CÁTEDRA TELEFÓNICA

POLÍTICA Y REGULACIÓN TELECOMUNICACIONES E INTERNET
AMÉRICA LATINA-EUROPA

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Policy coordination and Internet Governance in Latin America

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2016/51

INSTITUT BARCELONA ESTUDIS INTERNACIONALS

IBEI WORKING PAPERS

2016/51
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Publishes: Institut Barcelona d'Estudis Internacionals (IBEI)
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Legal deposit: B-21.147-2006
ISSN: 1886-2802
Barcelona, November 2017

Abstract

This paper examines the roles that telecommunications regulation and Internet governance have played over the last few decades in coordinating policies that contributed to the development of todays´global communications infrastructure. Departing from two very different conceptual models, the coordination processes of the telecommunications sector and of the Internet community have had to adapt to deal with the realities of technological convergence. After the politically charged events of the ITU 2012 World Conference on International Telecommunications, where the future of Internet governance was presented as a necessary choice between the existing governance arrangements or an expanded role for multilateral organizations, recent developments now appear to indicate that a more cooperative and productive approach to policy coordination has gained traction. This includes the recognition, by all those involved, that Internet governance encompasses both multilateral and multistakeholder coordination instances, with different tasks assigned to governments and multilateral organizations, the private sector and to multi-stakeholder institutions. Nonetheless, many challenges remain on the road to achieving global coordination, given the dynamic and complex nature of the issues at stake. In this context, the processes of policy coordination in this area are initially examined in relation to three current issues: connectivity costs and the role of Internet exchange points, network neutrality, and the debate on privacy, jurisdiction and data localization. In light of these examples, this paper then takes closer examination at the potential of regional public policy networks in further enhancing Internet governance policy coordination processes in Latin America. Increasingly, these public policy networks are viewed as a means to advance the regional agenda and increase participation in the multiple forums in which international Internet governance decision-making is actually taking place.

Keywords: Internet, telecommunications, governance, policy coordination, public policy networks, Latin America.

1. INTRODUCTION

Telecommunication networks have grown over the last century to become the global infrastructure that it is today. In 2015, there were over 7 billion mobile telephone subscriptions[1] worldwide. This was achieved, to a great extent, as a result of internationally agreed regulatory framework that includes common standards and procedures established through coordination mechanisms centered at the International Telecommunication Union, a specialized agency of the United Nations.

The Internet, in turn, has grown over the last decades to also become a global communications infrastructure that reaches almost half the world population[2]. It evolved continuously, since its beginnings as a research and academic network, into the structure of the Internet of today. It is coordinated via a complex multi-stakeholder and highly centralized organizational structure, but not subject to regulation *per se*. The fact that the Internet is based on open standards has allowed it to develop into a highly flexible global platform that has transformed not only communications, but all areas of the political, economic, cultural and social life around the globe.

Now that the Internet is on its way to achieving near-global populational coverage, the challenge is to adequately coordinate national, regional and, ideally, globally harmonized policies on topics that can affect the impact of the "network of networks" that is the Internet.

From a network engineering point of view, over the last two decades telecommunications networks and the Internet infrastructure have been converging over a common platform based on the Internet Protocol (IP). Notwithstanding this technical reality, from a "governance" point of view, this convergence has been slower and will require a lot more coordination effort over the next years. This is not to say that a single governance entity could fulfill this role. The most likely and desirable scenario is the co-existence of several instances of "Internet governance" (Kurbalija, 2014), each with its own area of specialization.

In the last few years, a number of Internet-related issues have come up and a lot of debate has taken place on how to deal with them. This paper will discuss two issues where a certain degree of coordination has been achieved: the question of Internet exchange points (IXPs) and their role in reducing the costs of international Internet connectivity, and the broader and cross-cutting issue of network neutrality. Additionally, it will include a close examination of the pending coordination on the issue of privacy and jurisdiction, and the associated debate on data localization.

[1] See www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx
[2] See www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2015.pdf

The issue of IP interconnection and the cost of IP transit[3] has been a contentious issue in the expansion of the Internet. Although IXPs have been known to be a key element to the solution of this issue, the truth is that only fairly recently have the full benefits of their implementation been extended to many developing countries, through effective capacity building, promotion of best practices and sharing of market-friendly regulatory measures.

Network neutrality (Wu, 2003) over the last few years has become a hot topic, and can be broadly defined as a principle that all traffic should be treated equally on the Internet, with no discrimination by sender, receiver, device, content, service or application. Abyding by this principle has policy implications in many areas, including privacy, competition, innovation (Yoo, 2010) and, not least, the balance of power in the Internet value chain. Of interest to this study are the mechanisms that have been applied for the implementation of network neutrality by different countries and regional groupings – most notably in Europe, in the USA and in some countries in Latin America.

The third issue, currently unresolved and deserving great attention, is that of privacy and jurisdiction over personal data on the Internet, including the debate on data localization strategies. This issue has been of concern in many countries, given the implications for its citizens. Here the lack of broad international coordination mechanisms at the policy-level is identified as a serious vulnerability, and possible solutions will be examined.

This paper will initially focus on these three issues and the policy coordination mechanisms that have been identified to deal with each one of them. It will be followed by a discussion of means to further enhance coordination mechanisms, particularly in the case of Latin American countries, while also noting the existing organizations in the region where this coordination process could take place, leading to an improved process of Internet governance.

The most comprehensive effort so far to identify the key issues in Internet governance is summarized in the recent work of the UN Commission on Science and Technology for Development. The CSTD mapped (CSTD, 2014) these issues in the categories of infrastructure and standardization, security, human rights, legal, economic, development and sociocultural. This led to the identification of forty high priority Interrnet governance issues, including cyber-security, trade and taxation, privacy and jurisdiction.

Today, an extremely important debate in Internet governance is establishing the appropriate instances for discussion and deliberation on specific topics of the agenda. There is general agreement that multistakeholder participation is positive, providing diverse expertise and inclusiveness, despite the challenges of ensuring effective participation of all stakeholders. In this context, it seems clear that the technical and standardization issues require the technical and academic communities, and the

[3] In a transit arrangement one network pays another network for interconnection. In a peering relationship networks tipically exchange traffic in a settlemnet-free arrangement. See www.fcc.gov/Bureaus/OPP/working_papers/oppwp32.pdf

private sector plays a significant role in issues that relate to infrastructure and development. The question of the role of governments and multilateral organizations is currently the focus of much attention, with the gradual realization that public policy issues can only be dealt with effectively with the full participation of these essential stakeholders in the Internet governance process.

2. THE BENEFITS OF INTERNET/TELECOMS POLICY COORDINATION

Over the last century the telecommunications sector has experienced many technological cycles, but undoubtedly the transformational impact of the Internet has no parallel in past cycles. The Internet has become an integral part of the structure of telecommunications networks, and technological evolution will tend to further accelerate integration of networks and services.

The Internet has evolved into a truly global infrastructure, and thus presents new challenges for international policy coordination and regulatory framework harmonization among countries and regions. The intricately interconnected agendas of Internet governance and telecommunications regulation have highlighted the need for more active policy coordination.

The International Telecommunications Union (ITU) is the traditional locus for harmonization of the regulatory framework among countries, and Internet-related issues are increasingly on the ITU negotiation table. A clear example comes from the ITU 2012 World Conference on International Telecommunications - WCIT-2012[4], where the politically charged and highly contentious atmosphere (Aguerre, 2013; Aguerre and Galperin, 2015) seemed to indicate an impasse. Nonetheless, just six months later, agreement was being reached on many of the very same Internet-related issues raised at the WCIT-2012, during the ITU 2013 World Telecommunications Policy Forum - WTPF-2013[5].

Further agreement followed at the ITU 2014 Plenipotentiary Conference[6]. Most recently, in December 2015, the United Nations General Assembly concluded a ten year review of the World Summit on the Information Society - WSIS+10, a process that brought together governments, the private sector, civil society, international organizations, the technical and academic communities and all other relevant stakeholders in taking stock of the progress made in the implementation of the WSIS outcomes. The approved document reaffirms the commitment to continue the implementation of the WSIS 2013 Geneva Plan of Action[7] and the WSIS 2015 Tunis Agenda[8], and to harnessing the potential of information and communications technologies to achieve the goals the UN 2030 Agenda for Sustainable Development[9]. With regard to Internet governance, the WSIS+10 Resolution[10]

[4] See www.itu.int/en/wcit-12/Pages/overview.aspx
[5] See www.itu.int/en/wtpf-13/Pages/opinions.aspx
[6] See www.itu.int/en/plenipotentiary/2014/Pages/default.aspx
[7] See www.itu.int/net/wsis/docs/geneva/official/poa.html
[8] See www.itu.int/net/wsis/docs2/tunis/off/6rev1.html
[9] See sustainabledevelopment.un.org/post2015/transformingourworld

recognizes that there are many cross-cutting international public policy issues that require attention and have not been adequately addressed.

A central element to the possibility of coordination is the capacity to formulate policy and establish regulatory frameworks that can be harmonized. Extending the benefits of Internet access to all is still a global challenge, given that half the world population is not yet connected (ITU, 2015). In fact, one of the explicit targets of the United Nations Sustainable Development Goals is to "Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020"[11].

Developing countries have an agenda relating to the Internet, with a clear focus on increasing both fixed and mobile broadband Internet access, as reflected in the fact that most countries now have a National Broadband Plan (Broadband Commission, 2015). Studies have shown evidence of correlation between investment in broadband infrastructure and economic growth, pointing to the potential for 1.38% GDP growth per 10% increase in broadband penetration in low and middle-income economies. Besides the immediate network effects of these investments, it can also and bring forward long-term aggregate spillover effects which improve the productivity of the entire economy (Qiang, 2009).

Interestingly, a more recent study has pointed out that in the case of Latin America and the Caribbean, a 10% higher broadband penetration is associated with 3.19% higher GDP and 2.61% higher productivity (García Zaballos and López-Rivas, 2012). These are significant incentives to a process of policy coordination, from which the telecommunications sector regulatory perspective and the Internet governance perspective could benefit.

The International Telecommunications Union, as a specialized agency of the United Nations, is at the center of the international telecommunications regulatory structure. It is a multilateral organization, where member states have representation, but also with the participation of other stakeholders, most notably from the technical and academic sectors. ITU member states coordinate policies and harmonize regulations through its recognized Regional Organizations (APT, AMSG, ATU, CEPT, CITEL and RCC)[12]. Over the last few years, increased participation from civil society has been promoted, albeit in an informal role.

The ITU has for over one and a half century coordinated standardization and spectrum harmonization, which is at the heart of the tremendous growth of mobile telephony worldwide. Agreements among the ITU member states on standards and harmonized frequency bands for mobile

[10] See workspace.unpan.org/sites/Internet/Documents/UNPAN95735.pdf
[11] See www.un.org/sustainabledevelopment/sustainable-development-goals/
[12] See www.itu.int/en/ITU-R/conferences/wrc/2015/Pages/reg-prep.aspx

networks have allowed that economies of scale could be achieved in order to produce cost-effective infrastructure equipment and personal devices. This, in turn, has created a truly global communications access network. The advent of smartphones with data capabilities has provided the means for literally billions of people to access the Internet. Mobile telephony has proved to be the key technology for digital inclusion, particularly in Latin America[13], but also in Africa and Asia. These developments are in part the result of a tremendous amount of policy coordination that translated into coherent regulation.

The growth of the Internet to become todays´ global communications infrastructure has been based on coordination mechanisms that have evolved and expanded. At the heart of many of the Internet governance processes, is the Internet Corporation for Assigned Names and Numbers (ICANN) and the I* group of organizations[14] (Internet Society - ISOC, Internet Engineering Task Force – IETF and the Internet Architecture Board - IAB), as well as the Regional Internet Registries (AFRINIC for Africa, ARIN for North America, APNIC for the Asia-Pacific Region, LACNIC for Latin America and the Caribbean, and RIPE NCC for Europe).

The ICANN structure, with its supporting organizations, has responsibility over operational functions of the Internet, most notably those related to domain names and IP addresses. ICANN is at the top of a coordination process that is described as a "bottom-up, consensus-driven, multi-stakeholder model"[15]. It is expected that in 2016 the United States Commerce Department's National Telecommunications and Information Administration (NTIA) will transition to ICANN the administrative role that it still maintains over critical functions of the operation of the Internet[16].

Over the last decade, increasingly the United Nations, with its specialized agencies (ITU, the UNCTAD Commission on Science and Technology for Development - CSTD, and UNESCO) and the Internet Governance Forum (IGF) have played a role in better balancing the process of international Internet governance. More recent initiatives outside the scope of the UN, such as NetMundial[17], have also provided new alternatives for the discussion of these issues.

The complexity of the issues at stake and the diversity of organizations where they are discussed point to the need for an additional effort of coordination among interested parties. Developing countries have historically been underrepresented at the Internet governance table, which in turn signals the need for increased regional coordination mechanisms and global engagement. In order to have an effective voice at global discussions, regional groupings of countries must establish a

[13] See gsma.com/newsroom/wp-content/uploads/2013/12/GSMA_LatAM_BOP_2013.pdf
[14] See www.isoc.org/pubpolpillar/docs/internetmodel.pdf
[15] See www.icann.org/resources/pages/welcome-2012-02-25-en
[16] www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-internet-domain-name-functions
[17] The NetMundial meeting was held in Brazil (April 2014), brought together 1,480 stakeholders from 97 countries, representing governments, private sector, civil society, technical community and academia from around the world to address Internet governance challenges. Its concluding, non-binding **Multistakeholder Statement** contained a shared set of Principles and a Roadmap for the evolution of Internet cooperation and governance. Available at netmundial.br

common agenda, which will gain more traction at the traditional Internet governance forums if it reflects an inclusive view of all relevant stakeholders, including governments, the business sector, the academic community and civil society.

3. RECENT AGENDAS OF POLICY COORDINATION

The issues at the intersection of the domains of telecommunications regulation and Internet governance provide good insight into their common agendas and point to the need for more active policy coordination. In fact, coordination processes on precisely these issues have actually proved to be effective and progress is being made. In order to understand how this approach to policy coordination has advanced, it is important to examine the mechanisms that have been adopted and how they can contribute to further enhance broader policy coordination in international Internet governance.

3.1 Internet Exchange Points: a leading case

Internet exchange points (IXPs) are a key infrastructure element in building globally interconnected Internet backbones. An IXP is a physical location at which service providers and network operators exchange traffic between their networks, identified as autonomous systems.

By directly exchanging part of their traffic via settlement-free peering, networks reduce the portion of the total traffic which must be delivered via transit providers, thus reducing the cost of their service and increasing network performance. The structure of the IXP provides the positive externalities of enhanced routing efficiency and fault-tolerance, reduced latency and reduced bandwidth requirements (Cavalcanti, 2010; Cavalcanti 2011).

Despite the direct benefits of the implementation of IXPs and other positive effects they generate, the fact is that this piece of infrastructure did not exist in many countries until very recently, even in a scenario of continuous growth of the Internet. This can be attributed to factors such as specific market conditions and, in some cases, a lack of technical expertise locally to set up and operate an IXP.

For a number of years now some Latin American countries had been working on Internet policy coordination (Aguerre and Galperin, 2015) and pushing the agenda on Internet Exchange Points (IXPs). As a first result of this effort IXPs were included in the 2012 International Telecommunications Regulations[18], although this required text that avoided the use of the word Internet. Later this issue emerged by consensus at the WTPF-2013 as Opinion 1: Promoting Internet

[18] See ITU International Telecommunications Regulations , Article 3.7. in www.itu.int/en/wcit-12/documents/final-acts-wcit-12.pdf

Exchange Points (IXPs) as a long term solution to advance connectivity. Further coordination on the IXP issue was achieved by ITU member states, as reflected in Resolution 102[19] of the ITU 2014 Plenipotentiary Conference.

This is a case in which persistent policy coordination and regulatory action have led to the creation of a favorable environment for the deployment of IXPs. In Africa, parts of Asia and of Latin America, the recent spread of IXPs is the direct result of initiatives of a number of organizations, including the Internet Society (ISOC) and the ITU.

a) Regional impact of IXPs on Internet expansion in Latin America

The first open and neutral IXPs date back to the early 1990's in the United States, many of which are large commercially-operated IXPs. Europe has developed some very successful open and neutral IXPs, including DE-CIX in Frankfurt, LINX in London and AMS-IX in Amsterdam, all of which are members of the well-structured Euro-IXP[20] association.

In Latin America, both Argentina and Brazil were the first countries to develop IXPs, given their history of early adoption of the Internet and strong technical and academic communities interested in the deployment and operation of these exchange points. The benefits of IXPs for the region were clearly realized, since these allowed the exchange of a significant portion of the locally generated traffic, thus avoiding the need to exchange traffic over transit routes provisioned by international backbone operators. Additionally, there were other technical benefits, such as reduced latency and increased fault-tolerance, as well as the economic benefits of increased bargaining power in purchasing transit capacity. Over the years, these two countries have developed an extensive network of open and neutral IXPs: 15 IXPs in operation in Argentina[21] and 25 IXPs in Brazil[22], and they currently cooperate on integration and expansion of infrastructure in the region.

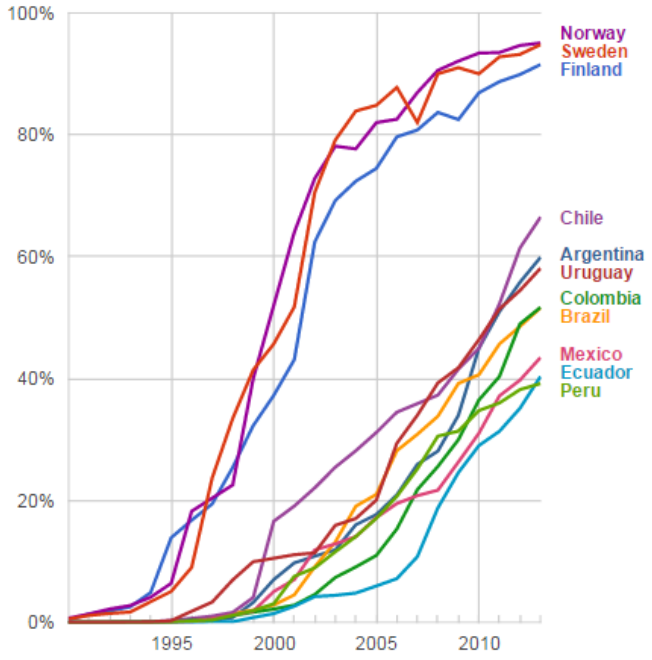
The wider benefits of policy coordination in Latin America and the Caribbean on the issue IXPs, as well as the difficulties that still persist in the region have been the focus of recent studies (Galperin, 2013; Galperin, Alvarez-Hamelin and Viecen, 2014). Nowadays most Latin American countries operate at least on national IXP. Furthermore, coordination mechanisms are being established, which include the regional association of IXPs (LAC-IX[23]) and the ITU Regional Connectivity Forum[24].

[19] See ITU Resolution 102 (Rev. Busan, 2014), in www.itu.int/en/plenipotentiary/2014/Documents/final-acts/pp14-final-acts-en.pdf
[20] See www.euro-ix.net
[21] See www.cabase.org.ar/wp-content/uploads/2015/07/Poster-Cabase15-06-20151.pdf
[22] See ix.br/localidades/atuais
[23] See www.lac-ix.org/
[24] See www.itu.int/es/ITU-D/Regional-Presence/Americas/Pages/EVENTS/2015/0910-PA-intrcnectvdad.aspx

Part of the coordination process on this topic is centered on extending the benefits of IXPs, so that they can help to promote Internet development in areas serviced by small and medium-sized Internet Service Providers (ISPs). Besides the economic benefits of stimulating competition in the IP interconnection market and ensuring a level playing field, the deployment of IXPs carries the abovementioned externalities, as the utility of an IXP is directly related to the number of networks that are present at that particular exchange point.

The significant expansion of Internet connectivity in the region helps to explain the recent growth in Internet access in Latin America. The most recent statistics published by the ITU highlight this fact, although there is still much to be done towards providing the level of Internet use achieved in the Nordic European countries, as illustrated in Figure 1.

Figure 1. Percentage of individuals using the Internet in selected countries



Source: ITU[25]

Despite the positive effects of local and national IXPs, a further coordination challenge still remains in the area of IXPs in Latin America - the establishment of Regional IXPs. Fiber optic submarine cable backbone networks that provide international Internet transit capacity tend to converge on very few locations. Thus, it is essential that smaller network operators can also access interconnection facilities either directly at these locations, or indirectly through a regionally distributed mesh of interconnected IXPs, in order to increase their bargaining power when purchasing transit capacity. These Regional IXPs would be strategically located in order to maximize the benefits of access to submarine cables at their landing stations.

[25]See www.itu.int/net4/itu-d/icteye/

Reaching regional coordination to agree on the location of these regional hubs and directing investments across the region to reach these points is the current focus of attention. A recent study sponsored by the CAF – Development Bank of Latin America (CAF, 2014) has provided a comprehensive review of the issue as well as the technical and economic rationale for the initiative, providing detailed recommendations as to the ideal locations for these IXPs. However, despite recent efforts[26] this last aspect has proved to require a lot more policy coordination, as it entails directing investments towards a common regional objective.

b) The Future of IP Interconnection

Deploying IXPs is one of the building blocks in addressing a wider issue that is the cost of IP interconnection. Connectivity costs for countries and regions that are still building their Internet infrastructure has been for many years an area of concern. The current interconnection arrangements, based exclusively on peering and transit, tend to impose the burden of expansion at the periphery of the Internet. The fact is that these countries still have to purchase transit at full cost, since they are yet unable to generate enough traffic to benefit from peering arrangements.

The ITU has contributed significantly to the study of this issue, since the early work of Recommendation ITU-T D.50, particularly in Supplement 2: Guidelines for reducing the costs of international Internet connectivity. At the ITU 2014 Plenipotentiary Conference, further focus was put on the issue, in the revised version of Resolution 101 - Internet Protocol-based networks, which resolves "to continue the study of international Internet connectivity as an urgent matter".

Meanwhile, the emergence of global Internet content and application providers, especially the major Content Delivery Networks (CDN), greatly altered the IP Interconnection value chain and has the potential to influence the negotiating power among connectivity stakeholders within the Internet ecosystem (ADL, 2014). In this context, new IP Interconnection arrangements could support further development of the Internet, and thus, new IP Interconnection business models would be needed to accelerate innovation.

Over the last few years a number of studies have focused on the question of the future of IP interconnection, which points to the fact that the issue will require further policy coordination at the regional and global levels. Extensive studies have been conducted in recent years to inform action on this issue in Europe (Marcus and Elixmann, 2008; BEREC 2012a). It appears that a similar level of coordination could be obtained in Latin America, and in depth studies could greatly assist in informing regional coordination processes.

[26] See www.itu.int/en/ITU-D/Regional-Presence/Americas/Pages/EVENTS/2015/0910-PA-intrcnectvdad.aspx and www.itu.int/en/ITU-D/Regional-Presence/Americas/Pages/EVENTS/2014/1201-DO-Cnntvity.aspx and www.itu.int/en/ITU-D/Regional-Presence/Americas/Pages/EVENTS/2014/0804-PY-Cnntvity.aspx

3.2. Network Neutrality: the current issue

Network neutrality is a well-established concept in telecommunications, as initially applied to circuit-switched voice telephony, and network operators are subject to service standards and interconnection regulation by recognized regulatory authorities.

Network neutrality, as applied to the Internet, is a principle that has received many definitions since originally proposed (Wu, 2003). It basically refers to the concept that all traffic should be treated equally on the Internet, with no discrimination by sender, receiver, device, content, service or application. This, in turn, implies the absence of unreasonable discrimination on the part of network operators in transmitting Internet traffic, although there is broad agreement that some measure of traffic management is required.

In the United States, the Federal Communications Commission (FCC) originally set out guidelines on network neutrality in 2010, establishing three basic principles: *transparency* (to publicly disclose accurate information), *no blocking* (not block lawful content, applications, services or devices) and *no unreasonable discrimination* (not unreasonably discriminate lawful network traffic). In 2015 the FCC set out updated rules to protect the Open Internet[27]: *no blocking*, *no throttling* (not impair or degrade lawful Internet traffic on the basis of content, applications, services, or non-harmful devices) and *no paid prioritization* (not favor some Internet traffic over other, *i.e.* no *fast lanes*), although explicitly admitting *reasonable network management*. The FCC further determined that it would hear complaints and take appropriate enforcement action whenever it determines that unreasonable interconnection activities have taken place.

In Europe the national regulatory authorities took varying degrees of action on network neutrality (Marsden, 2014). Ofcom in the UK took a ligh self-regulatory approach, whereas ARCEP in France realeased a detailed report[28] pointing that further legislation would be required. In 2012 the Netherlands became the first European nation to formally introduce mandated network neutrality, followed by Slovenia that same year.

For several years now, the Body of European Regulators of Electronic Communications (BEREC), the European Commission and the European Parliament have been studying issues relating to network neutrality, interconnection, traffic management and quality of Internet service (BEREC, 2012a; BEREC, 2012b; BEREC, 2012c; European Parliament, 2014).

In 2013 the European Commission adopted a legislative package for a "Connected Continent: Building a Telecoms Single Market"[29] with provisions relating to network neutrality. In October 2015

[27] See apps.fcc.gov/edocs_public/attachmatch/DOC-332260A1.pdf
[28] See www.arcep.fr/uploads/tx_gspublication/rapport-parlement-net-neutrality-sept2012-ENG.pdf
[29] See eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013PC0627&from=EN

the European Parliament voted the first EU-wide net neutrality rules, determining *no blocking or throttling* of online content, applications and services.

More recently, BEREC informed that it was tasked to develop European Net Neutrality guidelines[30] in order to contribute to the consistent application of the regulation in Europe. Final Net Neutrality guidelines are expected to be issued by August 2016, including topics such as the kinds of traffic management practices which will be allowed under the new rules, the role and nature of *specialised services* and how they relate to the new rules and the extent to which commercial practices, such as *zero-rating*, can co-exist with the new rules.

In 2010, Chile became the first Latin American country to introduce legislation dealing with network neutrality, followed by Colombia in 2011. Brazil more recently adopted specific Internet legislation in 2014 (Marco Civil da Internet[31]), which includes general provisions for network neutrality, but importantly upholds regulatory oversight on these matters and the ability to take action on issues such as those relating to reasonable network management and interconnection arrangements.

In the Internet ecosystem new *players* enter the services market continuously, bringing new functionalities and challenging traditional services, often with a disruptive effect. The existence of this favorable environment for innovation is associated with the principle of network neutrality. Nonetheless, most regulatory and legal frameworks for network neutrality that have been established (*e.g.*, in Europe, in the USA and in Brazil) include a regulatory oversight role, which allows for the continuous evaluation of *reasonable traffic management* practices and the power to act whenever deemed necessary. This will quite obviously become an area of focus for further policy coordination, given the extremely dynamic nature of the Internet.

A relevant aspect to point out here is the fact that in Europe there has been extensive use of BEREC studies on network neutrality, in order to support policy coordination and decision-making. Latin America could greatly benefit from similar background studies that could inform the coordination process in the region on a number of relevant issues relating to Internet and telecommunications.

Network neutrality is a topic of great importance for the future development of the Internet in Latin America, as it relates both to the terms of use of those who are already online and to the infrastructure investments that are necessary to provide digital inclusion for those who still remain offline. On the one hand, the Internet must be a space for innovation, allowing the entry of new players and services, and on the other there must be room for reasonable management of a

[30] See berec.europa.eu/eng/news_and_publications/whats_new/3551-berec-has-started-its-work-to-develop-european-net-neutrality-guidelines
[31] See www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l12965.htm

continuously expanding network infrastructure. Understanding these dynamics in the particular context of Latin America and coordinating policy in the region are essential elements to advance the agenda of integration.

3.3. Debate on Privacy, Jurisdiction and Data Localization: the need for coordination

The term data sovereignty relates to the concept that data is under the jurisdiction of the country where it physically resides, allowing law enforcement access to servers and data. In this regard, data localization policies can establish a number of requirements, but in general refer to provisions that limit the storage, movement and processing of digital data. They can apply to requirements that data only be processed by entities located within a given jurisdiction, that data only be locally stored, or that data traffic only be routed within a geographical boundary. These concerns were especially highlighted after the revelations of widespread surveillance of Internet traffic and massive data collection.

Several proposals have appeared to localize Internet data and to establish how Internet traffic is to be routed. These include requirements such as mandatory storage of citizens' data in their respective countries, local hosting of application servers, launching of national email services, restriction on international Internet transit routes, and investment in alternative submarine cables.

The motivation for countries to establish data sovereignty requirements and jurisdictional control over information about their citizens stems from the fact that they don't want to have to rely on foreign entities complying with government demands and requests. Regardless of the wider discussion on the effect of data localization on the Internet, the truth is that many governments already have localization requirements for certain types of information, especially on national security matters[32].

However, wide-ranging data localization requirements may have an overall negative economic impact. The domestic benefits of data localization for local enterpises may be outweighed by broader negative impacts that would result from these requirements.[33] Nonentheless, in response to public concern and in anticipation of prospective government regulations, global companies are already starting to offer local servers.

As a side effect of the discussion on data localization, there is a growing concern with the possibility of Internet fragmentation. The concept of the Internet evolving from "single" to "fragmented" has been widely criticized (Drake, Cerf and Kleiwächter, 2016).

On the other hand, some researchers (Noam, 2013) envision a future "federated" Internet as a potentially positive development. Given the recognition that only so much multilateral agreement is

[32] See papers.ssrn.com/sol3/papers.cfm?abstract_id=2407858
[33] See www.ecipe.org/app/uploads/2014/12/OCC32014__1.pdf

possible, different policy approaches would tend to emerge. To ensure interoperability, there would be the need for intermediaries to supply bridging as a service, such as the cloud providers. This system of interconnected private Internet arrangements would co-exist with the public Internet. Interestingly, while advocating that various mechanisms and arrangements could be created to maintain interoperabilities, the author recognizes that this scenario would only be feasible provided the arrangements were subject to a single overall international decision process.

With or without data localization requirements, the fact is that privacy and jurisdiction are issues currently at the center of the Internet governance debate, including conditions under which a court in a given country can decide on an Internet-related dispute and to what extent domestic law can be applied thoroughout the Internet. Clearly, Internet-related issues such as *consent*, the *right to be forgotten* and *local court jurisdiction* over citizen's data, are central to this debate.

In October 2015 the European Court of Justice ruled against the so-called "Safe Harbour" agreement that existed between the EU and the United States. A new recent agreement has been reached[34], known as the "EU-US Privacy Shield", which would impose new strong obligations on the data importer as well as clear safeguards and transparency provisions. However, in the absence of a broader international framework, a number of countries continue to consider data localization requirements, while only a few have actually implemented legislation[35].

Alterantive policies could also be examined, including the expansion of encryption tools. The widespread use of encryption would enhance privacy and significantly raise the cost of surveillance generally. It is recognized that encryption can be applied to various layers of the Internet while preserving its decentralized structure and strengthening existing frameworks. Furthermore, the use of encryption tools has no negative impact on the free flow of information and strengthens overall Internet security.[36]

Perhaps this is an area where the focus of policy coordination could be directed, since stronger encryption has received growing political traction around the world. The question that remains is whether broader coordination is possible in order to establish internationally agreed resolution mechanisms for the questions of privacy and jurisdiction, while resolving the debate on data localization.

[34] See europa.eu/rapid/press-release_IP-16-216_en.htm
[35] See law.emory.edu/elj/_documents/volumes/64/3/articles/chander-le.pdf
[36] See ccdcoe.org/cycon/2015/proceedings/04_maurer_morgus_skierka_hohmann.pdf

4. THE PROCESS OF POLICY COORDINATION IN INTERNET GOVERNANCE

Internet governance can been described as an arena where the key stakeholders - national governments and international organizations, private corporations, the technical community and civil society representatives - compete to change the existing balance of power.

Drake and Kaspar (2014), when looking at options for institutional improvements to the global Internet governance ecosystem, discuss the need for better coordination of Internet-related policy making, as well as for a closer analysis of events and trends. The view that this ecosystem lacks sufficient mechanisms for the continuous monitoring, analysis, and sharing of governance related information first emerged during the discussions of the Geneva phase of the WSIS process, which in turn led to the working definition of Internet governance first advanced in the Working Group on Internet Governance - WGIG Report[37] and subsequently included in paragraph 34 of the Tunis Agenda[38]: "A working definition of Internet governance is the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet".

In fact, when earlier reflecting on the Geneva phase of the WSIS process, Drake (2004), who had participated in the WGIG, compiled a series of observations, including the perception that Internet governance mechanisms vary widely in their institutional attributes, and the need for an integrated analysis that reveals weaknesses, gaps and tensions in the governance architecture. He notes that the technical and policy issues often cannot be neatly separated, and that developing countries would be particularly unwilling to accept a sharp boundary line between the technical and policy realms. This is reflected in paragraph 35 of the Tunis Agenda: "We reaffirm that the management of the Internet encompasses both technical and public policy issues and should involve all stakeholders and relevant intergovernmental and international organizations".

Kleinwachter (2013) mentions that after revelations of Edward Snowden the Internet is no longer just another policy issue, and has become high priority for policy decision-makers. He stresses that within the Internet governance system the traditional national legislation and intergovernmental agreements continue to play a role. However, they will have to be embedded into the broader multistakeholder environment. On the other hand, the new emerging governance mechanisms will have to recognize existing frameworks and regulations on various levels.

When Internet governance is placed in the broader context of cyber-security, Nye (2014) points out that governments want to protect the Internet so that their societies can continue to benefit from it, but at the same time, they also want to protect their societies from what might come through

[37] See www.wgig.org/docs/WGIGREPORT.pdf
[38] See www.itu.int/net/wsis/docs2/tunis/off/6rev1.pdfnotes

the Internet. Given this context, some of the bipolarity in alignments that characterized WCIT-2012 is seen to have eroded. A good example is the approval by the United Nations General Assembly of Resolution 68/167[39] - "The right to privacy in the digital age", an initiative jointly led by Brazil and Germany and broadly endorsed as a result of inter-regional policy coordination between Latin America and Europe.

DeNardis (2014) when addressing the theoretical question of whether the United Nations or some other organization should control the Internet concludes that the appropriate question should be determining which is the most effective form of governance in each specific context. Lewis (2014) believes that the the multi-stakeholder model will be modernized and made more globally inclusive, allowing for the roles of the stakeholders to be rebalanced so that governments gain a greater say in those areas of traditional governmental concern. In his view the key issues are defining the role of the UN, identifying those issues where governments should lead and those best left to non-governmental actors. While acknowledging the difficulties in developing a coordinated international approach to a governance model, it is viewed as essential for progress, and should start with very broad areas of common interests.

DeNardis and Raymond (2013) highlight the need to determe the optimal types of administration to promote an adequate balance in Internet governance, with some tasks assigned to governments and multilateral organizations, while others to the private sector and others to multi-stakeholder institutions. Nonetheless, multistakeholder participation is viewed as a positive development, expanding the consultative base and providing diverse expertise. However they caution that the open nature of the multi-stakeholder process does not guarantee by itself an effective participation of all stakeholders.

In this context of the evolving structure of Internet governance, an increasingly important mechanism is the establishement of public policy networks, which can be defined as sets of formal and informal linkages between governmental and other actors structured around shared beliefs and interests.

Reinicke and Deng (2000) characterize global public policy networks as a creative new arrangement to address issues that arise from liberalization and the information technology revolution. They argue that these dynamics have produced negative side-effects on global governance institutions, which may be framed in terms of two governance gaps: an operational gap, due to lack of information, knowledge, and tools needed to respond to the complexity of policy issues, and a participatory gap that prevents understanding and agreement on critical policy issues.

[39] See www.un.org/ga/search/view_doc.asp?symbol=A/RES/68/167

Establishing public policy networks that are inclusive and resilient may prove to be a key element in closing these gaps in Internet governance and promoting broader policy coordination, both at the regional level and globally.

In summary, a minimum set of basic criteria should be met in order to reach a reasonable degree of policy coordination in Internet governance. First, that the issues are clearly identified and mapped, in terms of both scope and the cross-relationships between the different policy issues. Second, that the roles of the different stakeholders are acknowledged and well understood, providing an environment that is conducive towards consensus-building. Third, that policy networks are established, thus ensuring the dissemination of information and the capacity to respond to the complexity of policy issues. Finally, it is essential to build on cases of success, creating a virtuous circle of coordination, in which formulation and discourse translate into action, and stimulate further coordination.

5. THE ROLE OF POLICY COORDINATION INSTANCES IN LATIN AMERICA

Since the World Summit on the Information Society (Geneva 2003, Tunis 2005) the debate over the roles of different stakeholders in Internet governance has been an important issue for developing countries, particularly those in Latin America. Seeking a more active role, they have advocated greater engagement both within the UN system – ITU, UNCTAD/CSTD, UNESCO and other agencies - as well as at the ICANN and its affiliated organizations.

Over the last few years, much of the debate on Internet governance has been inappropriately framed in terms of a necessary option between the "multi-stakeholder" and the "multilateral" instances for the discussion and deliberation on Internet-related issues. This polarization was especially visible at the WCIT-2012, which approved the revised International Telecommunication Regulations - ITR[40].

Most Latin American countries adopted the new ITRs, but their motivations for this stance have often been misinterpreted (Aguerre, 2013). Such is the case when these countries are portrayed as "swing states"[41] that can be persuaded into an option between the two extreme views – multi-stakeholder vs. multilateral. In fact, from their perspective, these two approaches to Internet governance are not mutually exclusive, but complementary.

While from the point of view of Latin American countries adopting the ITRs broadens their participation and supports the multilateral approach to advance a particular subset of issues on the Internet governance agenda, on the other hand several of these countries already have an established

[40] See www.itu.int/en/wcit-12/documents/final-acts-wcit-12.pdf
[41] See www.cigionline.org/sites/default/files/no5_3.pdf and https://www.cigionline.org/sites/default/files/no7_2.pdf

national multi-stakeholder Internet governance strucutre[42]. In their view, international Internet governance should include both multilateral and multi-stakeholder instances, each one dealing with the specific issues as appropriate, but always reaching decision-making as a result of a participatory process involving stakeholders.

At approximately the same time of WCIT-2012, Latin American countries were also actively discussing international Internet governance issues at ICANN. One of these issues resulted from the fact that the ICANN board had approved in 2011 an increase in the number of generic Top Level Domains (gTLDs). In 2012 two companies in the United States, Amazon and Patagonia, requested new Top Level Domains (.amazon and .patagonia).

ICANN receives input from governments through the Governmental Advisory Committee (GAC). The GAC is only able to provide non-binding "advice" on issues of Internet-related public policy, particularly where ICANN's activities affects policies and national laws or international agreements. Latin American countries presented at the GAC their objections to handing these domains to private companies, but the issue remained unresolved when discussed through the established ICANN governance mechanisms. The ICANN board failed to act on previously existing advice from the GAC on the issue of geographic TLDs. This concerned Latin American countries and triggered national and regional coordination mechanisms, including formal statements at multilateral meetings. Ultimately this issue was resolved when United States Government withdrew its consensus-blocking position[43] at the GAC, which in turn signaled a way-forward to settle the question.

Despite these events that date back to 2012, much progress has taken place over the last few years. The recent agreement that was achieved at the high-level meeting of the United Nations General Assembly which concluded the ten year review of the World Summit on the Information Society - WSIS+10, provides clear evidence that multilateral and multi-stakeholder organizations have come closer.

The UN WSIS+10 review process was open an inclusive, with the participation of all stakeholders in the preparatory meetings. The WSIS+10 outcome document recognizes that the existing Internet governance arrangements have worked effectively to make the Internet what it is today, but reminds us that approximately two thirds of the people residing in developing countries remain offline. It highlights that there are many cross-cutting international public policy issues that require attention and have not been adequately addressed, and points to the fact that the management of the Internet as a global facility includes multilateral and multi-stakeholder processes, with the full involvement of Governments, the private sector, civil society, international organizations, technical

[42] The Brazilian Internet Steering Committee CGI is a good example of this type of structure. See cgi.br/about/
[43] See www.ntia.doc.gov/other-publication/2013/us-statement-geographic-names-advance-durban-meeting

and academic communities, as well as all other relevant stakeholders, in accordance with their respective roles and responsibilities.

In this context, the challenge in Latin America is to generate more effective coordination among the existing regional governance instances and to expand multi-stakeholder dialogue. Establishing a well structured Internet governance public policy network would greatly contribute towards this objective, and can be achieved by building on previous successful initiatives.

When examining this question, Katz (2013) questions if the existing instances in the region can provide the basis for policy coordination that can go beyond technical coordination, to include formulation of public policies. While identifying a conflict between regional instances that adopt a bottom-up approach and regional public policy formulation that tends to be less participative, he also notes that, to be effective, the new regional space would have to overcome the simple declarative dimension.

In addressing this question, what is proposed here is precisely to build and expand on success cases that originate in policy coordination on more technical Internet governance issues within the region. The effective regional coordination on relevant issues, such as that shown in the protection of geographical denominations in the gTLD expansion process, has the potential to form the basis for a resilient Internet governance public policy network.

Further instances of good coordination processes include the efforts to deploy new submarine cables in the region, particularly with an aim to provide global coverage to the international transit routes in the region. Here a good example of ongoing regional and inter-regional policy coordination in establishing the ELLA – Europe Link with Latin America Submarine Cable Project[44]. Similarly, the deployment of regional Internet exchange points is an issue that has motivated significant regional coordination efforts, launched on many fronts, including events promoted by the the ITU, as well as in-depth studies (Cavalcanti, 2010; Galperin, 2013; CAF, 2014) to support decision-making.

Over the last decade the establishment of National Broadband Plans and Digital Agendas in Latin America (CEPAL, 2013) has been another area for policy coordination in the region, given the fact that broadband infrastructure integration can greatly contribute to the more widespread deployment of broadband access networks and economic growth (Broadband Commission 2013; García Zaballos and López-Rivas, 2012).

In this regard, a number of regional organizations with a direct interest in Internet governance have emerged. Together they provide a platform for active participation of stakeholders in the region,

[44] See www.ella-int.eu/index.php/2-home-page and ec.europa.eu/digital-agenda/en/news/eu-latin-america-submarine-cable-boosting-connection-between-our-continents

including governments, the private sector, civil society and the academic community, providing a favorable environment for regional policy coordination.

A first listing of these regional entities with an interest in Internet-related issues, which could provide the initial impetus for a sustainable and expanding regional Internet governance public policy network, would include BID, CAF, UNASUR/COSIPLAN, ASIET, LACNIC, the ISOC Regional Bureau, REGULATEL, the ITU Regional Office and CITEL, LACIGF and CEPAL.

The Inter American Development Bank – IDB / BID[45] is a large regional development bank, owned by 48 sovereign states in the Americas, Europe and Asia. BID is an important source of development financing for Latin America and the Caribbean, providing loans, grants, and technical assistance. One of the recent initiatives by BID has been the development of the digiLAC[46] online platform for public policy in the areas of broadband infrastructure and the digital agenda.

The Development Bank of Latin America - CAF[47] is also a regional development bank, owned by several Latin American countries, Spain and Portugal, as well as private banks in the region. CAF provides credit operations, as well as non-reimbursable resources, offering support in the technical and financial structuring of projects in the public and private sectors of Latin America. CAF recently sponsored a comprehensive study on the expansion of regional infrastructure for Internet traffic interconnection (CAF, 2014). In-depth studies are crucial in supporting effective regional policy coordination.

The Union of South American Nations – UNASUR is a regional intergovernmental organization formed by 12 South American nations. Member states approved the Union Treaty in 2008, with an aim to strengthen political dialogue and ensure regional integration. Within this organization an important ministerial initiative is the Council on Infrastructure and Planning – COSIPLAN, which during its December 2015 meeting highlighted the approval of the CAF-UNASUR Agreement for South American network integration[48]. This council has the potential to expand the degree of policy coordination that has been developed at the sub-regional level within the MERCOSUR[49] Working Group on Communications (SGT1).

ASIET[50] is the regional association of the telecommunications service providers, with a focus on shaping policy in telecommunications and the information society, as well as in promoting a public-private dialogue in the region. ASIET brings the private sector to the policy network, while also sponsoring technical and economic studies on these issues.

[45] See www.iadb.org/en/inter-american-development-bank,2837.html
[46] See kp.iadb.org/DigiLAC/es/Paginas/Iniciativa.aspx
[47] See www.caf.com/en
[48] See www.iirsa.org/admin_iirsa_web/Uploads/Documents/Declaration%20of%20Ministers%20COSIPLAN%20Dec-3%202015.pdf
[49] See http://www.mercosur.int/innovaportal/v/6379/1/innova.front/institucional
[50] See asiet.lat and cet.la

LACNIC[51] is the Regional Internet Registry (RIR) for the Latin American and Caribbean region, and one of the five RIRs worldwide. A non-governmental organization based in Uruguay, it is responsible for the assignment and administration of Internet numbering resources in the region. LACNIC contributes to the development of the Internet in the region through an active policy of cooperation, as well as hosting the Casa de Internet de Latinoamérica y el Caribe, which is home as well to other entities in the region (*e.g.*, LACTLD[52]).

The Internet Society – ISOC[53] is a global non-profit organization that promotes the open development of the Internet. ISOC has a Regional Bureau in Latin America and is involved in cooperation projects, especially in the areas of capacity building and infrastructure development, such as recent projects in Bolivia and Paraguay[54]. LACNIC, LACTLD and ISOC are important instances in coordinating regional positions and action within the ICANN organizational structure.

The Latin American Forum of Telecommunication Regulatory Entities – Regulatel[55] is an organization that aims to foster cooperation and coordination among national regulators, to identify and defend regional interests, with a view to establish joint positions at international forums. Regulatel members include twenty national telecommunications regulators in Latin America, as well as the European national regulators of Italy, Portugal and Spain. Besides its traditional areas of interest in spectrum management, service quality and competiton, a new working group for Internet-related issues was created, and a memorandum of understanding[56] with ICANN has been signed. With further engagement of national regulators in the region, Regulatel has the potential to play in Latin America a similar role to that fulfilled by BEREC in Europe, as an effective participant in the Internet governance policy coordination process.

The International Telecommunication Union has a local presence in Latin America, with the ITU Regional Office in the Americas[57], alongside the Inter-American Telecommunication Commission - CITEL[58], an entity of the Organization of American States. The ITU Regional Office has provided significant support for regional telecommunications policy coordination, focused on development-related issues. For several years now they have organized the Latin American and Caribbean Regional Connectivity Forum, as well as other events directed to the technical and regulatory policy community. Building on a strong tradition of regional coordination on telecoms standards, spectrum management and development issues, the direct presence of ITU in the region provides a positive environment for policy coordination.

[51] See www.lacnic.net/en/web/lacnic/area-de-cobertura
[52] See www.lactld.org/en
[53] See www.internetsociety.org
[54] See www.internetsociety.org/news/comcast-partners-internet-society-advance-internet-infrastructure-development-latin-america
[55] See www.regulatel.org/
[56] See www.regulatel.org/wordpress/wp-content/uploads/2015/12/MoU_ICANN.pdf
[57] See www.itu.int/en/ITU-D/Regional-Presence/Americas/Pages/RegionalOffice.aspx
[58] See www.citel.oas.org/en/pages/default.aspx

Also within the UN ecosystem, the Internet Governance Forum - IGF has provided for over a decade an environment for civil society to interact with other stakeholders. The mandate for IGF has been extended for another ten years at WSIS+10 high-level meeting of the United Nations General Assembly. LACIGF[59] is the In Latin American and Caribbean regional IGF coordination mechanism. LAGIGF provides representation of the various interest groups, including civil society organizations, governments, the technical community and the the private sector, with an aim to to promote the regional agenda within IGF.

The United Nations Economic Commission for Latin America and the Caribbean (ECLAC/CEPAL)[60] is a regional organization that prepares and disseminates analysis and policy proposals on the structure and dynamics of production and innovation systems[61]. Importantly, CEPAL holds the secretariat for a regional coordination mechanism known as eLAC - Digital Agenda for Latin America and the Caribbean.

The first Action Plan for eLAC was originally adopted by countries in the region for the period of 2005 - 2007. Two more phases followed (2008-2010 and 2011-2015). The current revision, known as eLAC2018[62], was formally endorsed during the Fifth Ministerial Conference on the Information Society in Latin America and the Caribbean, held in Mexico in 2015. The eLAC process adds an essential element to the Latin American Internet public policy network, and that is the engagement of national governments at the highest level.

One of the areas of action of eLAC2018 is "Governance for the information society", where governments in the region have agreed to establish as a formal objective (Objective 22) to "Coordinate, among the countries of Latin America and the Caribbean, participation in Internet governance, reinforcing regional mechanisms and promoting synergies between them; foster the development of multi-stakeholder dialogue forums or national mechanisms, to include governments, the private sector, civil society, the technical community and academia, and their coordination at the regional and global levels".

Clearly there is an established group of public and private organizations in Latin America that can provide the basis for effective policy coordination in the region. Furthermore, these organizations include decision-makers in governments as well as in other stakeholders. In this group there are also inter-governmental, public and private institutions that can strengthen this network and support the development of policy options in Internet governance.

[59] See www.lacigf.org/en/index.html
[60] See www.cepal.org/en
[61] See repositorio.cepal.org/bitstream/handle/11362/38604/S1500587_es.pdf;jsessionid=51A563AA9475018C44A3382C70F499F0?sequence=1
[62] See conferenciaelac.cepal.org/sites/default/files/15-00757_elac_digital_agenda.pdf

A crucial step, as has been noted, is moving from discourse to coordinated action in the region. This must be an incremental process that should begin with a few clear targets for the regional Internet governance public policy network. Eventual success can build into broader and more ambitious goals. As pointed out by Jordana and Levi-Faur (2014), the road to more effective regional networks in Latin America will require a stronger regional identity and capabilities to nurture regional collective action.

The eLAC2018 framework seems to provide an excellent starting point, since it enjoys strong governmental support in the region, while it is also an inclusive process with significant engagement in the wider community of stakeholders.

The agenda of Internet-related issues is extensive. The UN Commission on Science and Technology for Development recently compiled a study (CSTD, 2014) on the most relevant current international Internet public policy issues. The issues were classified under seven broad clusters according to their main attributes: infrastructure and standardization, security, human rights, legal, economic, development and sociocultural. As a result, forty high priority issues and more than sixhundred relevant coordination mechanisms were identified.

These international Internet public policy issues ranging from infrastructure expansion, to cultural diversity and multilingualism, to cyber-security, trade and taxation, privacy and jurisdiction, just to name a few of the currently most visible ones, will require the continued engagement of a regional public policy network to support the development of coordinated policy agenda both within Latin America and at the global Internet governance decision-making instances.

In conclusion, although the Internet governance agenda is very broad, current developments point to a scenario in which the key issues are more clearly being assigned to the leadership of specific stakeholders. The challenge in Latin America is to coordinate efforts among the regional organizations with a direct interest in Internet governance, while engaging all stakeholders and providing a productive environment for regional policy coordination. Focusing on the current issues in Internet governance, identifying common ground in the region and establishing an action plan, will ensure a more effective voice at the global stage.

Furthermore, while aiming at the Internet governance agenda of today, it is important not to loose sight of the challenges foreseen in the medium-term, which will include the emerging issues of the internet of things, e-finance, arbitration, as well as the permanent issues of cyber-security, cybercrime and the risk of cyberconflict.

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