

# The Institutional Indicator of Federalism from the Perspective of the TLICS Model: Juridical Variables for the ICT Comparative Studies

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## ABSTRACT

Based upon the Telecommunications Law Indicators for Comparative Studies (TLICS) model, this article builds upon the federalism as an institutional variable used in comparative analyses from the perspective of the information revolution category and dependence of economic development upon ICT. The research question asks how institutional guarantees of the federalism may shed light on the current literature of dependence of economic development upon ICT, when compared to studies that take for granted a univocal concept of federalism. In other words, to which degree does the TLICS model influence the perception of the federal institutional background in the ICT comparative studies? The article is organized in three main parts. A review of the literature is performed in the first part, in which ICT comparative analyses are scrutinized to show the role played by the institutional indicator of federalism. The second part applies the TLICS model to that indicator to detect its institutional guarantees by means of the method of prescriptive hermeneutics from the perspective of the institutional theory of Law. The third part delves into the aforementioned institutional guarantees of the two biggest Latin American economies – Brazil and Mexico – representative of the federal system, while a third country is used as a control case – United Kingdom – as a representative of the unitary system. As a main outcome, this article shows that the usual univocal concept of the federalism indicator in the literature on dependence of economic development upon ICT could gain in precision should the 43 institutional guarantees of the federalism, detected when applying the TLICS model, be taken into account, as it shows that countries usually separated by that variable are, on the contrary, in the same category for comparative purposes.

## Keywords

Comparative regulatory models; federalism; United Kingdom; Mexico; Brazil; Telecommunications Law Indicators for Comparative Studies (TLICS Model).

## INTRODUCTION

Keeping in mind that the basic building blocks for the analysis of national regulatory models have been consolidated in all-encompassing indicators (Aranha 2011a), that underpin institutional variables such as the rule of law, federalism, separation of powers, public service, regulation, intellectual property rights, universal service and access, among others, which mix legal concepts many times incommensurable and non-interchangeable, the Telecommunications Law Indicators for Comparative Studies (TLICS) model is used in this study to identify institutional indicators and variables derived from the concept of federalism.

The TLICS model was designed as an analytical tool for identification of institutional variables based upon a given juridical framework to be used in ICT comparative studies in order to go deep into the juridical dimension of institutional variables and indicators and, therewith, the differences and commonalities of the institutional guarantees that constitute each legal concept cited as independent variables for the comparison of national regulatory models (Aranha 2011b). In that sense, the TLICS model delves into the building blocks of those studies, which allows the researcher to isolate the ICT factor in order to determine its role in framing the development index of countries with similar institutional backgrounds.

Based upon hermeneutics, theory of law, and theory of institutional guarantees, the TLICS model contends that comparative researches on ICT and development would gain in precision should they add a juridical model when assuming differences and commonalities at the level of institutional variables. We are here testing that assertion by way of applying the model to the institutional variable of federalism. The TLICS model makes use of building blocks of complex juridical attributes that can be studied both separately and as a set of interconnected guarantees. This flexibility of analysis of individual guarantees as well as complex juridical variables makes it useful to cover a variety of landscapes from a comparison of specific juridical dimensions between two countries to a broader analysis that deals with more encompassing variables of higher level in the legal framework, such as the fundamental rights and constitutional principles, *e.g.* right to communicate, rule of law, separation of powers, and federalism.

This paper zeroes in on the federal institutional variable, which is broadly depicted as a representation of central/local relations in a nation and is currently perceived as an important analytical category for comparative purposes even for economic and political unions and confederations, such as the European Union, as a key aspect of constitutional-administrative structure in both the US and the EU (Nicola 2010). The importance of one key institutional guarantee of the federalism – decentralization of competencies – as an institutional variable for comparative studies is also self-evident when dealing with unitary states (Blume and Voigt 2011) or even when comparing federal states that experience a long-term process of centralization (Döring and Schnellenbach 2011).

In order to address the federal institutional variable from the overlooked perspective of its institutional guarantees, this paper is organized in three main parts. The first provides a synthesis of the review of the literature on comparative analyses on ICT/telecommunications, which are scrutinized to show the role played by the institutional indicator of federalism, while the second applies the TLICS model to that indicator to detect its institutional guarantees by means of the method of prescriptive hermeneutics from the perspective of the institutional theory of Law. The third part delves into the aforementioned institutional guarantees of the two biggest Latin American economies – Brazil and Mexico – representative of the federal system, while a third country is used as a control case – United Kingdom – as a representative of the prevalent unitary-system doctrine.

## REVIEW OF THE LITERATURE

We went through comparative analyses isolating the juridical dimension from their respective institutional variables. Among them, the comparative studies focusing on institutional variables showed a quite compelling picture (Figure 1) of how institutional variables usually present in comparative analyses depend upon their juridical dimension.

The picture below depicts a selection of variables collected from the New World Information and Communication Order (NWICO) of the 1970s as summarized by Carlsson (2003), the Campaign for Communication Rights in the Information Society (Intervozes 2005, Intervozes 2010), the UNESCO's International Programme for the Development of Communication (IPDC) proposal of a model for media development evaluation (UNESCO 2008), the literature on

development, ICT, and regulatory institutional environment summarized in Wilson (2006), and Katz and Avila (2010), and the ITU European funded projects for harmonization of ICT policies in Sub-Sahara Africa (HIPSSA ITU project), the Caribbean (HIPCAR ITU project), and Pacific Island Countries (ICB4PAC ITU project), in which those most related to the juridical dimension are closer to the center.

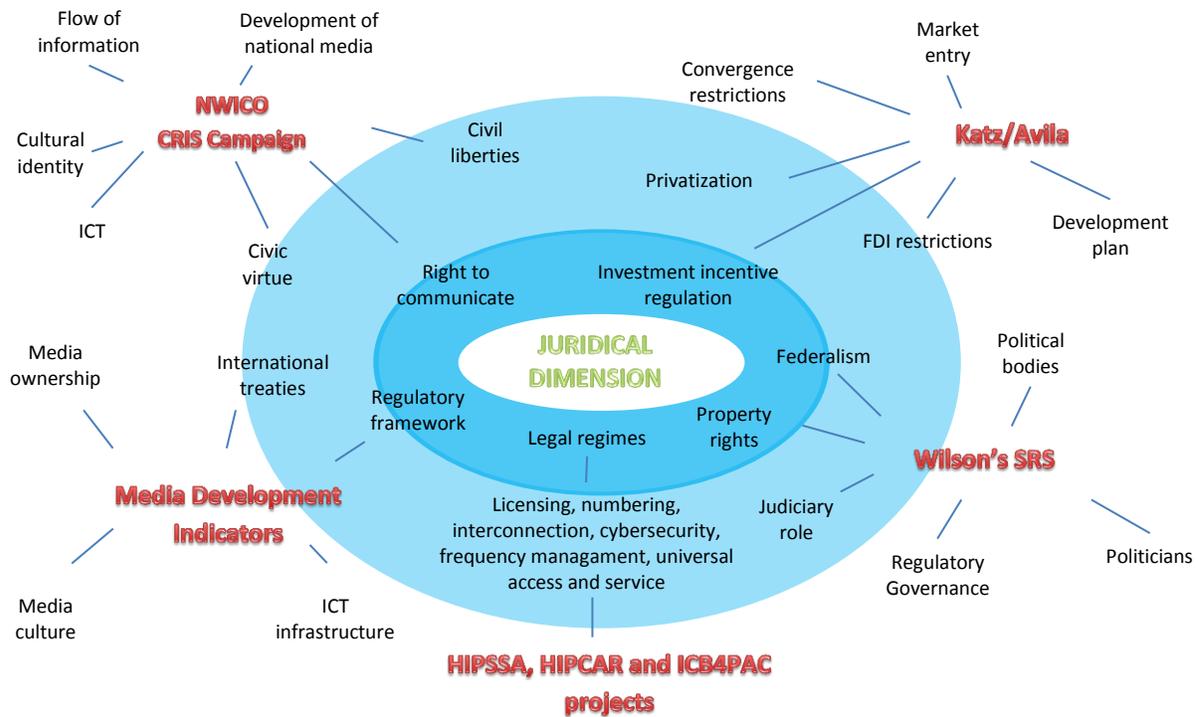


Figure 1 - The Juridical Dimension of Institutional Variables in the ICT Comparative Research

No matter what position they occupy, whether at the center or at the edge of the picture, except for the analyses on the right to communicate, they were invariably referred to in the reviewed literature as univocal concepts detached from the circumstances of the country's legal definitions, jurisprudence concepts, and judicial interpretations. No influence whatsoever was detected in those studies in terms of differences and commonalities between the federal systems of two given countries. The review of the literature on comparative studies on ICT and development shows that the federal system is rather referred to as an institutional variable used to support the authors' assertion of being comparing two or more similar institutional backgrounds.

In those studies analyzed, the federative variable is not used as a source for differentiation among countries that adopted the federal system; only among those that adopted it as opposed to those that did not adopt the federal system, even though federative and non-federative countries may not differ if specific federative categories be taken into account.

Except for the analyses on the right to communicate and harmonization of ICT/telecommunications policies, which deal precisely with the harmonization of ICT legal and regulatory frameworks, the juridical dimension of the institutional variables adopted in the studies analyzed were largely overlooked. Nevertheless the focus on the juridical dimension of institutional variables for comparison purposes was recently boosted by initiatives from the CRIS Campaign (Intervozes 2010) and the European initiative on Harmonization of ICT Policies, Legislation and Regulatory Procedures through the ICB4PAC project for the Pacific Island Countries (ITU 2009), the HIPCAR project for the Caribbean region (ITU 2011, ITU 2010, ITU 2010b, ITU 2011b, ITU 2010c, ITU 2011c, ITU 2010d) and the HIPSSA project for the African region (ITU 2005, ITU 2004b, ITU 2004a). Although the legal aspects of several variables might be self-evident – e.g. property rights – the lack of a juristic model at hand able to extract institutional guarantees from the institutional variables used in the comparative studies on ICT and development leads them to assume that the federal variable is a two-fold adjective instead of a multicolored concept of 43 meanings as it is contended in this article.

## THE INSTITUTIONAL GUARANTEES OF FEDERALISM

Following the TLICS model proposed in Aranha (2011b), we atomized the juridical dimension of federalism in basic building blocks. Betti's (1990) 1<sup>st</sup> and 3<sup>rd</sup> canons of the *hermeneutical autonomy of the object and actuality of understanding*, and Madison's (1988) 2<sup>nd</sup>, 7<sup>th</sup> and 8<sup>th</sup> guidelines of understanding, namely the guidelines of *norm-governed behavior*, *appropriateness*, and *contextuality* were especially useful in the hermeneutical process of identification of the basic components that act as building blocks of the federalism in the legal context of the United Kingdom, Mexico and Brazil.

According to the canon of the hermeneutical autonomy of the object, the meaning to be determined, that is the juridical dimension of federalism, may not be inferred into meaning-full forms in an arbitrary act, but rather it ought to be derived from it. In that sense, the institutional guarantees gathered in a given country analyzed were a product of the actual background research of its legal and regulatory framework, paying special attention to the legal or regulatory nature of a given instrument, approval date, authority, and legal basis content.

The process of acquiring the legal and regulatory data, moreover, followed the guideline of the norm-governed behavior, as it was based upon a previously designed form showed below (Table 1). The form below was designed to guide the researcher in filling the institutional indicators of federalism enumerated below in 43 juridical variables. For that purpose, a broad differentiation between legal, policy and regulatory instruments is useful. Building up on Duton and Fekete's analysis (2009, 39): (i) policy shall refer to any document adopted by any country's institutions in any branch of government or by international organization's institutions that guides actions, by way of leaving ample room of maneuver to those to whom it is intended without binding effect per se unless decided otherwise; (ii) legal instruments shall mean any document adopted by any country's legislative branch or international organizations' institutions that has a binding effect per se; and (iii) regulatory instruments shall refer to any document adopted by independent regulators or executive bodies with quasi-legislative power.

Dimension / Indicator / Variable	Legal or policy basis or regulatory instrument identification (Use "Not Found" if needed)	Approval date and enforcement (dd/mm/yyyy) (Use n/a if not applicable)	Adopted by whom (Use n/a if not applicable)	Legal basis content (Use n/a if not applicable)
<i>e.g.</i> <b>Fiscal Federalism</b> / <b>Local Treasuries</b> / <b>Broadband</b> (*Use this space for personal commentaries if needed)	*Constitutional, legislative and regulatory instruments or working documents with no legal force or draft.  *Should it concern an international organization, is it (i) an act of primary law (international agreement binding the signatory States, subject to national ratification mechanisms, (ii) a secondary legislation foreseen under the Constitutive Act of the international organization in its article ... (e.g. additional Acts to a given Treaty, decisions, directives, regulations, frame regulations), (iii) non-enforceable unilateral acts or non-legal documents (standard regulations, reports, recommendations, notices, guidelines on the implementation of the provisions of a given Act).	*When has the provision been approved?  <i>e.g.</i> Approval date: day/month/year.  *When did the provision enter into force?  <i>e.g.</i> In force since day/month/year.  *Should it be an international agreement, is it subject to signatories' ratification process?	<i>e.g.</i> General Assembly, Legislative Body, Independent Agency, Ministry  ...	<i>e.g.</i> "Article 9. ..."

**Table 1 - Legal and Regulatory Data Form**

Each country analyzed was entitled to 43 forms correspondent to the institutional guarantees described below in a total of 129 forms filled with legal or policy basis regulatory instruments, approval and enforcement dates, authority, and legal basis content. They are available for public consultation by the Center for Sectorial and Regulatory Law of the University of Brasilia Law School at its Telecommunications Law Study Group's website ([www.getel.org/TLICSforms](http://www.getel.org/TLICSforms)).

It is also to be noted that the canon of actuality of understanding, as it ascribes to the interpreter the task of retrace the creative process, adapting and integrating it into his intellectual horizon within the framework of his own experiences, required a common juridical background from the researchers involved in the analysis of each legal and regulatory framework.

With respect to the Madison's 7<sup>th</sup> guideline of understanding, as the guideline of *appropriateness* commands, it is imperative to bear in mind that the questions of the interpreter on the meaning of federalism rely exclusively upon the meaning-full forms – legal and regulatory instruments – raised by the analyzed legal frameworks themselves, which demanded that all variables that build up the juridical dimension of federalism derive from the institutional guarantees detected in the legal and regulatory frameworks of the United Kingdom, Mexico and Brazil.

Regarding the guideline of *contextuality*, by which a legal instrument must not be read out of context, without due regard to its historical and cultural context, the analysis on the institutional guarantees of the federalism was based upon a set of European, US and Latin American studies on the concept of federalism as follows.

Besides general definitions of federalism in the literature, what is right is that the term federalism means different things in different contexts. Tocqueville was a witness of that, as he described the nascent US federation as a form of government which was neither exactly national nor federal, as he relied upon the concept of federal government as it was then perceived in Europe (Tocqueville 1835, 238). The classical literature on the concept of federalism (Schmitt 2008, 381-395) defines it as a set of political and juridical principles in opposition to the concept of international alliance or confederation. Confederation is perceived as a contractual relation that obligates a state to go to war in a particular instance without interfering with its political status and its constitution, while federation lies upon the concept of federal state as a *public law subject* dependent upon a public law constitution derived from the constitution-making power. As a consequence, federalism refers to a new state status, in which the federation constitutional contract aims to establish a permanent order based upon an indissoluble association that bonds its members, which are not anymore free to leave it thereof. The federation constitution guarantees the political existence and territorial integrity of every federation member and, in turn, its right of supervision provides grounds for intervening in the affairs of the member states, as long as it preserves the homogeneity of all federation members. Accordingly, the federation is an existential balance, whose essence resides in a dualism of political existence: an intermediary condition between political unities and pluralism of states. Federalist values are also present in the literature, portraying federalism as an alternative to tyranny, as it prescribes that federation achieves a unity sufficient to resist people's common perils and advance their common welfare without undue sacrifice of their creative energies to which diversity gives rise (Wechsler 1954). Others focus either on the effects of federalism, *e.g.* how federalism deals with the territorial ethno-cultural cleavages (Moreno and Molino 2010), or how regime changes affect federalism, *e.g.* dynamics of competitive regime transitions influence over the development of federal institutions (Tafel 2010).

Neither the 19<sup>th</sup> century European experience with federal states, namely the Prussian one, nor the American war of secession could anticipate the diverse institutional behavior of the theoretical category of federalism as it has been adopted by several countries around the world with different political and juridical traditions and legal frameworks, which have influenced the meaning of their federal systems by the unavoidable and unstoppable shaping power of the cultural variable (Geva-May 2002). On the bright side, that inherent difference in the nations' concepts of federalism created national doctrines on that subject, which describes the meaning of their federal systems in terms of differences and commonalities that reinforce a general notion of federalism by its common grounds that will be addressed in the next section of this study.

Stated thus, there is a discrepancy between the provision of a federative or unitary system on a given country's constitution and the actual political practice and social reality, which leads to the conclusion that it may function as both federative and unitary state in accord with the timeframe and subject matter under scrutiny, especially when national essential facilities are taken into account, which are the keystone issues for comparative studies on ICT and development. The identification of an indicator of federalism for comparative purposes cannot rest upon the sole official classification of a given country as a federal or unitary system. In that sense, the identification of the components of the principle of federalism in a given country helps identify the indicator of federalism by way of finding its institutional guarantees in the country's legal framework. That is not to say that a certain degree of federalism in a given country permeates all sectors in the same way. On the contrary, it is not unusual to find, in a given country, two sectors, or even markets of a single sector submitted to opposite approaches as far as federalism is concerned: one submitted to stringent concentration in the hands of the Union, as opposed to another sector, where the federative principles are rooted deeply in its DNA. It is not impossible, rather probable, that in a given country with a constitution that establishes the fiscal federalism for the vast majority of areas does not apply that principle to other areas at all. The federalism variable thus conceived as a univocal concept derived from the constitution or fundamental principles of a given country is a misleading indicator. What really matters for comparative purposes is the set of institutional guarantees of federalism in the ICT/telecommunications sector of each country analyzed.

Accordingly, besides the general notion of basic characteristics of the federal state described above, federalism should then be written in the plural as federative variables useful for the analysis of a given sector of the economy. The mere categorization of a given country as a federation does not convey the whole message, as it is showed in the study of Blume and Voigt (2011), who argue that federalism is a constitutional institution that does not comprehend all manifestations of

decentralization, which is rather the outcome of a policy choice and can occur in non-federally structured states. By gathering the institutional guarantees of decentralization under the concept of the institutional variable of federalism, the TLICS model makes use of the methodological hermeneutics to add juristic precision to the literature on ICT and development.

Applying the TLICS model to the federalist institutional variable, we found the following six ICT dimensions each one divided in categories that contemplate telecommunications, broadcast, broadband, and e-commerce: (1) the revenue federalism; (2) the fiscal federalism; (3) the regulatory federalism; (4) the judicial federalism; (5) the planning federalism; and, (6) the media federalism.

The six dimensions above were segmented in their correspondent institutional guarantees of the federalism named from now on as federative juridical indicators.

The first dimension of federalism – the revenue federalism in the ICT sector (Figure 1) – deals with the centralized or decentralized power to collect taxes levied on ICT activities or any administrative fees thereof. That indicator relies upon the identification of the following institutional guarantees present in statutory law, common law and/or judicial decisions: (1.1) ICT taxation originally under the jurisdiction of states, counties, municipalities or other sort of local government pertaining to (1.1.1) telecommunications, (1.1.2) broadcast, (1.1.3) broadband, and (1.1.4) e-commerce; (1.2) ICT contract or administrative payments, franchise or license fees originally under the jurisdiction of states, counties, municipalities or other sort of local government – administrative fees – pertaining to (1.2.1) telecommunications, (1.2.2) broadcast, (1.2.3) broadband, and (1.2.4) e-commerce.

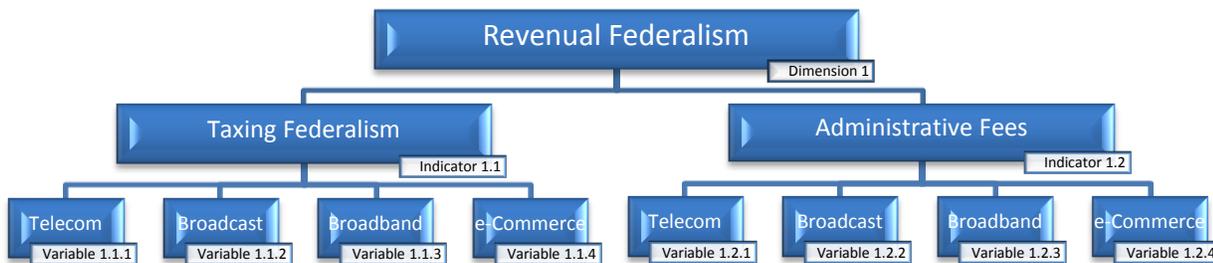


Figure 1: Revenual Federalism

With respect to the dimension of fiscal federalism in the ICT sector (Figure 2), one cannot portray a useful picture of the federative variable if based exclusively upon the treasury distribution among states or other subnational governments. The fiscal federalism topic rather demands that specific institutional guarantees be identified in the statutory law, common law and/or judicial decisions portraying the distribution of revenues originated in national sectorial funds or national treasury to states, counties, municipalities or other sort of subnational government's funds or treasury. In that sense, the juridical variables of fiscal federalism hereby proposed are separated in two categories: (2.1) the transfer of national funds to subnational sectorial funds, such as universalization funds locally administered pursuant institutional guarantees present in the statutory law, common law and/or judicial decisions pertaining (2.1.1) telecommunications, (2.1.2) broadcast, (2.1.3) broadband and (2.1.4) e-commerce; and (2.2) the transfer of national funds directly to local government's treasury pursuant institutional guarantees present in the statutory law, common law and/or judicial decisions pertaining (2.2.1) telecommunications, (2.2.2) broadcast, (2.2.3) broadband and (2.2.4) e-commerce. It is also to be noted that the origin of the assets distributed should be connected somehow with the taxation or administrative payments, franchise or license fees pertaining the ICT sector. Gratuitous transfers from central to local governments not supported by legal or regulatory commands were not considered for filling the variable of fiscal federalism.

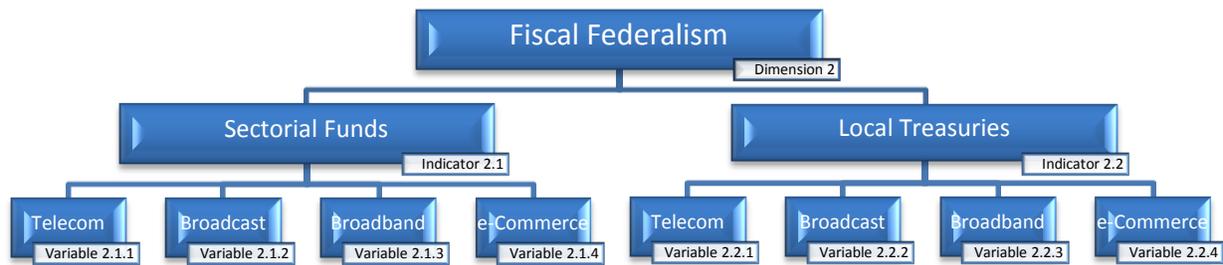


Figure 2: Fiscal Federalism

As long as the revenue federalism deals with the governmental competence on tax and fees, as taxation powers attributed to sub-central governments, the fiscal federalism, although encompasses taxing, spending and regulatory roles (Shah 2007), is hitherto defined as decentralized expenditure powers with focus on the first ideal type of fiscal federalism identified by Sorens (2010) – the *programmatic autonomy*. It bolsters the federal system by opening up to local authorities the ability to apply federal funds with local administrative control and policymaking discretion. An indicator of federalism must take into account those two factors separately. In spite of centralized competence to taxing ICT, a given country enhances the federal attribute of diffusion of political authority by adopting a stringent delegation of administrative control and policymaking discretion to local authorities over funding from fiscal federalism. The option of distributing national funds through sectorial funds or directly to local treasuries is also an important variable, as it shows the level of discretion attributed to local governments to define priorities and mostly the possibility of expending funds in different areas of interest not abided by the regulation of a specific sectorial fund.

Regarding the third dimension proposed above, the regulatory federalism (Figure 3) focuses on the distribution of regulatory bodies designed either to ICT rule-making – quasi-legislative power –, adjudicatory – quasi-judicial power – and/or enforcement functions, regulating conduct in private relations in the ICT arena. The dimension of regulatory federalism is based upon the identification of the following institutional guarantees present in statutory law, common law and/or judicial decisions: (3.1) regulatory jurisdiction bestowed to states, counties, municipalities or other sort of local government’s accredited regulatory bodies pertaining to (3.1.1) telecommunications, (3.1.2) broadcast, (3.1.3) broadband, and (3.1.4) e-commerce; and (3.2) contingent regulation on ICT by local regulatory bodies not directly entitled with sectorial competence on ICT, although influent in the sector, such as ICT consumer rights regulation, ICT antitrust regulation, electromagnetic health hazard regulation, ICT infrastructure limits derived from land use regulation – zoning ordinances and building requirements –, environmental regulation or the like, so long as the restrictions are specifically designed for the ICT sector. Generic restrictions on land use, for example, do not represent an important variable of local function for the regulation of ICT. As with the practice of the previous topics, the variables of regulatory federalism concern telecommunications, broadcast, broadband and e-commerce.

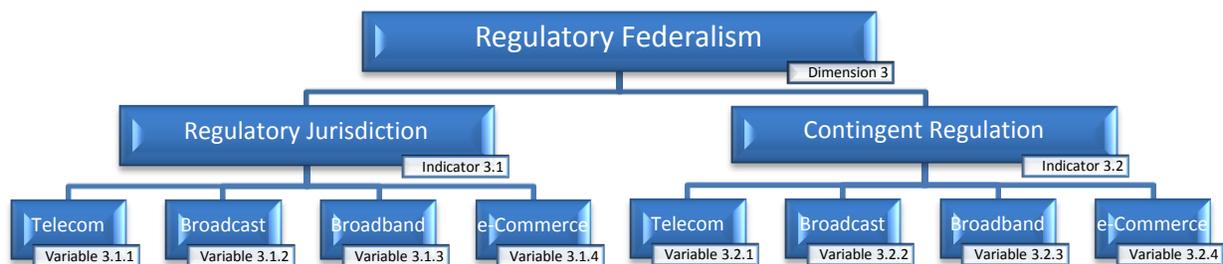
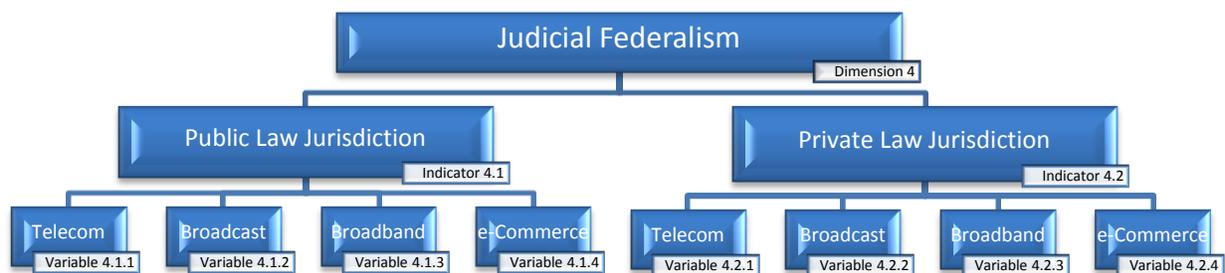


Figure 3: Regulatory Federalism

As regards the fourth dimension mentioned above, the variable of the judicial federalism (Figure 4) informs whether federal – or national – and subnational courts comprise two or more integrated but distinctive systems for the delivery of justice or just one nationwide judicial system administered by a central government as a unique judicial forum at the national level. The variable of judicial federalism is twofold: (4.1) the judicial federalism relating to public law pursuant institutional guarantees present in the statutory law, common law and/or judicial decisions pertaining (4.1.1) telecommunications, (4.1.2) broadcast, (4.1.3) broadband and (4.1.4) e-commerce; and (4.2) the judicial federalism relating to private law pursuant institutional guarantees present in the statutory law, common law and/or judicial decisions pertaining (4.2.1) telecommunications, (4.2.2) broadcast, (4.2.3) broadband and (4.2.4) e-commerce. Public law is used here with reference to the subject matters of an autonomous discipline that deals with the constitution, maintenance and regulation of governmental authority (Loughlin 2003). Accordingly, in judicial systems divided in national and subnational jurisdictions, the answer for the question on how decentralized might be the courts authority depends upon the public or private nature of law. For example, the consumer rights, as a private law discipline, may be centralized in federal courts due to regulators interest on the matter in a given country, or not. Likewise, regulatory suits may be decentralized in local courts if the regulatory system delegates jurisdiction power to them, or not. In that sense, it is not impossible to have a given country portrayed as federative from the perspective of private law issues, but leaning towards a unitary system when dealing with public law, and vice versa.



**Figure 4: Judicial Federalism**

Concerning the fifth dimension of analysis, the planning federalism builds upon Archibugi's (2008) definition of the planning theory as a methodological enterprise focused on the institutional interconnections of planning processes from national to local levels and vice versa. Variables related to decentralization of ICT public policy are gathered under the topic of the planning federalism, as follows (Figure 5): (5.1) the identification of institutional guarantees present in statutory law, common law and/or judicial decisions that attribute a binding effect to national ICT development plans pertaining (5.1.1) telecommunications, (5.1.2) broadcast, (5.1.3) broadband and (5.1.4) e-commerce; and (5.2) the identification of institutional guarantees present in statutory law, common law and/or judicial decisions that attribute a binding effect to local ICT development plans pertaining (5.2.1) telecommunications, (5.2.2) broadcast, (5.2.3) broadband and (5.2.4) e-commerce. In both 5.1 and 5.2 sets of variables, this study tackles national and subnational budget plans, economic development plans, universalization plans, and regulatory update plans. It is also to be noted that the existence of two different indicators for the planning federalism in both national and local levels is imperative to assess whether national policies on ICT planning tackle different subjects when compared to the correspondent local ones. In the case of national and local ICT planning converging to the same subjects, the two independent indicators are also imperative to determine whether local ICT development plans will define their priorities with ample room of maneuver or mimic national plans as local administrations of the national government's policy and treasury persuasion. The constituent local government's autonomy to generate local policies is a key characteristic of the federalism as opposed to local administration of nationally determined policies (Dye 1990, 5), so long as self-government within the state structure fit in the federal idea of preserving special status arrangements for the regional arena (Lluch 2011). It is also important to bear in mind that a usual characteristic of federal systems – the use of specific grants that hampers local authorities their discretion on budget – does not affect the planning federalism indicators, as they categorize countries according to the presence of local ICT development plans and their relation to national ICT plans. On the contrary, the subnational government discretion on budget, especially when it refers to national policies adopted by national ICT plans administered by regional entities, is a misleading indicator, since federal systems are characterized by specific

grants and limited local discretion on budget (Laffin and Thomas 1999, 99-100) instead of the intuitive outcome of a principle of federalist budget discretion.

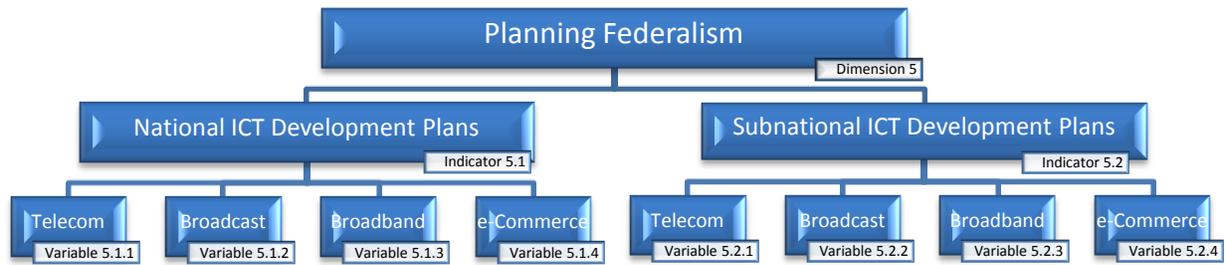


Figure 5: Planning Federalism

Finally, the sixth dimension named above as the media federalism factor (Figure 6) depicts, according to its variables, the institutional guarantees of centralized *versus* decentralized content regulation, as electoral, educational, cultural or local independent content quota, present in statutory law, common law and/or judicial decisions that require the (6.1) broadcaster, (6.2) pay TV provider, and (6.3) Internet service provider to transmit programs of specific content.

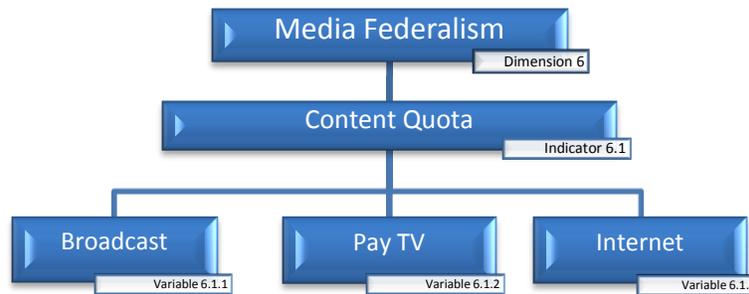


Figure 6: Media Federalism

### THE UNITED KINGDOM, MEXICO AND BRAZIL INDICATORS

The choice of analyzing the two biggest Latin American economies against the United Kingdom is twofold. Firstly the United Kingdom is known for its innovations in the ICT regulatory framework and the ripple effect therewith produced in other countries. Secondly the United Kingdom had been up to 1999 the only substantial nation in Europe with no elected regional institutions that could raise suspicions of any kind of federal behavior.

In a nutshell, Mexico is a historically centralized nation, although officially under a federal system, even though that perception has been challenged from 1997 onwards by recasting federalism in terms of decentralization of administrative decision-making and political power towards a kind of federalism *a la mexicana* (Rodríguez 1998).

Brazil is a federative country since the Republic was proclaimed in 1889. From the perspective of the political environment of the Brazilian federation, Stepan (2000) describes it as the most demos-constraining democratic federal system of the world, based upon the assertion that all democratic federal systems are inherently more demos-constraining than democratic unitary systems. That does not mean that Brazil experienced a continuum of federal decentralization in the 20<sup>th</sup> century. From the late 1970s on, Samuels (2000) argues for the increasing of fiscal decentralization due to the military government decision of jumpstarting the process of democratization, as opposed to the decade before that followed the revolutionary movement which started the military government in 1964. That trend of simultaneous institutionalization of federal and democratic principles was confirmed with the promulgation of the constitution of 1988, which established a more pervasive roll of

competencies to states and municipalities, and even regions (Bonavides 1993), but that did not prevent critics from agreeing on the fact that Brazil should be defined as a “supercentralized system” (Neves 2001), that is a *de facto* unitary State in many instances.

United Kingdom does not provide a clear shot as well. It is a representative of the prevalent unitary-system doctrine, although UK had taken steps toward federalization since the process was started by Prime Minister William Ewart Gladstone in 1886 and fastened by Britain’s Labour Government bills of 1997 to establish a Scottish Parliament and a Welsh Assembly, to say only a few examples of the long process of devolution described in details by an advocate of the categorization of UK as a union state (Mitchell 2009), as opposed to a unitary state, that is a unitary state doctrine challenged by concepts of *balanced constitution* and *union state* (Keating 1998).

The description above of Mexico, Brazil and UK territorial division of powers show the importance of granulated indicators of federalism for comparative analyzes that deal with several dimensions of the ICT sector.

As a result of gathering the 129 institutional guarantees of federalism correspondent to the United Kingdom, Mexico and Brazil, the following table (Table 2) shows how two known federalist countries – Mexico and Brazil – and a third country with official aversion to the term federalism, as pointed out by Laffin and Thomas (1999), that took its first steps toward becoming a regionalized state in 1999, but still far away from a federal multilateral intergovernmental system, portray themselves as a mix of federal and unitary characteristics as far as ICT decentralization is concerned. The institutional variable of federalism, when applied to the ICT sector from the perspective of the TLICS model to the United Kingdom, Mexico and Brazil, shows a compelling predominance of commonalities over differences in the ICT federalist institutional framework towards a more centralized approach.

Federalism													
Dimensions	Indicators	Variables			United Kingdom			Mexico			Brazil		
					D*	C*	n/a	D	C	n/a	D	C	n/a
Revenual Federalism	Taxing Federalism	1.	1.1.1 Telecommunications		X			X			X		
		2.	1.1.2 Broadcast		X				X				X
		3.	1.1.3 Broadband		X			X			X		
		4.	1.1.4 e-Commerce		X				X		X		
	Administrative Fees	5.	1.2.1 Telecommunications		X			X				X	
		6.	1.2.2 Broadcast		X			X				X	
		7.	1.2.3 Broadband		X			X				X	
		8.	1.2.4 e-Commerce			X			X				X
Fiscal Federalism	Sectorial Funds	9.	2.1.1 Telecommunications		X			X			X		
		10.	2.1.2 Broadcast		X			X			X		
		11.	2.1.3 Broadband		X			X			X		
		12.	2.1.4 e-Commerce			X			X				X
	Local Treasuries	13.	2.2.1 Telecommunications			X		X					X
		14.	2.2.2 Broadcast			X		X					X
		15.	2.2.3 Broadband			X		X					X
		16.	2.2.4 e-Commerce			X		X					X
Regulatory Federalism	Regulatory Jurisdiction	17.	3.1.1 Telecommunications		X			X				X	
		18.	3.1.2 Broadcast		X			X				X	
		19.	3.1.3 Broadband		X			X				X	
		20.	3.1.4 e-Commerce		X			X			X		
	Contingent Regulation	21.	3.2.1 Telecommunications			X	X	X			X		
		22.	3.2.2 Broadcast			X	X				X		
		23.	3.2.3 Broadband			X	X				X		
		24.	3.2.4 e-Commerce			X	X				X		
Judicial Federalism	Public Law Jurisdiction	25.	4.1.1 Telecommunications		X			X				X	
		26.	4.1.2 Broadcast		X			X				X	
		27.	4.1.3 Broadband		X			X				X	
		28.	4.1.4 e-Commerce		X			X			X		
	Private Law Jurisdiction	29.	4.2.1 Telecommunications		X				X		X		
		30.	4.2.2 Broadcast		X				X		X		
		31.	4.2.3 Broadband		X				X		X		
		32.	4.2.4 e-Commerce		X				X		X		
Planning Federalism	National ICT Development Plans	33.	5.1.1 Telecommunications		X			X				X	
		34.	5.1.2 Broadcast		X			X				X	
		35.	5.1.3 Broadband		X			X				X	
		36.	5.1.4 e-Commerce			X			X				X

Subnational ICT Development Plans	37.	5.2.1 Telecommunications			X			X			X
	38.	5.2.2 Broadcast			X			X			X
	39.	5.2.3 Broadband			X			X			X
	40.	5.2.4 e-Commerce			X			X			X
Media Federalism	Content Quota	41.	6.1.1 Broadcast		X			X			X
		42.	6.1.2 Pay TV		X			X			X
		43.	6.1.3 Internet			X			X		

\*D stands for decentralized. \*\*C stands for centralized. Table produced by the authors based upon 129 forms, as in Table 1, that gather institutional guarantees of the federalism according to the TLICS Model made available by the Center for Sectorial and Regulatory Law at [www.getel.org/TLICSforms](http://www.getel.org/TLICSforms).

**Table 2 – Federalism indicators (UK, Mexico and Brazil)**

## CONCLUSION

The literature review shows that, although largely overlooked by the literature on ICT and development, the juridical dimension of institutional variables adopted in the ICT comparative research was recently boosted by new ITU/EU projects on international harmonization of ICT policies, which benefits from juridical methodology that atomizes legal concepts in basic and useful building blocks. On the other hand, the recurrent option of several ICT comparative studies to tackle the institutional variable of federalism as a univocal concept hampers deeper analysis on the institutional background needed to unveil specific effects of federalism on the literature of ICT and development. Federalism, as a constitutional institution (Blume and Voigt 2011), does not encompass all manifestations of decentralization, which is rather the outcome of a policy choice and can occur in non-federally structured states. Accordingly this study gathers the institutional guarantees of the decentralization of power under the concept of the institutional variables of federalism adding juristic precision to the literature on ICT and development. Using the TLICS model by way of applying the canons of the hermeneutical autonomy of the object and actuality of understanding, and the guidelines of norm-governed behavior, appropriateness, and contextuality, we found 43 variables distributed among 11 indicators under the revenue, fiscal, regulatory, judicial, planning, and media juridical dimensions. Associated with those dimensions, we found the following indicators that represent both decentralized and centralized characteristics of a given country: taxing federalism; administrative fees; sectorial funds; local treasuries; regulatory jurisdiction; contingent regulation; public law jurisdiction; private law jurisdiction; national ICT development plans; subnational ICT development plans; and content quota. The legal and regulatory data form proposed in this study (Table 1) was applied to Brazil, Mexico, and United Kingdom. The data collected and summarized in Table 2 were a product of the background research of each country's legal and regulatory framework, paying special attention to the legal or regulatory nature of the instruments, approval date, authority, and legal basis content. The analysis of 129 institutional guarantees of federalism gathered in accord with the TLICS model in the legal and regulatory frameworks of the United Kingdom, Mexico and Brazil, and available for public access at [www.getel.org/TLICSforms](http://www.getel.org/TLICSforms), shows a compelling predominance of commonalities over differences, even though a wide gap was expected between two well-known federative countries and the United Kingdom, a country known for its official aversion to federalism (Laffin and Thomas 1999). In all three cases, the variables of federalism portray ICT non-federally structured systems in several instances of the ICT sector relevant for comparative purposes.

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