLAC (the Economic Commission for Latin America and the Caribbean) have allowed for regional policy coordination and coalition building in Latin America. The OAS has been active in the last five years in cybersecurity

issues,⁴ while ECLAC has implemented the eLAC strategy.⁵ Run and coordinated by governments, eLAC is viewed as a multi-stakeholder space for policy coordination and input on several ICT and Internet-related initiatives at a regional level. During the third stage of its action plan (2010-2015) eLAC established a Working Group on Internet Governance, reflecting the prominence that the issue has acquired in the broader Information Society discussions. This group has become more deeply involved in the regional Internet Governance Forum, called LACIGF, which has been functioning continuously since 2008, originally driven by the technical community and civil society organizations. The eLAC ministerial declaration of April 2013 exemplifies regional coordination to achieve a common position in view of ICANN’s new gTLD program and the controversies around geographical Top Level Domains which affected the region⁶. It also served to ratify the need to address multi-stakeholder dialogues, since it highlighted the need to increase cooperation with non-governmental stakeholders to increase governmental awareness and engagement in forums such as ICANN.

At the national level, until recently there were few countries that had established national mechanisms for Internet policy-making. In Latin America, topics such as Internet for development and the human rights dimension of Internet governance emerged prominently at the Bávaro Meeting in 2003, which kick-started contributions from LAC governments to the WSIS process. In addition, the WSIS process facilitated debate and reflection on the current international regime and the way it had been structured until then, particularly concerning the IANA functions and ICANN’s contract with the U.S. government. During the WSIS process, opposition to this model was very clear in the case of Brazil, (Lucero, 2011).⁷ Nonetheless, this critical

3 The struggle over the meaning and implementation of multi-stakeholder Internet governance was not only present at WCIT-12. The United Nations Commission on Science and Technology for Development (CSTD) convened a working group between 2013 and 2014 to examine the mandate of the Tunis Agenda with respect to “enhanced cooperation” (a key component of the multi-stakeholder governance process incorporating in particular the role of multilateral mechanisms) and one of the exercises was to map the weaknesses and deficits of the regime in addressing global Internet public policy issues.

4 The Cyber Security Program is under the aegis of the Inter-American Committee Against Terrorism (CICTE-OAS). See http://www.oas.org/en/sms/cicte/programs_cyber.asp

5 eLAC is an intergovernmental strategy that conceives of ICTs as instruments for economic development and social inclusion in the region. Its first action plan was implemented in 2007, and one of its main purposes is to fulfill the Millennium Development Goals related to ICTs before the WSIS review in 2015.

6 Notably the Latin American region was affected by the ICANN new gTLD program with the request from two U.S. based companies, Amazon and Patagonia for their respective new Top Level Domains launched in 2012. The case of .amazon and .patagonia served to trigger national and regional mechanisms within the region, at multilateral meetings and through less formal mechanisms, including social network campaigns, to resist to these new requests.

7 Brazil was an active opponent to the US Government unilateral control over the IANA contract functions during the WSIS process and was one of the leaders of the coalition called the “Like-Minded Group”. It was a set of countries (including China, India, and Iran) that opposed the institutional foundations of the international regime of Internet governance and aimed to establish an Intergovernmental Council for Global Public Policy and Oversight. Because these nations do not have a clear record regarding democratic performance

stance had no adherents in the region at the time of the Tunis Declaration; the other LAC countries were focusing on developmental issues associated with the Internet and ICTs.

In sum, by the time of the Snowden revelations in 2013 interest in Internet policymaking in Latin America had been gradually building, with greater participation in Internet governance issues and forums, both at the regional and global levels. The institutional mechanisms were nonetheless underdeveloped, and participation was erratic and highly dependent on entrepreneurs within national bureaucracies. Moreover, the lack of consensus-building mechanisms at the national level resulted in conflicting positions amongst different national stakeholders, and even different government agencies. Building these mechanisms continues to be a challenge that countries will undertake in the post-Snowden context.

and human rights, Brazil's alliance with them found neither domestic nor regional supporters.

3. Internet Governance in Latin America: Case Studies

Argentina

Like most countries in Europe and Latin America, Argentina developed its first data networking initiatives in research and academic centers. What differed from other countries was the role of the state and the support that was provided by government agencies; both during and after the 1976-1983 dictatorship, research agencies and university departments were severely under-resourced in both financial and human capital in these topics⁸. For this reason, the partnership between research centers and national government departments and agencies, and sometimes businesses,⁹ was critical for networking activities.

The Ministry of Foreign Affairs (MREC) adopted the first international connection in 1987 through a UUCP network and a partnership with the University of Toronto. That same year the ministry submitted a request to Jon Postel for the delegation of the .ar national domain name. Three years later, Argentina established its first Internet connection with the U.S. by way of the ARNET network at the MREC. This was a joint project with the Secretariat for Science and Technology (SECYT), headed by Dr. Manuel Sadosky.¹⁰

In terms of Internet protocol adoption, by 1991 Argentina was connected to all the usual worldwide networks (the Internet, BITNET, UUCP, Usenet¹¹), but its expansion rate was still low (Quaterman, 1991). Network links and connectivity posed a problem, but network culture was buoyant, involving more users with different needs. Although the national monopoly of ENTEL, the state-owned telecommunications company and incumbent operator,

ended in 1990, the international link would continue to be a private-sector monopoly in the hands of Telintar well into the late 1990s.¹² Telintar's pricing model was based on circuit-switched rather than packet-switched networks, a legacy of the OSI model, and hence it charged for data and amount of time used. Although these issues did not hamper the entrepreneurial spirit of early pioneers, they affected the quality and speed of the Internet.

Until 1997, the cost of international connectivity was prohibitive for a large proportion of nascent ISPs as well as for non-commercial and academic networks.¹³ This barrier led to reform, stimulated by the case of an academic network "Retina" which was the first to be granted an exemption from the monopoly of Telintar in 1994. But Internet access and affordability were lagging behind due to the pricing system and monopoly of the international gateway. In 1997, Internet access was declared of "national interest" which as a consequence triggered in the next year two public consultations which showed how the bottleneck in the international gateway was effectively acting as barrier to quality and affordable Internet connectivity¹⁴.

The pioneers' struggles for connectivity were extremely influential in the configuration of differing interests, positions, and strategies at the infrastructure level between 1995 and 2000, when international Internet connectivity was finally liberalized. CABASE (Argentine Chamber of Online Services and Databases), established in 1989 was a strong actor in the development of the Argentine Internet. It was the product of an institutional effort by early Internet entrepreneurs to improve collective action, an effort that had lasting effects. Its founders have been active participants in national, regional, and global discussions and initiatives associated with Internet infrastructure and critical resources. In 1997 they founded the first IXP in Latin America, the "NAP CABASE," with the aim of lowering the cost of Internet access by localizing national and regional traffic. To date, this initiative has installed 9 IXPs in the country and has played a prominent role in the region

8 This was not the case for all the scientific sectors. Nuclear research for example was clearly favoured. (Adler, 1987; Alborno and Gordon, 2011).

9 The company Fate Electrónica, developer of the globally known scientific calculator Cifra, and large banks and laboratories became a relevant testing ground for these early networking initiatives by young researchers.

10 Dr. Sadosky, creator of the university degree in computer science at UBA and one of the leading figures in the dissemination of computer science in Latin America since the 1960's.

11 BITNET, "Because It's There Network," was developed in 1981 as a cooperative project between scientists in two universities (CUNY and Yale). Like Usenet, it employed a point-to-point storage network design and used telephone lines to run. IBM adopted BITNET for its in-house system, and later the smaller VAX computers incorporated it as well. Usenet was a distributed system that resembled Bulletin Board Systems (BBS). Both were precursors of present-day Internet forums. UUCP is the acronym for Unix-to-Unix Copy. It is a set of computer programs and protocols that allows remote execution of commands and transfer of files and emails between computers, among others. It was originally developed for the Unix operating system in the 1970s, but was later adapted to other operating systems, including Windows and Mac.

12 Telefónica (Spain) and Telecom (France) were awarded the fixed-line telephony market, and Telintar, a company owned in equal parts by these two, was granted the monopoly of international telecommunications services, including "value-added services," which, although still unregulated at the time, encompassed data communications.

13 Considering the ratio and fee, in 1997 the cost of an international exchange link with the same quality as U.S. domestic links was one hundred times higher in certain provinces. Source: CNC Resolution 2765/97.

14 Executive Order 554/97.

regarding the promotion of Internet Exchange Points to improve Internet access and technical efficiency.

The current president of the Argentine organization is also the leader of the International Federation of Regional IXP Associations, which illustrates the organization's involvement in the international regime.¹⁵ In addition, CABASE was a key regional player during the International Forum for the White Paper (IFWP) and was the organizer of the third international meeting that led to the creation of ICANN in 1998. It was also a founding member of the Regional Internet Registry, LACNIC, and the local partner for the organization of the 22 ICANN meeting in Mar del Plata in 2005, further evidence of the private sector's interest in international governance arrangements. CABASE has been one of the few national stakeholders that have consistently addressed the technical, institutional, and systemic aspects of Internet governance at the national, regional, and global levels.

CABASE, as a private-sector representative espousing the values of the "technical community," represented by international Internet organizations such as ISOC, ICANN, and LACNIC, has remained involved with the development of the Internet and its infrastructure. In 2005, the major ISPs – a venture of Telefonica, Telecom, and the other large telecom players – left the association due to several conflicting interests, particularly the issue of interconnection of networks which was a major principle for the membership of CABASE to expand connectivity and cut-down costs. This divide stressed profound differences based on diverging business models and market orientations: while the big players are carriers or wholesale providers, most CABASE members are retail ISPs – largely in the provinces and in cities in the outskirts of Buenos Aires. This business model of the carriers and wholesale providers was based on their ownership of their infrastructure at a large, sometimes national scale, while the smaller providers relied on this infrastructure and were generating increasing traffic volumes, particularly since the uptake of VOIP services. The interconnection of the smaller local networks with the larger national ones was championed by the retailers and was seen by the larger players as a threat, which also saw this initiative as a free-riding exercise since they claimed that the larger portion of the investments and the risk was not undertaken by the smaller ventures.

While in the 1990s CABASE and the communications regulators (SECOM and CNC) had played a pivotal role in Internet policy-making,¹⁶ it was not until the WSIS process that government actors showed a more proactive approach to the international Internet policy regime. The Internet policy agenda focused on the developmental aspects of the Internet and ICTs, including poverty and the socioeconomic gap, rather than on political aspects of the global regime, and was taken on by the Ministry of Foreign Affairs (MREC) and the National Information Technologies Office (ONTI). Still, despite Argentina's large delegation to WSIS and its relatively high profile, this meeting had few significant effects on domestic Internet policy mechanisms. The various stakeholders involved in the diverse layers of Internet policy still based their actions on informal coordination mechanisms sustained by years of working together.

Since 2011, changes have occurred that have stemmed from a particular view on the role of the state in most fields of policy, especially in those areas where public goods and services are involved, where the state is not only intervening through regulation but also by becoming a service provider in this particular sector of telecommunications and the Internet.

One significant step in this direction was the changes introduced to the ccTLD.ar (nic.ar) after an executive order¹⁷ in December 2011, which re-classified the registry to the rank of an administration. The trajectory of .ar changed significantly considering that since its delegation by the IANA in 1987 it had remained in the margins of national and international Internet policy discussions, as an insignificant area dependent on the IT department of the Ministry of Foreign Affairs and lagged behind international best practices and standards in registry management. After this regulatory initiative, the ccTLD has not only an enhanced administrative status, but it has achieved greater autonomy to develop not only technical functions, but to become a player in its own right in Internet policy related with DNS issues¹⁸.

16 In 1996 SECOM established an Internet Commission. Although there were few substantial outcomes in practical terms (other than public hearings on Internet matters in 1997 and 1998), the commission served to outline responsibilities over this issue within the national government.

17 Executive Order 187/2011.

18 Since this measure, several technical and policy measures have been adopted: from IPv6 implementation, automated registration and registration fees to name but a few which have served to make it less vulnerable to cyberattacks and cybersquatting. It has achieved a broader international recognition by being the local host of ICANN meeting 48 and forthcoming ICANN 53.

15 The Internet eXchange Federation, created in 2012.

Three additional examples illustrate the government's increasing participation in Internet policy. One is the development of the national broadband plan "Plan Argentina Conectada" in 2010,¹⁹ which constituted a clear statement in favour of national infrastructure investments for the development of the domestic Internet backbone. Another example is the bolstering of ARSAT, a national company created in 2006²⁰ to develop satellite communication services in the country. With digitalization of the spectrum and the development of the "Plan Argentina Conectada," ARSAT began to position itself as a telecommunications service provider, both nationally and regionally and is one of the players that has most clearly benefited from the latest regulatory change, "Ley Argentina Digital" which will be next addressed as a final example of this trend.

The bill "Argentina Digital,"²¹ passed on December 19, 2014, constitutes the most recent milestone in telecommunications, ICT, and Internet policy in this country, since it addresses the scenario of convergence in communications. This law aims at providing a regulatory framework for telecommunications in an era of convergence. While an update of the legislation was perceived as necessary, the lack of time for public consultation and its approval by Congress in two months since it first appeared provided little room for debate with other stakeholders traditionally involved with Internet policy, which marks a style of governing which contrasts with other governance processes for Internet-related matters, as well as with the open and bottom-up consultation process carried out for the "Ley de Servicios de Comunicación Audiovisual"²² (Law for Audiovisual Communication Services) in Argentina. Two issues derived from the law "Argentina Digital" are particularly relevant to this study. The first is the lack of a clear description of the power and attributes of the regulatory body, including issues of organizational and political autonomy, composition and scope of the functions. The second is the vagueness of the definition of "ICT services" and "ICT."²³ This ambiguity implies that Internet services might be sub-

ject to further regulation, including the potential for content layer applications to require a license. The full impact of this law on the Internet is yet to be assessed since its application mechanisms are currently being drafted, but the trend of increased state involvement in Internet policy at the infrastructure and logical layers is manifest.

On April 22, 2014, one day before NETmundial, SECOM created the Argentine Commission for Internet Policy (CAPI) through Resolution 13/2014. When the Brazilian government invited the Argentine authorities, they were faced with a dilemma. They had to appoint three government representatives as part of their delegation, but several government offices were already participating in international forums (ICANN, CITELE, ITU, eLAC, and so on). Consequently, SECOM established CAPI as a formal space for intra-governmental coordination. The Commission articulates the work of eight agencies that are involved with the different layers of domestic Internet policy. CAPI received a twofold mandate: (i) to enhance national information sharing and coordination among the different government entities involved in Internet policy and governance; and (ii) to consolidate Argentina's different positions on these issues in international forums.

Although the head of SECOM and the resolution creating CAPI expressly stated the intention to incorporate multi-stakeholder perspectives into the policy-making process, up until now the Commission has only served as a government instrument for debate and information sharing. At the end of May 2014, it held its first meeting with non-government actors from civil society, academia, the business sector, and the technical community that had participated in NETmundial. The purpose of this meeting was to listen to the expectations, questions, and concerns raised by these actors. Since then there have been no additional formal meetings with non-governmental stakeholders, and CAPI is now working with the government agencies named in Resolution 13/2014. According to SECOM, the conveners of the initiative, before opening the space to non-governmental stakeholders CAPI must define its agenda and "generate the proper mechanisms and safeguards to ensure that non-governmental stakeholders are legitimate representatives of their communities."²⁴ This statement relates to a concern present in the governance literature regarding the "shadows"²⁵ (Peters, 2010) cast

19 Executive Order 1552/2010.

20 Law 26.092 contains the description, mission and objectives of ARSAT created in 2006.

21 Law 27.078 also known as "Ley de Medios" (Media Law) was passed in 2009 as one of the most categorical reforms during the first presidency period of Cristina Fernández.

22 Law 26.522 *Servicios de Comunicación Audiovisual* addresses, among others, the issues of convergence in the broadcasting sector. It has created a new set of regulations for broadcasting licences in the new digital scenario.

23 Law 27.078 defines ICT Services as follows: "those services whose goal is to transport and distribute signals or data, such as voice, text, video and images facilitated or requested by third party users through telecommunication networks. Each service will be subject to its specific regulatory framework." The definition provided for ICT is the following: "it is the set of resources, tools, equipment, computer programs, applications, networks, and media that allow the compilation, processing, storage, and transmission of information such as voice, data, text, video, and images." (Authors' translation)

24 Eugenia Migliori, SECOM, LACIGF El Salvador, July 2014.

25 Guy Peters (2010) has identified four governance mechanisms and the "shadows" cast by the authority behind each of them: "hierarchies" correspond to the bureaucratic state apparatus; in "markets," power is concentrated in large corporations or in forces that can produce undesired outcomes, such as drug trafficking; "society" refers to the social networks of actors in organized civil society; and a fourth category is associated with the knowledge of experts. In

by the stakeholders of the four main governance mechanisms (government, businesses, civil society, and the expert community) and the interests they claim to represent.

Until the resolutions contained in the “Argentina Digital” bill were released, various stakeholders expected CAPI to become an open, diverse body rather than a coordination instrument for the government. Such expectations stemmed from the influence that the Brazilian multi-stakeholder Internet Steering Committee (CGI) had traditionally exercised as a reference model, both within the government and among other actors. This is not to say that the CGI is perceived in all of its positions (organizational design, electoral mechanisms, scope and functions) as a model to replicate entirely, but it is considered a legitimate and formal body to address multi-stakeholder representation of Internet governance issues, both nationally and externally. The CGI has set a standard whereby formal internal coordination is seen as necessary but not a sufficiently legitimate or relevant function on its own for the larger Internet community. In addition, as many participants in the first open meeting reported, CAPI had the potential to become a suitable space for exchange and debate at the governmental level that would facilitate not just the consolidation of a national position in the face of international meetings, but also for the debate of domestic issues.

However, up until now this role has not yet been fulfilled. The Commission did not provide institutional input, either formally or informally, to the formulation of, and debate on, the Net Neutrality or the “Argentina Digital” bill. Contrary to the expectations surrounding the creation of this agency based on its principles and core objectives, which were discursively aligned with an open, multi-stakeholder Internet governance framework, its lack of visibility in recent crucial domestic debates have reduced its relevance. This development leaves Internet policy devoid of a vital body for institutional and systemic governance.

Costa Rica

Costa Rica has a rich history of networking initiatives and was the first country in Central America to connect to the Internet in 1993. As early as 1990, it was already linked to BITNET, following Argentina, Brazil, Chile, and Mexico.

These early networking experiences were the result of the endeavours of scientists²⁶ and of two organizations involved in communications and telecommunications infrastructure development – RACSA (Costa Rican Radiographic Company) and ICE (Costa Rican Electronic Institute). Institutionally, these efforts started at the University of Costa Rica, which was involved with other Central American universities in a regional project to develop network infrastructure (Siles González, 2008). Additionally, Costa Rica was the first country in the region to deploy an IP backbone in 1993.

This Central American nation was among the few Latin American countries in which the telecommunications system remained state-owned until 2008 (ICE). Combined with progress made in computer science research and in the university system, public ownership enabled the government to work on the different layers of technology and infrastructure needed to develop the Internet, “which would later allow them to be more independent from international consortiums” (Teramond, 2008). The national communities forging these connections were based on international borderless technology (TCP/IP), which relied heavily on telecommunication networks. In the case of Costa Rica, for the first fifteen years of Internet adoption, the infrastructure level was dominated by a strong public-sector player that would leave traces in future policy-making despite market liberalization, as will be described shortly below.

The connection to the international networks was an accomplishment of the ccTLD .cr, which was created in 1990 and in 1995 was included as part of a wider effort by the national scientific and engineering community into the National Academy of Sciences. The latter currently hosts scientific network projects and other academic cooperative ventures, a corporate umbrella partially supported by .cr’s registry activities. The consolidation of such an institutional structure has provided this agency with the potential for becoming a focal point for national Internet policy-making, as the work will later develop.

The deployment of commercial Internet services, in turn, began in 1994 through RACSA, a subsidiary company of ICE. In addition, a project to develop broadband connectivity was implemented through the Advanced Network (known as RIA), and ended in 2005. Ties were henceforth closed between the scientific and technical communities,

the author’s own words, “the logic of these shadows is that these represent alternative formats for governing, and also represent choices to be made by the actors involved. They also represent the options available in a complex political game. Further, few if any of these options will be implemented in a pure manner. This is especially true now given the complexity of modern governance, the legitimacy of both market and social actors, and the failure, or unwillingness, of many governments to supply conventional hierarchical governance in many settings” (Peters, 2010: 7).

26 Notably, Guy de Teramond, who is both a national figure and one of Central America’s “fathers of the Internet” http://www.odi.ucr.ac.cr/boletin/index.php?option=com_content&task=view&id=575

on the one hand, and the government-run telecommunications networks, on the other.

With respect to regulation, the Regulatory Authority for Public Utilities (ARESEP) underwent changes in 1996 but continued operating until 2008. That same year the government liberalized the market for the provision of communications services, including Internet and mobility (Law 8642), and created a new, specialized communications regulatory authority, SUTEL. Along with the opening of the market, there was a growth in Internet and mobile connectivity penetration in the country, which served to highlight the increasing significance of these assets for the national community and the government.

The year 2012 was a landmark year for Internet policy development in the three governance dimensions, namely, technical, institutional, and systemic; progress was made in all three. As Costa Rica hosted the 43 ICANN meeting, the issue achieved prominence in the national agenda. The keynote speech, delivered by the then President Laura Chinchilla (2010-2014), was not merely a declaration of goodwill. It posed a challenge to improve Internet development in general:

We aspire to become the network access point of the digital economy in Central America and the Caribbean. However, we Costa Ricans are not satisfied with a good worldwide connection. We want to feel connected among ourselves as best we can. Therefore, a year ago I challenged my nation. Along with the social covenant for peace and the social covenant for nature, we should also subscribe a social digital covenant.²⁷

This speech made a significant impact on policy both domestically and abroad. Domestically, the project of developing an Internet exchange point, mentioned by President Chinchilla, began to take shape under the lead of .cr.²⁸ The second highlight of the year was the creation of the Internet Consulting Council (CCI) in October. The CCI attends to the institutional dimension of Internet governance, and while it does not aim for systemic governance at the regime level, it has helped this small country achieve global recognition through a specific positioning of Internet governance related matters.

The .cr registry as part of the National Academy of Sciences first convened the CCI to create an institutional space for the discussion of pressing issues requiring the perspectives of multiple stakeholders, such as the development of national broadband plans, a Universal Access Fund (and the allocation of resources for it), and the first IXP. Its formal objectives are to participate in policy recommendations for the TLD of Costa Rica and in the advancement of the Internet to contribute to national development objectives. Although the CCI is a multi-stakeholder body, with representatives of government agencies, scientific and academic institutions, NGOs, and businesses, the overwhelming majority of its members are government and state entities.²⁹ In this way, even though the multi-stakeholder principle underlies its core operational practices and values, the CCI has a strong public-sector orientation due to this presence.

While it does not produce formal documents, nor does it generate multi-stakeholder statements as national positions, as is the case of the Brazilian CGI. The CCI is formally constituted as a space for discussion of specific Internet issues and for the validation of technical governance initiatives lead by nic.cr, like the recent IXP launch.³⁰ Its methodology comprises working groups addressing the following issues: National Internet Policy, Internet Security, Educational Network, Cybercrime, Infrastructure, and Promotion of the .cr Domain Name.³¹ CCI members meet every six months to discuss the progress made in the six working groups and other emerging issues. Their work is then continued online through a closed platform for members, where intersession assignments are followed. If there is a need to treat a specific concern, extraordinary meetings are convened.

NIC.cr conducted consultations with the Mexican and Brazilian national Internet registries and the CGI in order to identify best practices and experiences that would help shape the CCI. "These agencies work in analogous contexts to that of Costa Rica, with a similar idiosyncrasy, since they are all Latin American and share common features. They also have had experience with this issue, in particular, NIC.br and the CGI."³² Following this round of consultations, Costa Rica decided to implement a model that incorporated aspects of both experiences. The institutional configuration of the CCI is more formal than that of

27 The full transcript of the speech is available at: <http://costarica43.icann.org/meetings/sanjose2012/video-president-chinchilla-speech-12mar12-en>

28 The first national IXP was finally inaugurated in June 2014, a few days before President Chinchilla left office. The registry and the operators that joined the initiative headed and co-financed the project.

29 The full list of members is available at: <https://consejoconsultivo.cr/miembros>

30 The first IXP in Costa Rica was launched in June 2014.

31 "There was a group working on domain name disputes that was closed after the life cycle of the topic (...) ended" (Rosalia Morales, Director, .cr, interview conducted in July 2014).

32 Rosalia Morales, Director, .cr. Interview conducted in July 2014.

the Mexican Initiative Group, which will be analyzed in the next section. Nevertheless, it has less power to produce policy recommendations and enforcement mechanisms than the Brazilian CGI. Its role is that of an advisory council that promotes organized and documented discussions and positions. Its recommendations are not binding with regard to the policy-making process. They have been thematic instead of procedural, and have helped inform and shape policy debates. Another difference with the Mexican experience is that CCI members are institutions rather than individuals, a feature that is consistent with the greater presence of government stakeholders.

Although this space has not been defined as closed to new members, since its creation the CCI has not invited other actors to participate. According to SUTEL, the regulator, the group's relatively informal mode of functioning has created a harmonious environment; stronger formalization mechanisms would have generated conflicts and tensions with those organizations that are currently not part of it. The idea that it could potentially open up to new members is important, since non-member stakeholders could potentially question this body's status and legitimacy. Due to its advisory and consulting nature and the fact that its organizational boundaries are formally open, particularly for technical topics, the CCI has been rarely challenged.

Still, there are nuanced opinions regarding CCI's scope and goals, depending on the stakeholder group involved. While government representatives consider the CCI an informal space for learning, sharing experiences, and receiving input for policymaking, for the conveners – the National Academy of Sciences, .cr, and the business sector – it is an institutional sphere where governance processes take place. These differing perceptions are also materialized in the view of CCI members of the role of this organization in systemic governance at the international level. When the CCI was formed right before the WCIT conference, the regulators³³ did not feel compelled to discuss the country's international position in this institutional setting, nor to reach consensus regarding such position. They perceive it as a workspace for policy-makers that facilitates well-informed, and hence improved, decision-making. According to Mazón, at CCI meetings “it is important to understand other points of view and to voice the regulator's own.”³⁴ At the same time, the convener of the meeting (.cr) views it as a space whose objectives are in keeping with Internet development, working by way of an open, transparent

mechanism, “expecting to maintain the principles of cooperation and trust.”³⁵

A distinct feature of the Costa Rican case is the government's commitment to the current model of global Internet governance as a bottom-up, open, and multi-stakeholder process. The Central American nation was among the few Latin American countries³⁶ that refused to sign the new ITRs at WCIT. It saw this document as a threat to the current model of Internet governance, a stance that strengthened the position outlined by former President Chinchilla in her closing words at the 2012 ICANN meeting in San José:

*Internet belongs to us all, and we should all participate in the discussion on the rules that should govern the Internet. The design of Internet governance should be based on a multi-stakeholder approach, regardless of our political, corporate, financial power. We can participate in a process of reciprocal trust that will reinforce coordination and organization mechanisms in a democratic way. Internet is the great opportunity that we have in history, so as to not repeat our past errors that led to the creation of international governance institutions that are vertical, closed and bureaucratic.*³⁷

President Chinchilla's speech became a roadmap for the country's position at the NETmundial meeting in Sao Paulo.³⁸ Costa Rican authorities participated in the conference along with most governments in the region. Yet the Central American nation's status as an “ally” that was invited to the ICANN–WEF NETmundial Initiative in August 2014 in Geneva³⁹ evinces the unique regional and international

35 Rosalía Morales, Director, .cr. Interview conducted in July 2014.

36 Chile, Colombia, and Peru also adopted this position.

37 Available in <http://costarica43.icann.org/meetings/sanjose2012/video-president-chinchilla-speech-12mar12-en>

38 As evidenced by the public announcement by the Ministry of Science, Technology and Telecommunications during the NETmundial meeting. Available at http://www.micit.go.cr/index.php?option=com_content&view=article&id=6184:costa-rica-reitera-su-posicion-a-favor-del-internet-libre-y-abierto&catid=40&Itemid=630

39 The NETmundial Initiative is a process that was initiated by ICANN and the WEF in August 2014 in a meeting in Geneva to address the current gaps and challenges facing Internet governance ecosystem and to provide a platform for discussion for the implementation of the issues raised by the NETmundial Multi-stakeholder Statement, the outcome document of the NETmundial conference of April 2014, Sao Paulo. The NETmundial Initiative has evolved considerably since the meeting in Geneva and is currently becoming more consolidated as a multi-stakeholder institutional platform where ICANN, WEF and the CGI are the main promoters. It has not been exempt of criticism and concern by representatives from all stakeholder groups since reasons for the development of a new international multi-stakeholder platform remain unclear to many in the context of an expectation of a renewal of the IGF mandate by the UN Secretary General in 2015 and the intense work around the IANA Stewardship Transition process.

33 Adrián Mazón, SUTEL. Interview conducted in July 2014.

34 Adrián Mazón, SUTEL. Interview conducted in July 2014.

role it has adopted – that of a country that is playing by the rules of the game of the international regime. It was the only country in Latin America besides Brazil whose government was invited to participate in this meeting and will be hosting a NETmundial Initiative meeting next March 2015.

The Costa Rican experience showcases an attempt to formalize and produce concrete outcomes in the technical dimension of Internet governance through the CCI's various working groups output documents (.cr domain report) and proposals (from the launch of the IXP in 2014 to the development of training modules on cybersecurity issues to Law Enforcement Agencies (LEAs). Regardless of the non-binding nature of the council's documents and working group products, the government has attempted to consolidate an institutionalized setting to discuss the policy agenda. As a body, the CCI is not oriented toward participation in systemic governance: its focus is on domestic policies. Nonetheless, some of its stakeholders, notably the regulator (SUTEL) and the Ministry of Science Technology and Telecommunications, together with the .cr registry, are following and taking part in global initiatives. The involvement of the Ministry of Science and Technology in the NETmundial Initiative is a strong sign of support and alignment with a specific process emerging from powerful organizations (ICANN, WEF and CGI) and for this last reason, heavily questioned in recent months.

Mexico

In the early 1990s Mexico boasted a high-quality Internet connectivity infrastructure and a burgeoning community, with three different academic networks distributed across major urban areas.⁴⁰ These networks received government funds, enabling them to consolidate infrastructure and expand the user base. However, institutional rivalries and disagreements, as well as competition for government funding (Gayosso, 2003) also led to a duplication of efforts in the management of critical Internet resources. There were three DNS operations for the .mx Top Level Domain: one was managed by ITESM and had been formally delegated by Jon Postel's IANA on February 1st, 1989; another was managed by the UNAM network, and consisted of Type B class of IP addresses; and the third was the National Technological Network. The Mexican ISOC Chapter worked within UNAM, and there was a more or less tacit agreement to split technical and policy issues between the two major national universities to avoid unnecessary friction

(Gayosso, 2003). By 1995, with the increased popularity of the Internet as an access to the World Wide Web and the creation of the Mexican ISOC Chapter, it became indispensable to integrate these efforts. ITESM, which was the country's official ccTLD, became also the NIC and managed IP allocation services (NIC.MX).⁴¹

Mexico's ccTLD has been a leading registry in the Latin American region, not only because of its special status as National Internet Registry,⁴² but also due to its in-house technological and commercial innovation. Along with nic.br, it has been a pioneering institution in the establishment of LACTLD in 1998 and the Regional Internet Registry, LACNIC, in 2002, and was deeply involved in the creation of ICANN (1998) and the ccNSO (2004). After the initial years of rivalry between ITESM and UNAM, the registry managed to develop a strong domestic position, guaranteeing stable and reliable services. Yet the early experience in coordinating critical Internet resources left a valuable lesson to the community of Internet pioneers in both universities. They had to work with the international regime in order both to understand and play by its rules and thus strengthen their position domestically, and to disseminate the core values and principles derived from Internet architecture within their communities. They also realized that there was room to launch regional processes that included the organizations mentioned above.

While the Internet technical community was making progress in the development of new institutions, the telecommunications regulatory authorities lagged behind. During the early 1990s the government started a process of telecommunication reform aiming to create a "national champion" within the sector. For this reason, it set in motion the privatization of Telmex (until then a public company) by granting an exclusive concession for seven years in December 1990. One of the first goals of the privatized Telmex was the development of a fiber optic network, which would greatly enhance Internet connectivity during the first years of that decade, especially in comparison with other countries in the region.

The main document that served to regulate the telecommunications sector during the first five years after privatization was the Concession Title (TC). The latter stated that by way of the public telephone network grid, Telmex should offer voice, sound, data, texts, and images, as well as local and international calls. Telmex was also granted

40 MEXNET comprised the ITESM in Monterrey and the University of Guadalajara; the UNAM network was located in Mexico City; and RUTYC conjoined thirty-five public universities spread throughout the country (but it only lasted a year, from 1992 to 1993) (Huesca Morales, 1998).

41 <http://www.nic.mx/es/NicMx.Historia>

42 Both in Latin America and in Asia Pacific, National Internet Registries (NIRs) were established before Regional Internet Registries. Brazil and Mexico are the only two NIRs in LAC, and there are seven in AP.

the provision of mobile telephony services, but with the stipulation that such provision would be deregulated. Value-added services, which included the Internet, were also to be offered in a context of market competitiveness. As Mariscal puts it,

the reform of the (telecommunications) sector posed obstacles from the beginning. These obstacles gave rise to an essential feature of Mexican telecommunications, namely, its precarious institutions (...) One of the constitutive aspects of the Mexican model is that the structural component of its regulatory framework is a contract between the government and the company Telmex instead of an overarching law for the sector. (Mariscal, 2007: 265)⁴³

In 1996 the Federal Telecommunications Act (LFT) was enacted that followed the line of limited competition, which enabled Telmex to grow into a global player. Although the LFT had to stimulate competition among telecommunications providers, there was no institutional home for this function. The regulator, the Federal Telecommunications Commission (COFETEL), established by executive order in the same year, had also been institutionally weak since its creation. In certain crucial matters, such as producing standards and technical plans and awarding broadcasting services through calls for bids, its role was limited to submitting opinions to the Secretary of Communications and Transport (SCT), who was granted decision-making powers after the LFT was passed. The lack of real autonomy and clear boundaries and the duplication of roles generated a slow and inefficient regulatory process; no agency had the authority or flexibility of a decision-making body. Effectiveness and timeliness have been absent from the Mexican telecommunications sector for more than fifteen years.

The national regulatory framework remained more or less the same until 2006, when a description of COFETEL's functions was incorporated into the LFT. The regulator became a decentralized administrative body of the SCT, but with full autonomy to dictate resolutions. While value-added services (which is the formal legal figure that frames the commercial provision of Internet services), and later VOIP, were offered within a competitive market, the long and costly bureaucratic procedures imposed on new providers⁴⁴ meant that in practice, Telmex's dominant

position helped the company extend its reach to all communication matters in a sector that follows a convergence model. As a consequence, Internet service provision depended increasingly on this company.

The long-sought reform of the telecommunications sector came about during the administration of Enrique Peña Nieto in 2012,⁴⁵ in a process that crystallized on July 14, 2014 and was called the LFT Amendment. The new Federal Telecommunications Act created the Federal Institute of Telecommunications (IFT), phased out COFETEL, and empowered the Secretary of Communications and Transport to implement Internet policy. Reforms have shaken up the entire telecom and media sectors, and their long-term consequences could be very significant for all communication policies in the country. As we describe in the next subsection, these regulatory reforms have sought an institutional balance whereby state policy begins to address the Internet more specifically.

President Peña Nieto's reform of the national telecommunications sector started in 2012 with the creation of the agency National Digital Strategy. The aim of this office is to coordinate all the Executive's efforts associated with the Internet (including governance issues) and digital communications. Until its creation, the various Internet stakeholders mentioned above, such as NIC.MX, the Mexican ISOC Chapter, or AMIPCI (the Mexican Internet Association),⁴⁶ as well as other civil society organizations and companies formed a loosely bound group that would join forces to challenge regulatory measures that threatened the Internet's architectural principles, its established organizations, and human rights issues, among others. Yet these were informal mechanisms based on social ties that had been forged over the years.⁴⁷ There was a lingering idea to develop a multi-stakeholder space where participants would be on equal footing to promote informed dialogues and debates around Internet issues.

The creation of the National Digital Strategy within the President's Office sparked the emergence of the Initiative Group. According to the President's Office, "the National Digital Strategy became a catalyst for this initiative, since it prioritized the issue in the national agenda and placed Internet governance at the center of the government's digital policy."⁴⁸ The Initiative Group had neither an official nor

43 Authors' translation.

44 As an example, a special concession was necessary to provide VOIP services, a provision that acted as a barrier to effective competition in this area.

45 Member of the PRI (Institutional Revolutionary Party), which governed Mexico during most of the 20th century.

46 AMIPCI was created in 1999 and is a leading organization of the Mexican Internet business community.

47 Haces, policy advisor, NIC.MX. Interview conducted in 2014.

48 Gutiérrez, Office of the President. Interview conducted in 2014.

a legal structure. It started early in 2013 under the guise of informal talks among representatives of different sectors. Initially, NIC.MX, in its role as convener, contacted two representatives per sector. This was a personal, unofficial, and non-binding invitation. The group gradually consolidated into a multi-stakeholder organization comprising five sectors, namely, academia, civil society, the technological community, operators, and government. It adopted the following principles referred to organizational aspects: equitable participation, balanced representation, self-motivated rather than formal leadership based on the topic under discussion, and consensus-based decisions (Haces, interview, 2014).

In 2013 the group agreed to produce a formal output, and decided to organize a meeting aimed at expressing the fluid, interactive nature of its institutional setting. For this reason, it opted to call this meeting a *dialogue* rather than a forum or seminar. Entitled Dialogues on Internet Governance, the two-day event was held in November 2013. It could be characterized as a national IGF, and was the first of its kind in the country. The group developed the program with input from surveys administered to the Mexican Internet community, reflecting an array of concerns regarding human rights, ecommerce and participation. It was a highly attended event and was broadcast nationwide.⁴⁹ It was viewed as a success, and it was the first time a multi-stakeholder initiative had produced such a specific outcome (Martínez, interview, July 2014). A second edition of the Mexican Dialogues has recently been organized exposing the need to continue with a new space for interaction.⁵⁰

The Initiative Group has maintained online activity by way of a mailing list created for this purpose.⁵¹ Its members have realized that this list is a living, useful tool and point of contact to discuss current issues, such as the IANA stewardship transition and NETmundial (Haces, interview, 2014). In the latter case, the group has reached an agreement concerning the Mexican position for this meeting and the NETmundial Multi-Stakeholder Statement (Haces, interview, July 2014). The agency has not followed other examples in the LAC region. Instead, it has embraced the founding principles espoused by organizations that have traditionally belonged to the Internet technical communi-

ty (IETF, ICANN) in its choice of consent-based discussions, openness, and equality, and the Tunis Agenda in its adoption of a rights-based approach to the topics discussed.⁵²

The Initiative Group faces the challenge of maintaining the continuity of the events it organizes, and promoting renewal and growth with the incorporation of new members while preserving its informal nature. Both this body, as a plural space for national debate and coordination and, in particular, the National Digital Strategy agency will be in the spotlight in 2016, as the Mexican government submitted a formal request to the United Nations to host the 11th IGF (provided the IGF's mandate is renewed). In addition, Mexico will also host the eLAC ministerial meeting and the 8th "LAC IGF." These regional and global events represent challenges and opportunities for domestic stakeholders, and there is a strong, unanimous feeling that the initial steps toward national coordination have helped pave the way for a greater degree of institutional governance. 2015 and 2016 will be crucial to assess the ability of the Group Initiative's multi-stakeholder model to deal with, both procedurally and substantially, the challenges of Internet governance in its institutional and systemic dimensions.

An important feature of Mexican Internet policy is related with the country's physical and economic connectedness to the U.S., which has resulted in an affinity for shared Internet policies (including net neutrality and ISP liability), which has also been shaped by economic treaties such as the experience of the TPP (Martínez, interview, July 2014). However, at the same time, along with regional partners, the country has sought to define a block of Latin American interests with regard to international forums such as WCIT (2012), the ITU Plenipotentiary Conference in Busan in 2014, and the forthcoming Ministerial eLAC Conference. In addition, the presence of the Mexican technical Internet community and government in leading positions at ICANN⁵³ has generated a natural dialogue between these stakeholders and one of the major institutions of the international regime. This dialogue is an important asset that connects the national and international levels. Their close contact with ICANN experts has helped Mexican stakeholders acquire the knowledge required to operate in the systemic governance dimension, a knowledge that is often implicit due to its political nature.

49 More than 3,000 devices logged into the remote participation platform: http://media.wix.com/ugd/802958_1e0ec112f1db43749f6bfe441aa28e58.pdf

50 The second edition was organized on 17-18 February 2015.

51 It used the mailing list address grupodeiniciativa@nic.mx, an address that shows the engagement of the NIC.MX with the initiative.

52 A detailed description of these principles is available at <http://www.gobernanzadeinternet.mx/#lacerca/c4nz>.

53 There are a handful of examples of Mexican technical experts and academics serving on the ICANN board and participating in other technical entities. Notably, the two ICANN regional representatives have been former COFETEL staff. This representation is much larger than that of any other country in the LAC region.

4. Comparative Analysis and Discussion

This section provides a comparative analysis of the three national contexts in order to identify common patterns and key points of divergence. In particular, we compare the following dimensions: a) the institutional building blocks of national governance initiatives; b) stakeholder representation in these bodies/debates; c) isomorphism with, or replication of, the experience of other countries, especially the Brazilian multi-stakeholder model; d) articulation with global Internet policy discussions and institutions; and e) policy coordination mechanisms within the region.

Regarding the scope and goals of the new national initiatives, there is considerable variation in the cases analysed. Unlike Brazil, which created the CGI in 1995, the three countries studied here present very recent institutional configurations, established during the 2012-2014 period. They may thus cement in the medium term, but at present their institutional foundations are still weak.

For example, Argentina's CAPI was established in April 2014 through an administrative order by the telecommunications regulator. Up to that time, Argentina's international representation in global Internet forums was incumbent upon the Ministry of Foreign Affairs, except in the case of multilateral processes such as CITEC and the ITU. Yet, after NETmundial several Internet policy issues were considered interrelated despite their being addressed by different government agencies. The need arose for a formal coordination at the domestic level that would lead to a more effective engagement in the international sphere.

While it might be too soon to assess its effectiveness, the agency has held few meetings and has not developed a voice of its own in recent domestic debates - for example, on net neutrality and the new bill "Argentina Digital." Internationally, there has been an increased representation of the communications regulator in forums such as the IGF and ICANN, which had been traditionally assigned to the Ministry of Foreign Affairs, but to what extent this is a consequence of improved domestic institutional governance or of internal power struggles is yet unclear. What does transpire from the creation and evolution of CAPI is that it is a weak institutional mechanism highly dependent on the Secretary of Communications, which has discretionary power to convene it and utilize it to build consensus with the government or with a broader set of stakeholders.

In the case of Costa Rica, the CCI emerged as a response to the need for a more organized forum for debate, and was intended to achieve technological and policy improvement in view of the prominence of Internet issues in President Chinchilla's agenda. ICANN 43, held in San Jose in 2012, rendered this agenda more visible to both domestic and international audiences. Like that of CAPI, the creation of the CCI was triggered in part by an international event, but the presidential agenda had traced a more clearly defined roadmap. So had the Social, Digital, and Environmental Covenant of Costa Rica (2010), which was based on a multi-stakeholder alliance geared toward increasing connectivity in order to support the enhancement of productivity and the development of the digital economy in the country. Since the CCI is a multi-stakeholder body convened by a scientific consortium, its scope and goals are less formal than those of CAPI, despite the fact that many government bodies participate in it.

The Mexican Initiative Group's aims are similar to the CCI's; it seeks to provide a consolidated space for debate and information sharing, and to organize the Mexican Dialogues on Internet Governance. Its nature, like that of the Costa Rican body, is mostly informational. What distinguishes it is that it resulted from a redefinition of national policy and regulatory authorities (in particular, from the creation of the presidential coordinating agency for the National Digital Strategy) rather than from a single international event. In addition, the Initiative Group is the least formal in terms of standard definitions of norms and regulations, not because it failed to achieve a more organic structure but because informality was a desired outcome. This space emulates many of the early working methods and values of the original Internet technical communities, as well as the principles defined by the Tunis Agenda. The process dimension of governance is very much a key component of this multi-stakeholder entity, and the appropriateness and efficacy of this arrangement will be put to a test when Mexico becomes the host for regional and international Internet governance events. Both the CCI and the Group Initiative are oriented toward consolidating institutional governance processes within the domestic realm.

Stakeholder participation in all three instances differs in terms of composition and number, and in the roles played by each stakeholder group. CAPI is a purely governmental entity convened by SECOM. The CCI and the Initiative

Group are plural, but the latter shows a more balanced representation than the former.⁵⁴ The Group Initiative has twelve members, roughly two from each stakeholder group, although the technical community (NIC.MX, ISOC, ICANN) is dominant. In the CCI, by contrast, there is a greater number of government representatives.

A key feature for the analysis of stakeholder participation is how formally these initiatives have defined membership eligibility and/or renewal, and their degree of openness. Although CAPI is an intra-governmental body, it has acknowledged the need for multi-stakeholder feedback from the community. Furthermore, during the only meeting with other actors that has been held to date,⁵⁵ participants mentioned the plural composition of the Brazilian CGI as a desirable future. Yet the implementation of such a model, which requires the selection of representatives from each stakeholder group, has been a barrier to running this type of institution effectively. The CCI, in turn, has no clear membership rules and has been working with the same composition for over two years. Although, in practice the agency is open to new representatives and some of its members have manifested that it would be desirable to incorporate them, their integration might generate greater competition and rivalry among the organizations that are left out. Finally, a distinctive trait of the Group Initiative is that its members were invited to join in their individual capacity. While the invitations preserved a balanced representation, members were carefully chosen based on personal rather than institutional qualities.

Stakeholder representation is also at the core of the goals and scope of these new institutional building blocks. In the case of Argentina, however, intra-governmental coordination was prioritized. Stakeholder representation, therefore, is not as relevant as it is in the other two cases. While the Costa Rican CCI is more organic (with working groups that will help inform and shape policy-making, a fixed meeting calendar, and a special online platform to carry out intersession work), multi-stakeholder dialogue is an essential component that will contribute to formulating well-informed national policies.⁵⁶ The Initiative Group in Mexico needed to formalize discussions and exchange

es that were already taking place but had no concrete outcomes for the wider national community of Internet stakeholders. Consequently, it implemented some tools to facilitate the development of an ongoing debate in a trustworthy environment with a closed mailing list, and produced the first experience of a “Mexican IGF.”

It is worth bearing in mind that the plurality of Brazil’s CGI was wrought over the course of eight years. While the agency emerged as a multi-stakeholder body in 1995, it evolved into its current configuration thanks to a reform mandated by an executive order issued by Luiz Ignacio Lula da Silva in 2003. The original CGI had a variety of representatives, but the government selected/endorsed the members from other sectors. In the second and current phase of the committee, each stakeholder group elects its own representatives, and while the government has the largest number, it does not have a majority. The formalization of such a body implied a greater degree of institutionalization over time regarding regulatory and normative aspects (Scott, 1995).

The procedure for admission into the CGI constitutes a device that promotes organized collective action (Olson, 1971), although it should be stressed that it might not prove successful or legitimate in other national contexts. Nonetheless, public good provision comes at the cost of improving collective action mechanisms, so multi-stakeholder representation in these national bodies will need to address the challenges posed by self-interest and capture. A greater degree of focus on, and strengthening of, the institutional dimension of governance may be indispensable for their survival.

The cases studied also vary in their degree of isomorphism with the global Internet governance regime. Argentina’s regulatory and institutional building blocks (the new law “Argentina digital” and CAPI) constitute the strategy that least responds to global principles of Internet policy and governance. Argentina’s CAPI is based on hierarchical governance (Peters, 2010), with a focus on governmental capacity regarding Internet control, knowledge, and operations through its critical resources. This initiative has greater isomorphism with multilateral organizations, such as the ITU and UN processes, rather than with the open, multi-stakeholder bodies of the international Internet regime configured in the past two decades.

Nevertheless, CAPI is also a clear sign of governmental recognition of the complex nature of the Internet and of the need for greater participation in other institutional settings. Beyond the activity of this agency, the Argen-

54 Many international settings formally accept this principle as suitable for Internet governance. It is the case of the IGF’s MAG, the UN Working Group on Enhanced Cooperation for Internet Governance, and the NETmundial organizing committee, among others.

55 This meeting took place on May 26, 2014.

56 It is also essential to bear in mind that a small-sized country such as Costa Rica faces different challenges and needs a different approach to stakeholder coordination; the distinction between formal and informal, and even stakeholder affiliation, might sometimes blur in smaller economies/context. A representative of the Uruguayan government offered a similar portrayal when referring to plural platforms in that country.

tine government has been a leading force in the regional processes launched by multilateral organizations such as ECLAC and CITELE, but also in other, more plural spaces like the regional IGF (LACIGF) and IGF MAG. In addition, the Internet providers' association CABASE espouses the values of the technical and business sectors and maintains an ongoing presence in regional multi-stakeholder initiatives. Consequently, despite the fact that national Internet processes are not organic or coordinated at all levels, some policies, especially those linked to technical governance, are in line with the global regime.

As for Costa Rica's CCI, its scope, working methods, and composition follow the principles of multi-stakeholder governance – emphasis on working group discussions is one of the latter's key features (Hemmati, 2002). In addition, the government has repeatedly endorsed the international regime's principles and values, and Western democracies consider it a strategic player since its opposition to WCIT in 2012 and its high profile in the 2014 NETmundial Initiative in Geneva.

The Mexican Initiative Group, in turn, is strongly articulated with the values emanating from WSIS, the Tunis Agenda, and the Internet technical community's historical *modus operandi*. Nevertheless, this body and the Mexican Dialogues on Internet Governance need to inform policy-makers better, especially with regard to critical Internet resources and the "jurisdictional" turn given to many of these resources in the last two ITU Plenipotentiary Conferences.⁵⁷ In the regional preparatory meetings for the Plenipotentiary, the Mexican and Argentine delegations produced documents on the matter that sometimes evidenced a lack of understanding of the technical architectural features and other times were based on mistrust of the private sector or of multi-stakeholder arrangements.⁵⁸

At the same time, the Mexican government has been an active participant and leader in many regional multilateral (eLAC and CITELE) and multi-stakeholder initiatives (LACIGF). The scope and objectives of the new autonomous regulatory authority, the Federal Telecommunications Institute (IFT), the National Digital Strategy (whereby access to ICTs is a right guaranteed by the State),⁵⁹ and the

open, non-discriminatory, and neutral features of the Internet established by law (LFT, 2014, Articles 145 and 146) could be interpreted as legal and institutional actions that bridge the distance between the international and domestic spheres in terms of trends and best practices (MacLean et al, 2007; Correa et al, 2006). In addition, Mexico's hosting relevant regional and international Internet meetings in 2015 and 2016 is another opportunity to create new interfaces between these spheres.

Concerning the degree of coordination between these initiatives and regional processes (which were described in the first section), the latter have historically preceded domestic configurations, save in the case of Brazil. It is interesting to note that all stakeholders embarked on a consolidation of the regional mechanisms before the domestic sphere crystallized around specific institutional formations such as the ones examined here. Therefore, despite the fact that national Internet stakeholders from the technical, scientific, and government communities emerged over two decades ago along with the first Internet connections, the national processes have taken much longer to institutionalize domestically than the regional processes.

One possible explanation for this lag is the quick and successful consolidation of the transnational Internet governance regime (Drake and Wilson, 2008; Lucero, 2011), which rapidly promoted the development of regional processes as a subsidiary level for discussion and implementation of global Internet policy. In the LAC region, the series of regional government meetings held as part of the preparations of the WSIS process (Bavaro 2003, Rio de Janeiro 2004), LAC IGF (which started in 2008 and was organized initially by LACNIC representatives, RITS, and APC) are examples of the interrelatedness of the consolidation of regional and transnational structures. Yet their taking longer to develop does not necessarily make national mechanisms weaker. On the contrary, particularly in the case of the Costa Rican CCI and the Mexican Initiative Group, concentrating on the national agenda leads them to carry out their work with a greater degree of autonomy to address their concerns.

The following figure presents a mapping of the case studies analysed along two key variables. The first (on the vertical axis) is the degree of formalization of the initiative; in other words, to what extent is the initiative formalized in terms of representation, decision-making process and scope of issues. This variable also reflects how the initiative has emerged, ie whether it was created by administrative order or emerged from the bottom-up led by its participants. The second variable (on the horizontal axis) repre-

57 These are the so called "Internet-related public policy issues."The last Plenipotentiary meeting (Busan, October-November 2014) included the following resolutions touching upon several of these issues: 2, 101, 102, 133, 178, 180, ITR Resolution 3 and the Role of the ITU, and ITU PP-10 Decision 11. Based on ITU Plenipotentiary 2014 – Outcomes Matrix as of 10 November 2014 (ISOC, 2014).

58 The literature regarding participation of developing country governments and their preference for multilateral arrangements (MacLean et al, 2007; Drake and Wilson, 2008) has pointed to this aspect of the documents.

59 Article 6 of the Political Constitution of the United States of Mexico is concerned with Telecommunications and Economic Competition.

sents the degree to which policymaking is dominated by state actors. Put differently, it indicates to what extent the policymaking process involves non-state actors, ie, is a multi-stakeholder process.

This conceptual matrix of policy-making mechanisms reveals three distinct configurations that have characterized Internet governance since the 1980s. The first is the Consensus model, which is best illustrated by the IETF and the development of Internet standards in the 1980s. At a time when the Internet community was small and relatively homogeneous, the RFC model of "rough consensus and running code" was an effective mechanism for reaching agreement on the basic architectural pillars of this emerging technology. The recent Mexican initiative on Internet governance owes much to this model: it is by and large a non-formal consensus-building mechanism where state actors work alongside multiple other stakeholders.

As the Internet became more complex in its structure and geographical scope in the 1990s, a new policymaking model began to coalesce around ICANN and other focal institutions such as WSIS and later the IGF. While this phase retained the multi-stakeholder principles that characterized the first phase, the mechanisms were increasingly formalized and national governments began to demand a larger role in the policymaking process. We call this period the U.S. Multi-stakeholder phase, given the prominent role played by the U.S. government with respect to ICANN's attributions. Even if the attempts of ICANN in its origins were to become a global multi-stakeholder organization, it was still too heavily linked to its origins reflecting the Clinton administration and the interests of companies in the country (Mueller, 2002). This is also the model for Brazil's CGI and Costa Rica's CCI initiative: a formal, state-sanctioned mechanism for policymaking in which state actors are well represented, but where non state actors are also rep-

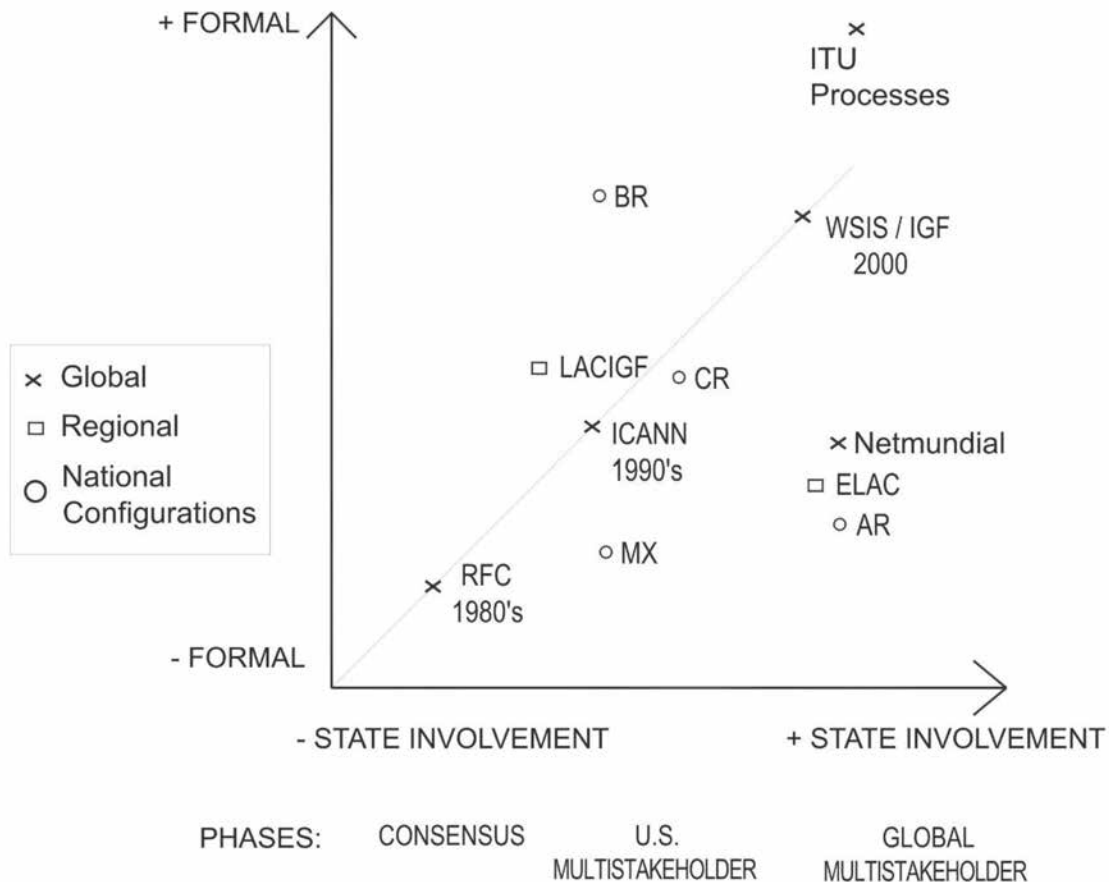


Figure 1: Policymaking mechanisms for Internet governance

resented to varying degrees (e.g., more so in the case of Brazil than in the case of Costa Rica).

The third phase, which we label a Global Mixed Regime, is characterized by the increasing pressure by state actors from the developing world for a systemic shift in the policymaking process to include more existing multilateral mechanisms, such as those of the ITU and the UN system, or regional organizations such as OAS into several of the issues concerning Internet-governance, particularly those that could be labelled as pertaining to the “public policy” domain. As this work has revealed for the Latin American region, this does not mean that there is a rejection of multi-stakeholder ventures, such as that of ICANN with its strong U.S. centric dominance, but it shows that regional actors are becoming more active promoters in the selection and combination of institutional mechanisms that they perceive are more suitable (both politically and instrumentally) to their purposes. At the national level, this is exemplified by Argentina’s CAPI, which since its first year of creation represents a policy-coordination mechanism for government agencies in which non state actors have minimal to no participation, but which seeks to engage in a more coordinated manner with the international regime, one of the key gaps which governments traditionally face vis-à-vis these new global processes. The fact that this is not a multi-stakeholder body on its own does not imply that this initiative is contrary to the multi-stakeholder governance model of the Internet. However, its lack of openness to participation from other stakeholders shapes its institutional configuration as well as the the scope of its agenda and mission.

5. Conclusions

This paper examines national Internet governance mechanisms in the early stages of the institutionalization process; it looks at the main developments that have shaped both actors' strategies and the evolution of Internet regulations in these countries. These domestic developments, aiming to shape and coordinate positions around Internet governance, reflect the maturity of national stakeholders on this matter, a maturity that will allow them to refine specific Internet-related policy issues and processes. Since the Internet has carved a space of its own in the international regime, it is expected that a similar approach will be increasingly adopted in the national arena. The bridges between the international and the domestic field will tend to rely on more formally institutionalized spaces as the state becomes a stronger player in these issues with its national bureaucracies.

The social capital of the early Internet engineers in these domestic spaces led to initial governance arrangements based on technical knowledge (Peters, 2010) – especially in the case of Costa Rica and Mexico. In other cases, such as Argentina there was a combination of hierarchical (state) control and knowledge governance. In each case, it is clear that governments are now working to formalize policymaking arrangements as the nascent informal coordination mechanisms are no longer sufficient in the current context. National policies need to address increasingly sensitive issues such as privacy, cyber security, surveillance, and net neutrality, together with a deployment of improved connectivity infrastructure.

Institutional governance plays an essential role in the construction of a national space for Internet policy-making in the countries analysed here, in that it articulates the expertise of the early Internet pioneers and the policymakers' agenda and their use of traditional mechanisms of regulation and normative control. These national initiatives must necessarily include policy-makers in systemic governance if regime changes are sought. Nonetheless, as we have described above, even those governments that have shown more ambivalence toward some of the features of the current international regime of Internet governance, like those of Argentina, Mexico, and Brazil (with its historical opposition to the unilateral control of the NTIA over the IANA functions), are working within the institutional boundaries of the global Internet governance regime.

Although the work addresses specific national cases and regional generalizations should be avoided without further analysis, there are some emerging trends that can be addressed from a comparative perspective in order to characterize regional choices. While the defining features of U.S. international Internet policy has been based in the sustained support of the founding engineering organizations that developed the core protocols, including the ICANN model for the DNS – a model that has been based in the first two phases of our figure, other regions have followed different combinations, considering the national interest of predominant states and blocks. The trajectory of Europe, organized around a strong regional body that has privileged the application of rights and obligations for different policy-areas has shown their own preferences for several Internet policy concerns, where the multi-stakeholder model of governance pre-exists arrangements around the Internet. The European bloc has served as a natural ally of the U.S. multi-stakeholder phase – even if critical of many of the arrangements surrounding Internet governance processes in bodies such as ICANN. The regions and countries that do not have a democratic tradition face extreme challenges in acknowledging many of the private sector, multi-stakeholder processes of the Internet governance regime, since it defies some of the basic domestic political economy division of social forces, and is seen to undermine the long tradition of inter-governmental organizations that address global issues.

The arguments used to define Latin American Internet governance approaches during WCIT-12 are closer to that of a region which is in the stage of developing its preferences without a clear alignment to pre-defined models, either from the U.S., Europe or the "bloc" including the Arab States, Russia and China. The lack of formal regional policy-making mechanisms in Latin America, such as those of the European Union, or the Arab League, provide a more fertile background for domestic for policy definitions and as the work has intended to portray, these choices are currently varied. While WCIT analysts have relied on definitions of "swing states" (Maurer and Morgus, 2014) to define those countries that did not show a clear preference for the current arrangements in multi-stakeholder Internet governance, we hope that this work has served to point out that it proves to be insufficient to characterize this region's orientations towards Internet policy and governance arrangements with its diverse and rich tra-

dition which has both embraced multi-stakeholder and multilateral principles. These orientations derive from a combined approach of relatively early development of the Internet infrastructure and applications layers (when compared with other regions), with close ties with the global Internet pioneers in developed countries, and on the other with a tradition of international multilateral mechanisms. In addition, the tradition of civic engagement in public life in Latin America, particularly with the democratic shift during the 1980s has balanced the predominance of one single stakeholder, principally those of governments and has promoted an increased diversity of players and forces in the political economy of these countries, which has effects on both national and international approaches to Internet policy and governance.

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- Instituto Federal de Telecomunicaciones (Federal Institute of Telecommunications) <http://www.ift.org.mx/iftweb/>
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Acronyms

CAPI	<i>Comisión Argentina de Políticas de Internet</i> (Argentine Commission for Internet Policy).
CCI	<i>Consejo Consultivo de Internet</i> (Internet Consulting Committee)
CGI.br	Comitê Gestor de Internet do Brasil (Internet Steering Committee of Brazil)
ccTLD	country code Top Level Domain
CITEL	Comisión Interamericana de Telecomunicaciones
DNS	Domain Name System
GAC	Government Advisory Committee
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
IETF	Internet Engineering Task Force
ISOC	Internet Society
ITU	International Telecommunication Union
LAC	Latin America & Caribbean
LFT	Ley Federal de Telecomunicaciones
TCP/IP	Transmission Control Protocol/Internet Protocol
TLD	Top-Level Domain
NIC	Network Information Center
NTIA	National Telecommunications and Information Administration
OAS	Organization of American States
RFC	Request for Comments
SECOM	<i>Secretaría de Comunicaciones</i>
UN	United Nations
WCIT	World Conference on International Telecommunications
WSIS	World Summit on the Information Society