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Comparative research on regional regulators' associations: A theory-driven path for progress

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ABSTRACT

Since the 1990s regional economic communities have been increasingly involved in the development of model telecommunications policies and regulations. Through semi-independent regional regulators' associations, these communities aim to harmonize telecommunications policy and regulation across member states in hopes of stimulating cross-border investments and market development. To fully understand the role and effects of these administrative bodies, analyses are needed within and between a variety of regions. The research described herein facilitates such analyses by providing a series of theoretically derived propositions developed with reference to a number of regions including the Organization of Eastern Caribbean States (OECS), the Southern African Development Community (SADC), and the European Union (EU).

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1. Introduction

Since the 1990s venues for regulatory policy making around the world have become increasingly diversified, transitioning from a predominantly national level to one that is multilateral and regional (supranational) (Cricelli, Gastaldi, & Levaldi, 1999; Drahos & Joseph, 1995; Kaiser & Prange, 2005; Wilson & Wong, 2003). This transition is due in part to the growth of regional¹ economic communities such as the European Union (EU), Asia-Pacific Economic Cooperation (APEC), and the Southern African Development Community (SADC), among others. These regional communities are likely to influence policy-making activities at the national level; for example, in the EU between 1960 and 1990 the growth in the number of regional policies and regulations was nearly exponential and already in 1991 roughly three fourths of the laws implemented in France were made in consultation with regional authorities (Majone, 2005).

This regionalization trend is also observed in the telecommunications field where regional communities are trying to coordinate policy making and implementation among member states, with the aim, for example, of facilitating cross-border market entry by service providers and intra-regional trade in equipment and services. Regional communities pursue these activities in conjunction with semi-independent regional regulators' associations, such as the APEC TEL Working Group (Telecommunications and Information Working Group), established in 1990; the ASEAN Telecommunications Regulators Council (ATRC), established in 1995; and the European Regulators Group (ERG), established in 2002. Within

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¹ Here 'regional' refers to *supranational* relations, whereas in other contexts 'regional' sometimes refers to the *subnational* level. For example, in the European Union the 'Committee of Regions' is made up of representatives of subnational regions, and provides advice to the Commission, Parliament and Council of Ministers. Indeed, in discussing European integration Hooghe and Marks (2001) contrast the force of European integration with that of regionalization, meaning the increasing importance of subnational governance.

regional communities specialized telecom administrative bodies typically focus on the higher-level policy issues, and in some instances develop directives, while regulators' associations seek to coordinate policy implementation by providing (guiding) models for regulation, which member states can use to shape the development of their national regulatory frameworks.

The rise of regional regulators' associations has implications at the global, regional and national levels and raises a variety of questions. In particular, these associations are likely to influence the regions' explicit objective to 'harmonize' policy and regulation across member states, which gives rise to questions such as: What factors, at both the regional and national levels, influence the extent to which regional policy harmonization is achieved?

Answering this question requires robust theory applicable in a variety of regional contexts that recognizes the different roles of policy makers and regulators at both the national and regional levels. Current research on the interactions between regional and national telecommunications policy making provides important insights but has two limitations in this realm. First and foremost is that the research has been largely carried out in the comparatively integrated and wealthy EU. As such, the resulting theories may have biases that distort studies of other regions (Hurrell, 2005). Secondly, previous research has focused primarily on regional telecommunications policy making, with less attention paid to the regulatory policy implementation (see e.g. Bartle, 2005; Humphreys & Simpson, 2005; Levi-Faur, 1999), although Humphreys (2008) and Simpson (2008) are recent exceptions. One reason for this may be that regulation is a relatively new undertaking for regional communities.

To facilitate studies of the effects of regional efforts in the domains of both policy and regulation in a variety of regional environments this study provides a set of theoretically derived propositions. Based on Levy and Spiller's (1994) constructs of regulatory governance and institutional endowments, this study identifies factors likely to influence regional telecommunications policy making, and the mechanisms through which regional communities and their regulators' associations influence national policies. As such, the propositions can be used as the basis for future empirical research.

The propositions are developed with reference to the work of region-specific and inter-regional telecommunications scholars (e.g. Barendse, 2003; Humphreys & Simpson, 2005; Levi-Faur, 1999; McCormick, 2003, 2005; Wilson & Wong, 2003), and are informed by an initial assessment of regional telecommunications policy making efforts in the European Union (EU), the Organization of Eastern Caribbean States (OECS) and the Southern African Development Community (SADC). These regions represent different levels of economic development, with the EU representing a high level of economic development and SADC and the OECS representing much lower levels, as well as different structures for regional policy making. With this diversity, the research provides preliminary insights into the roles and structures of regional regulators' associations and their mechanisms of regional policy making in a variety of contexts.

The paper is structured as follows. In Section 2, the theoretical underpinnings are presented. Next, Section 3 examines the diversity of regions in terms of their economic and organizational characteristics, and discusses the primary similarities and differences of telecommunication policy-making structures across regions. Section 4 brings together the theoretical underpinnings with factors identified in Section 3 to generate propositions about regions' effects on the national level, including effects on regional policy harmonization. The paper finishes in Section 5 with concluding remarks.

2. Regional regulatory governance and institutional endowments

Regional policy making faces many of the same challenges as those found at the national level. Primary among these is the need to establish administrative procedures that generate effective policies to stimulate market performance, and thus entails an extension to the regional level of the so-called 'regulatory design problem.' Nevertheless, besides the problem of developing appropriate policies, at the regional level an extra hurdle is added—namely that of national sovereignty—bringing to the fore the question of how regions can stimulate (voluntary) adoption of policy models by a variety of member states. At both the regional and national levels the effectiveness of policies will be determined by constraints related to both market characteristics (market structure, market power, etc.) as well as deeper constraints that are embedded in the regulatory and political systems themselves (e.g. Christensen & Laegreid, 2007; Scott, 2003). Levy and Spiller (1994) have categorized and thereby labeled these deeper constraints as 'regulatory governance' and the 'institutional endowment.' This study, with its focus on these deeper constraints, builds on these concepts.

2.1. Regulatory governance and institutional endowments

According to Levy and Spiller (1994) regulatory governance and institutional endowments are key factors that influence the policy and regulations implemented in society, also referred to as regulatory incentives. In the telecommunications sector, regulatory incentives, or rules and regulations, target issues such as pricing, interconnection, and service obligations. These regulatory incentives, in turn, influence sector performance, such as the level of competition, investment or innovation. Further, Levy and Spiller (1994) show that satisfactory sector performance can be achieved through a variety of policies and regulations, and that the same solution may not work in every context. However, satisfactory performance does require three basic mechanisms that restrain arbitrary administrative action, namely (1) constraints on the discretion of the regulator and (2) the ability to change the regulatory system (together labeled regulatory governance), as well as (3) institutions that enforce these constraints (labeled institutional endowments). Thus, while regulatory incentives intend to

affect the behavior of the private sector, a nation's regulatory governance and institutional endowments intend to affect or restrain the behavior of regulators (Cherry & Wildman, 1999).

Implications of regulatory governance for regulators' behavior and in turn policy outcomes include the following. First, the success of a policy will depend on the particular governance mechanism in place in a society, which explains previous failures in transplanting 'successful' policies across nations. Secondly, it determines the balance between regulatory commitment and flexibility, which in turn influences the criteria for 'effective' policies. Regulatory commitment is the consistency with which regulators hold to a particular policy direction, and when it is high, uncertainty is reduced, which stimulates private sector investment.² However, regulators must also maintain a degree of flexibility, which is required for regulation to evolve alongside technological and market changes. Overreliance on either commitment or flexibility may lead to stagnation or high levels of uncertainty, and hence a balance must be found between these two competing forces (Levy & Spiller, 1994; Scott, 2003; Stern & Holder, 1999).

In addition to regulatory governance, the behavior of regulators will also be influenced by institutional endowments. A nation's institutional endowment comprises five elements: (1) legislative and executive institutions, (2) judicial institutions, (3) administrative capabilities, (4) the character of contending social interests and the balance between them, including ideology, and (5) the customs and widely accepted norms that constrain action (Levy & Spiller, 1994). A number of implications of a country's institutional endowment have been identified. In particular, Levy and Spiller (1994) observe that the nature of a country's legislative and executive institutions will have implications for the nature of regulatory problems in a nation. Where the institutional endowment effectively constrains the behavior of regulators, the regulatory problems are likely to be less severe. Further, an institutional endowment that fosters administrative capabilities will facilitate complex regulatory processes without triggering excessive disputes and litigation (Levy & Spiller, 1994).

While the concepts of regulatory governance and institutional endowments were developed and tested at the national level, they are likely to be equally relevant at the regional level and may shed light on the symbiotic relationship between regional governments and their member states. For example, the balance struck between regulatory commitment and flexibility in member states may serve as a primary determinant of the level of influence of the region on national policy: national regulators with low levels of flexibility may face challenges in implementing regional model policies. In this way, national regulatory governance may influence the performance of the regional regulators' association. Additionally, regional regulators' associations themselves may have different degrees of flexibility, arising from differences in regional institutional endowments. The regional institutional endowment will be defined by executive institutions and perhaps to a lesser extent legislative and judicial institutions as well, in addition to administrative capabilities.

2.2. Integrating a process-oriented perspective

In addition to the formal structures of regulatory governance, policy making and implementation will also be influenced by informal structures in the form of processes and procedures (Stern & Holder, 1999). One important aspect of policy making defined by these processes is the role of stakeholders, and in the context of this study, the linkages of regulators to policy makers, the private sector, and consumer groups, among others. As indicated by the vast body of public policy research (e.g. Altman & Petkus, 1994; Koontz & Johnson, 2004; Pelletier, Kraak, McCullum, Uusitalo, & Rich, 1999), and to a lesser extent by telecommunications policy scholars (e.g. Lodge & Stirton, 2002a, 2002b), stakeholder participation influences the final policy design and implementation, as well as its legitimacy. Stakeholder participation is key to policy development outcomes as the variety of stakeholders involved steers policy design. Further, in general the likelihood for policy adoption increases when stakeholders are engaged in the policy development process as this involvement helps build stakeholder commitment and support (Altman & Petkus, 1994; Koontz & Johnson, 2004; Pelletier et al., 1999).

Additionally, and as related to stakeholder participation, the exertion of power in policy-making processes influences policy design outcomes, and as such is a key dimension of governance (e.g. Liefferink & Andersen, 1998; McCall & Minang, 2005). In the telecommunications realm power has played an important role for example in decision-making processes at the WTO, where power imbalances increased negotiation power of wealthy nations and firms over poorer nations (e.g. Murphy-Ives, 2003).

Thus, similar to the concepts of regulatory governance and institutional endowments, theories of the effects of stakeholder participation at the national level are likely to apply at the regional level as well. As a relatively new venue for policy making, and one that may be geographically distant from a large number of stakeholders, the regional level presents an interesting domain for research on stakeholder participation (see e.g. Sutherland, 2001).

Consequently, in order to identify primary factors that shape regional policy making, this study investigates the constructs of regulatory governance and institutional endowments; the former from both institutional and process-oriented perspectives, to develop a more detailed framework of regional policy making that can be used in future empirical

² For example, once operators invest in telecom systems that are characterized by high sunk costs, they will continue operating even when they cannot recover the sunk costs (and thus will be unable to break even), as long as they are able to cover the operating costs. After the initial investment, government or regulators could for example set price caps or introduce other regulation to force operators to sell services below long-run average costs and thus engage in administrative expropriation. If prior to the investments an operator would know such administrative expropriation would take place, it would not enter the market. Thus, in order to stimulate investment, the regulatory environment has to be predictable through regulatory commitment.

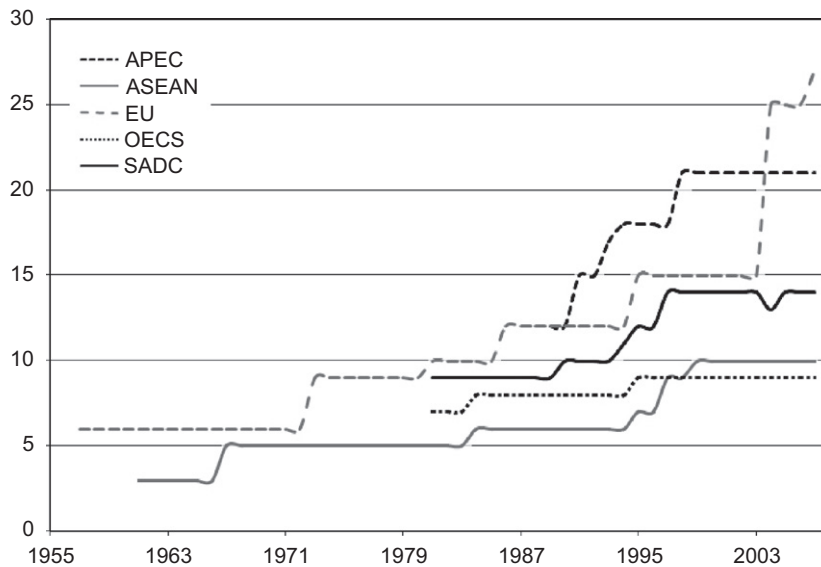


Fig. 1. Membership growth of regional economic communities. Source: Organization websites.

studies. Similar to the approach taken by Levy and Spiller (1994), this study is based on the idea that developing a robust theory of telecommunications policy making requires comparative analysis. Therefore, Section 3 provides a basic assessment of the similarities and differences in demographic characteristics, policy-making structures and processes of three regions. The comparison and contexts it reveals, will subsequently serve as basis for offering a set of illustrative propositions concerning regulatory governance, institutional endowments and stakeholder participation processes, which can serve as the basis of future research.

3. Regional community demographics, policy-making structures and processes

Understanding regional policy making first requires knowledge of the comparative organizational and economic context of regional communities. As organizations, regional economic communities can be characterized at the most basic level by the size of their memberships as well as at the most basic level by their cumulative wealth and the level of intra-regional income disparity. As shown in Fig. 1, the sizes and growth rates of regional communities' membership vary significantly.³ The three regions of interest here are the European Union (EU), the Organization of Eastern Caribbean States (OECS), and the Southern African Development Community (SADC). Among these three, the growth of the European Union has been most notable, particularly given the relatively stringent terms and conditions of membership. However, they are certainly not alone: the OECS and SADC, together with Asian Pacific Economic Cooperation (APEC) and the Association of South-East Asian Nations (ASEAN) all experienced steady growth in the 1990s, although since then their growth appears to have leveled off.

In addition to membership size, regional communities differ in the size of their economies. Table 1 shows this diversity as indicated by cumulative GDP, the range of member states' per capita GDP, and intra-region income disparity. The smallest group, the Organization of Eastern Caribbean States (OECS), has the smallest income disparity (ratio of the highest to lowest GDP per capita in the region). The poorest region, the Southern African Development Community (SADC), has the largest income disparity, with Botswana having a per capita GDP roughly 48 times that of the poorest member, the Democratic Republic of Congo.

Furthermore, it is important to note that these differences are partially the basis for the unique context of regional policy making as compared to national policy making. For example, whereas nations may experience significant differences in wealth in subnational regions or states, typically income transfers exist to minimize these differences. Also, nation states are unlikely to experience membership growth. These are just two of the many differences (e.g. language differences, etc.) to be found between regional and national policy-making contexts.

³ Here only regions that have associated regional regulators' associations are included, which happen to be all growing. This is not to imply that all regional communities are growing. Examples of declining communities include the Andean Community (Comunidad Andina, CAN), which lost Venezuela, and the Common Market for Southern and Eastern Africa (COMESA), which lost Tanzania, Namibia and Mozambique, but gained Libya.

Table 1
Economic diversity within and between regional economic communities.

Regional economic community	No. member states	Cumulative GDP region (PPP in US \$)	Member states' per capita GDP range (lowest-highest GDP/capita) (PPP in thousands US\$)	Income disparity (per capita GDP ratio)
EU	27	12.82 trillion	11.1–79.4	7.2
OECS	9	5.73 billion	3.4–18.3	5.4
SADC	14	737.34 million	0.3–14.3	47.6
APEC	21	19.25 billion	2.1–51.0	24.3
ASEAN	10	700 billion	1.9–51.0	26.8

Source: Organization websites, CIA World Factbook and authors' calculations.

3.1. Regional telecommunications policy-making structures

Beyond the very basic differences among regions in terms of size and wealth, differences can also be found in the basic administrative and organizational structures within which regional telecommunications policy making is carried out. These structures, to some degree, mimic those found at national levels. Since the 1990s in the vast majority of countries, policy making at the national level is being carried out in the ministry or governmental department responsible for (tele-) communications, whereas policy implementation through regulation making and enforcement is typically carried out by autonomous regulators (Melody, 1999). This division of roles between ministry and regulator was introduced to increase the chances for equal treatment of all market players.

These trends are reflected in regional organization structures. At a first glance the Organization of Eastern Caribbean States (OECS), the Southern African Development Community (SADC), and the European Union (EU) have fairly comparable organizational structures: All three regions have created regional policy frameworks for their telecommunications sectors, developed by high-level policy makers in administrative bodies responsible for telecommunications, in cooperation with regional regulators' associations that are responsible for the more detailed regulatory aspects. Nevertheless, regions differ in the structure of policy-making administrative bodies themselves, the number of regulators' associations, regulators' associations' relations to the high-level policy-making administrative bodies, and the reasons for their foundation and consequently key objectives.

A similarity is found in the EU and SADC, which both have a Directorate in place that is responsible for facilitating the development of high-level regional telecommunications policies; in the EU this is the Directorate General for Information Society and Media of the European Commission (EC) and in SADC this is the Directorate for Infrastructure and Services (Van Gorp, 2008). Conversely, in the OECS a separate institution, the Eastern Caribbean Telecommunications Authority, ECTEL, was established through an OECS treaty in 2000, which is in charge of all telecommunications-related issues—both as policy and regulation maker. ECTEL acts as high-level policy maker through its Council of Ministers, that is also tasked with the monitoring of the day-to-day operation of ECTEL's regulators' association in ECTEL's Directorate, which is responsible for regulatory issues (OECS, 2000). ECTEL was established with the specific goal to liberalize the telecommunications sector, and in particular to deal with the regional, multinational incumbent telecom operator that was (and still is) active in all member states (Barendse, 2006, 2007).

Unlike ECTEL's combined functionality, the EU and SADC have set up separate regulators' associations. These associations deal with implementation of regional policies through development of regulatory models and are structurally separated from their policy-making administrative bodies. SADC and the EU, however, differ in that the EU has two associations compared with SADC's one.

The two EU groups are known as the European Regulators Group (ERG) and the Independent Regulators Group (IRG). The latter was set up in 1997 in a bottom-up manner (Barendse, 2006), by national regulators themselves, and aims to “share experiences and points of views among its members on important issues relating to the regulation and development of the European electronic telecommunications market”.⁴ The ERG in turn was set up 5 years later in 2002 in a top-down manner, i.e. was European Commission-driven. The ERG consists of national regulators' heads and EC officials (Barendse, 2006). Through cooperation between the EC and regulators, the ERG aims to “achieve consistent application, in all Member States, of the provisions set out in the Directives of the new regulatory framework.”⁵ Thus, the ERG is more focused on executing decisions made in the EC than the IRG, as the IRG was established by regulators themselves as a convening forum to share experiences. The shared Secretariat of the ERG and IRG is housed in the Directorate General for Information Society and Media.⁶

Similar to the ERG, SADC's regulators' association, the Communications Regulators Association of Southern Africa (CRASA) was set up in 1997 through involvement of the regional authority although its Secretariat is housed separately

⁴ See the IRG homepage: <http://www.irg.eu/site/en/irg.asp> Accessed 20 February 2008.

⁵ See <http://www.erg.eu.int/> Accessed 21 February 2008.

⁶ See http://ec.europa.eu/dgs/information_society/practical/find_us/index_en.htm#brussels1 and http://www.erg.eu.int/contact/index_en.htm. Last accessed 11 June 2008.

from the SADC secretariat (Van Gorp, 2008). It was founded by SADC and a number of national regulators to enhance regulatory efficiency in general, by developing model regulation and policy and by coordinating harmonization of regulation. Additionally, an important goal was to stimulate the establishment of autonomous national regulators in countries that had not done so at the time (Van Gorp, 2008).

The regulatory function of ECTEL is based on similar objectives. However, ECTEL was founded prior to the establishment of autonomous national regulators in any of the OECS member states (Barendse, 2006, 2007). Accordingly, one of its goals was to first establish and subsequently assist national regulatory agencies, referred to as National Telecommunications Regulatory Commissions (Sampson, 2006).

Besides differences in whether regulators' associations are set up in a bottom-up or top-down manner, and the associations' objectives, differences in specific functions can be observed as well. While the ERG, IRG and CRASA are all to a greater or lesser extent involved in coordinating policy implementation and sharing experiences among national regulators, ECTEL in addition to this also has some specific regulatory functions. ECTEL's regulatory functions include an advisory role in the licensing of operators and service providers (Barendse, 2006, 2007; DeFreitas, Kenny, & Schware, 2001), as it receives and evaluates applications, after which it makes recommendations to the ministers. In addition, ECTEL is responsible for the regional frequency bandplan. Consequently, it also receives revenues from royalties for spectrum (OECS, 2000).

3.2. Regional administrative capabilities and outputs

Besides the similarities and differences in regional policy-making structures, there are differences among these regions in their administrative capabilities and outputs. The EU, as the wealthiest region, has significant resources that enable its policy-making arm, the European Commission (EC), to have a permanent staff. This differs from other regions where policy making is largely carried out by (volunteer) representatives of the member states' governments and ministers supported by minimal (if any) permanent staff. For example, in the EU regional telecommunications policy development is to a large degree executed by the 1200 regional staff of the Directorate,⁷ whereas in SADC policy making is carried out by national representatives, which include Ministers and other ministerial representatives (national policy makers), facilitated by only one telecom program manager at SADC's Infrastructure and Services Directorate. In ECTEL the Council of Ministers (with one telecommunications minister from each member state, thus a total of five) make up the policy arm of ECTEL. Even though they are supported by ministerial representatives, they do not have permanent staff from ECTEL specifically supporting their policy development endeavors.⁸

Administrative capabilities within these regions' regulators' associations vary widely as well, at least as observed in the number of permanent staff at their secretariats. In the EU, the ERG and IRG share their secretariat, which is staffed by three full-time employees in addition to an EC representative that supports the ERG.⁹ The CRASA secretariat from the SADC region in turn has three full-time employees; an Executive Secretary, Operational Manager and Administrative Assistant (Van Gorp, 2008). Within ECTEL's Directorate 19 employees support the regulatory arm of ECTEL.¹⁰

In addition, regions exhibit similarities and differences in the extent to which regional policies are legally binding on member states. Regional authority can be conceptualized as a continuum with the EU on one end, SADC at the other with OECS in the middle. In the EU, the European Commission does have the power to make legally binding directives. Conversely, in the OECS, ECTEL does have some powers but they are shared with member states and vary by issue. For example, with spectrum management, ECTEL together with Member States has regulatory authority (ECTEL, 2006b), while in other areas such as Universal Service, ECTEL takes more of an advisory role. Still further along the continuum is SADC, in which policy development and consequently adoption are undertaken on a purely voluntary basis (Van Gorp, 2008).

The level of regional authority is reflective of the desired level of regional integration and is further reflected in the existence/absence of regional courts. In both the EU and OECS policy enforcement is the responsibility of both national and regional courts, whereas in SADC it is exclusively the responsibility of national courts (Barendse, 2006). Naturally, the lack of a regional court in the SADC region, which leaves it with no legal power, is an outcome of the SADC Treaty and the low level of regional integration. Thus, differences in judicial capacities are a reflection of the varying institutional endowments between the regions.

The differences in the legal status of these policies are also reflected in their level of detail. Regions' outputs range from very specific policy directives that member states are required to abide by, to abstract 'guidelines' that could serve as one of many inputs to national policy-making processes. Accordingly, directives published by the EU contain text such as "Member States shall ensure", and "Member States shall guarantee", meaning that national regulation and legislation *must*

⁷ Personal communication—estimated by the Human Resources Department of the Directorate General of Information Society and Media, in June 2008.

⁸ Personal communication with the ECTEL Secretariat, June 2008.

⁹ Personal communication with the ERG/IRG Secretariat, June 2008.

¹⁰ Personal communication with the ECTEL Secretariat, June 2008.

be in compliance with EU directives.¹¹ Further, they provide a great level of detail. For example, in directive 2002/21/EC, the EU sets specific price caps on mobile roaming, stating:

The maximum average wholesale charge shall decrease to EUR 0,28 and EUR 0,26, on 30 August 2008 and on 30 August 2009 respectively.¹²

Conversely, in the SADC region one finds that guidelines do not typically contain terms such as 'shall', but instead contain terminology such as 'Member States are urged to adopt these guidelines'. For example, the preamble of the 'Telecommunications Policies for SADC' states:

On this account, the model policy on telecommunications is a useful and persuasive instrument. Nevertheless, it is recognized that individual Member States have to decide on their own respective policies and on the timing for their implementation in accordance with their own circumstances." (SATCC, 1998, p. 3)

In further contrast, ECTEL produces a large number of consultation documents that often in their appendices provide specific model regulation that member states could implement. These models have space where countries can fill out their name, and as such thus can use the literal document,¹³ whereas in SADC guidelines remain rather open and can be used only as input in national policy-making processes.

However, even though the EU can make legally binding directives, a trend towards increased voluntary policy coordination has been observed. Not only are EU directives designed to take into account national differences and hence often leave room for domestication of regulations and policies, but moreover, a general trend has been observed in the EU towards more voluntary policy coordination, which is known as the Open Method of Coordination (OMC) (Borras & Jacobsson, 2004; Szyszczak, 2006).

3.3. Stakeholder participation and power in regional policy making

The regional policy-making structures described above influence to some degree the design of regional policies (e.g. level of detail) as well as their adoption across member states (e.g. legal status of documents). However, policy design and adoption will also be influenced by the processes of stakeholder participation and the role of power in those processes. Of particular interest are private sector involvement and the role of expert power, as will be discussed next.

Similar to national policy making, the making of regional regulations may involve numerous stakeholders, whose level of influence will depend on both formally arranged structures and informal relationships. For example, infrastructure, equipment, and service providers (industry players) might have a stake in the regional endeavors. Their involvement allows them to lobby for policies that further their strategic goals, while at the same time it enables regional regulators associations to better understand the problems in the market. As at the national level, stakeholder participation in the policy-making process must be carefully controlled and regions are likely to employ different processes.

In the SADC region the private sector can be engaged with its regional regulators' association in three ways. First, there is a regional operators' association, called SATA—the Southern African Telecommunications Association—which typically sends representatives to CRASA's annual general meetings and vice versa—the CRASA Secretariat sends delegates to SATA annual meetings. As such, SATA as a body that represents member telecom operators has an opportunity to make recommendations to CRASA. However, initially set up as an association for incumbent fixed line operators, even though it expanded membership to allow for any ICT or telecom company to become a member, to date only four non-incumbent companies have done so (Van Gorp, 2008). Secondly, recently CRASA has opened its membership, which besides membership of national regulators, now allows for 'associate membership' by any organization from the ICT sector. These associate members, however, do not have voting power, and may attend only part of the annual general meeting. Thirdly, the CRASA committees responsible for developing model policies have invited operators and service providers on an ad-hoc basis to workshops and meetings in order to obtain input from the private sector.¹⁴

In the EU, stakeholder participation also occurs in a variety of ways. The Commission has been actively involved in organizing stakeholders by helping to establish several organizations (Maitland & Van Gorp, 2009). These organizations, along with independent stakeholder groups, private organizations and individuals, have a range of mechanisms for input,

¹¹ See e.g. (EC, 2002) http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&numdoc=302L0021&model=guichett&lg=en—Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive).

¹² See (EC, 2007, p. 37) http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/l_171/l_17120070629en00320040.pdf: L 171/37, REGULATION (EC) No 717/2007 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC.

¹³ See for example the universal service regulation model (ECTEL, 2007) and a draft consultation for wholesale regulation (ECTEL, 2006a).

¹⁴ CRASA's practices stand in contrast to the practices of the East African Community's (EAC) regional regulators' association, which until the summer of 2006 consisted of Tanzania, Kenya and Uganda. While CRASA to date primarily invited operators and service providers on an ad-hoc basis, the EAC's regulators' association—the Eastern African Regulatory Postal and Telecommunications Organization (EARPTO) consists of a General Assembly where regulators, ministerial representatives (policy makers) and private sector providers convene. Thus, through the governance structure all stakeholders come together and have equal voting powers, whereas in CRASA decision-making powers are solely with regulators while the private sector can only influence through lobbying.

including public meetings, one-on-one meetings with Commission staff and leaders, as well as consultations which require submission of written comments on proposed policies. Similarly, in the Caribbean ECTEL uses submission of written comments on pending regulations, as well as the opportunity to ‘comment on comments’ as a mechanism for stakeholder participation.

Inter-regional comparisons of the processes of stakeholder participation can provide lessons as to how to best organize this ‘external’ stakeholder participation. Similar to national-level regulators, regional regulators’ associations face the challenge of striking a balance between taking into account stakeholder positions and being unduly influenced, and hence appropriate mechanisms are required.

One criterion for determining the appropriateness of such mechanisms is their ability to handle stakeholder power differentials. As discussed earlier, some regions have large disparities in wealth among their member states. These disparities can generate power differentials both among public officials as well as among private interests. Power imbalances may arise due to different levels of expertise, which give rise to so-called ‘expert power’ (Busch & Wilson, 1976, p. 3). In the telecommunications domain expert power may arise, for example, when countries have specific policy or regulation-making expertise (e.g. familiarity with a new technology or complex regulations such as interconnection) that could be perceived as valuable to those countries that do not possess this knowledge (Van Gorp, 2008). Stakeholder participation mechanisms must recognize these differences, whether derived from wealth or expertise, and manage them appropriately such that they do not negatively impact member states’ commitment to regional policies.

Evidence of power imbalances are found most notably in SADC and OECS, while present in the EU as well. In SADC, South Africa is by far the region’s largest economic power and is therefore in the position to dominate the other member states. Further, its powerful network operators seek to influence regulations such that they can fulfill their goals of expanding to other SADC countries and routing traffic from other SADC countries through South Africa to the international backbone (McCormick, 2003). Additionally, a structure as observed in CRASA in the early days where the private sector was only involved based on invitation (Van Gorp, 2008), could lead to unequal inclusion of external stakeholders: the regulators’ association could choose to only invite large operators, or those of a particular country where the meeting is held, etc., which will have implications for the association’s agenda/problem definition and consequently identification of solutions, as different operators from different countries will deal with a variety of issues. In particular, in the case of CRASA it can be observed that many committee meetings are held in South Africa, where its large international mobile operators are located (Van Gorp, 2008).

Conversely, in ECTEL the pooling of authority into the regional regulators’ association by nations with relatively similar levels of wealth enabled it to balance the powerful position of Cable & Wireless, which prior to 2000, held a telecommunication monopoly in all of OECS’ member states. By liberating the sector and enabling participation in the policy-making process by those new entrants, the regional authority has helped to facilitate a balance of power. However, there is still work to be done as Cable & Wireless continues to dominate with an Internet Service Provider filing a lawsuit in early 2008 claiming anti-competitive practices.

4. Propositions for comparative analyses of regional policy making

The above comparison of particular regional characteristics provides preliminary evidence of the similarities and differences in policy-making structures among regions. The goal, however, is to understand the implications of these differences. The constructs of regulatory governance, institutional endowments and stakeholder participation can serve as a tool for understanding these implications and serve, too, as the basis for future empirical studies as well as the development of a broadly applicable regional telecommunications policy theory.

These concepts, combined with the regional characteristics described above, suggest a wide range of directions for future comparative regional research. Indeed, a deep understanding of the relationship between regional and national regulatory policy making requires investigations on a broad range of issues. Since an exhaustive treatment of these issues is beyond the scope of this paper, the exemplar of policy harmonization is provided.

In regions policy harmonization is a critical issue in that it is intricately tied to issues of sovereignty as well as regional integration (Maitland & Van Gorp, 2009), and also serves as the primary goal of many regional regulators associations.¹⁵ Policy harmonization resulting from regional community efforts will occur when a regional policy is subsequently adopted by its member states. Adoption by member states, also known as domestication, involves the process of developing national regulations, and the sovereign choice (not) to incorporate (parts of) regional model policies within the national regulatory framework (Van Gorp, 2008).

In the following paragraphs a series of propositions are presented, two each for the constructs of regulatory governance, institutional endowments and stakeholder participation. These propositions can serve as the basis for future regional research, and combined seek to answer the research question: To what extent can regional differences in regulatory governance, institutional endowments and stakeholder participation processes explain differences in levels of policy harmonization?

¹⁵ For a detailed discussion of this goal see Maitland and Van Gorp (2009).

4.1. Regional regulatory governance

Two primary factors likely to influence national policy adoption are: (1) member state commitment to model policies as reflected in their participation in the process of model policy development (regional regulatory governance), and (2) the level of autonomy of the national regulator (national regulatory governance).

Within a region, the level of participation of national representatives, through annual general meetings, policy development committees, and executive committees, varies. While reasons for this may stem from national conditions, such as a lack of resources to attend meetings or competing priorities with the national policy-making agenda, the ability or willingness to overcome these challenges will be influenced by regional regulatory governance. In particular, when the regional regulators' association is established through a bottom-up rather than a top-down initiative, it is likely to be more aware of the challenges representatives face and design appropriate governance mechanisms such that a greater level of participation by its member states results. This participation in the model policy-making process, as many theories and authors have argued (see e.g. Altman & Petkus, 1994; Koontz & Johnson, 2004), is likely to enhance commitment to and subsequent adoption of those policies. Hence,

P1: Regions with regulators' associations formed through a bottom-up process will have higher levels of policy harmonization.

Despite the belief that bottom-up processes are more likely to generate cooperation among actors with diverse interests, the power and authority associated with a top-down process can also have positive effects on policy adoption, as will be argued below. Consequently, further research is needed to determine which of these factors has a greater influence on policy harmonization.

While regional governance is likely to influence national-level adoption and hence harmonization, national-level factors play a role as well. Of course, adoption of model policies will be influenced by their fit with national market contexts as well as national legislation, but likely also very important is the flexibility that regulators have within their home countries to introduce new regulations. In developing countries, however, regulatory flexibility or autonomy is often restricted (see e.g. Gillwald, 2005; Horwitz & Currie, 2007; Lodge & Stirton, 2002b).

Hence, the adoption of regional policies by national regulators may be influenced by national regulatory governance, which defines their level of autonomy. In particular, national regulatory governance will define the regulator's relationship with the government, typically a ministry. The adoption of regional model policies by the national regulator will likely require negotiation with the ministry and possibly require amending existing national laws and policies. This could lead to significant delays of adoption or even make adoption impossible, particularly when the ministry seeks to protect its (partially) state-owned operator. Thus, national regulators with higher levels of autonomy can more easily implement changes in regulation. Hence:

P2: Regions in which member states' national regulatory authorities have higher levels of autonomy will have higher levels of policy harmonization than those with lower levels of autonomy.

However, it should be recognized that the autonomy of national regulators will not guarantee their adoption of regional policies. Consequently it may be that the relationship between autonomy and harmonization is moderated by commitment to the regional model policy.

4.2. Regional institutional endowments

The institutional endowment of a region is likely to have significant implications for both regulatory governance and policy harmonization. While institutional endowments are characterized by a number of factors, here due to their relative ease of measurement in a regional context, the focus is restricted to judicial and administrative capacities.

The judicial capacity of the region may establish or be a reflection of the level of integration of the region, with natural implications for the authority of the region over member states. A region such as the EU, where policies can be legally binding, is likely to have higher levels of adoption by member states, thereby potentially creating higher levels of regulatory harmonization and performance. Hence,

P3: Regions with judiciaries will have higher levels of policy harmonization than regions without.

Nevertheless, the effect of the institutional endowment of judicial capacity is not definitive. Regions are complex legal environments in which regional and national levels compete. Instead of creating a separate regional judicial administration, a region may rely on coordination among specialized and temporary councils as in NAFTA¹⁶ or on national judiciaries as in SADC. It is as yet unclear the extent to which a regional judiciary is superior as it relates to

¹⁶ NAFTA, for example, is a relatively wealthy region yet has developed minimal supranational institutions through which disputes can be settled. Indeed Haufbauer, Schott, Greico, and Wong (2005) suggest that in terms of judicial review of trade cases NAFTA needs to develop stronger institutions. They report that whereas Canada and Mexico have as many as 15 and 16 permanent review panel staff members, respectively, the US has only 3. NAFTA has no unified administration and in the US the NAFTA Secretariat is buried in the International Trade Administration of the US Department of Commerce.

telecommunications policy making and the particular outcome of harmonization. Furthermore, the relationship between regional authority and harmonization has not been established as the EU has faced many challenges in this realm, and has seen a shift towards more voluntary coordination through its Open Method of Coordination (Majone, 2005; Szyszczak, 2006). Thus, more insight is needed into the role of legally binding vs. voluntary coordination of regional policy adoption and the mechanisms through which they affect harmonization.

Further, administrative capacities, that have been defined for the national level as the “ability of the nation’s professionals (e.g. academics, lawyers, bureaucrats) to handle complex regulatory concepts and processes in a relatively efficacious manner” (Levy & Spiller, 1994, p. 208), indeed were found to be at a higher level in countries with the highest GDP per capita (Levy & Spiller, 1994). Clearly, the level of administrative capacities is related to training but also sheer numbers. Hence, the diversity of wealth in regions indicates there are likely diverse levels of administrative capacities. If sheer numbers alone are an indication, the discrepancy in policy-making staff between the EU Information Society and Media Directorate (1200) and SADC (1) indicates administrative capacities are likely to vary significantly among regions.

Sheer numbers of staff, however, will not necessarily bring about policy harmonization. As observed by Levy and Spiller (1994), administrative capabilities will facilitate complex regulatory processes without triggering excessive disputes and litigation. Being able to handle complex regulatory process can create a level of expertise in the region higher than that found at the national level. This is to some degree the case in ECTEL (Sampson, 2006). This higher level of expertise exercised in a way that minimizes disputes may lead to policies that are attractive to a wide range of member states. Hence,

P4: Regions with higher levels of administrative capacities will have higher levels of policy harmonization than those with lower levels of administrative capacities.

It should be noted, however, that the relationship between administrative capabilities and policy harmonization may not be definitive. For example, one could argue that a high level of administrative capacity in the region may result in less involvement of national representatives, who would otherwise build commitment through their participation in the regional policy development process. Further research into these issues is required.

4.3. Regional stakeholder participation

While national regulators’ involvement at the regional level is key to successful harmonization strategies, the private sector is needed as well. In particular, transparent private sector involvement—as regulatory embeddedness theory suggests (Lodge & Stirton, 2002a, 2002b; Stirton & Lodge, 2002)—will result in enhanced legitimacy of regional policies as well as the regulators’ association as an organization. The legitimacy of regional policies is likely to have a positive effect on their adoption at the national level, thereby promoting harmonization. Hence,

P5: Regions with higher levels of private sector involvement in the policy making process will have higher levels of policy harmonization than those with lower levels of private sector involvement.

Conversely, it can be argued that in those regions where the private sector has a less formal role to play, the most powerful and resourceful operators will have a disproportionate influence on regional policy making. In the cases where there is limited independence of the regulator at the national level, these ‘operator friendly’ regional policies are likely to be seen favorably by protective ministries and hence policy harmonization may result through a different process.

These power asymmetries have implications for participation both by the private sector as well as nation states. As observed at the WTO, power imbalances increased the negotiation power of wealthy nations and firms over poorer nations (e.g. Murphy-Ives, 2003). In regional policy making, power differentials can result in regional policies being a mere reflection of powerful nations’ regulatory frameworks. Such a situation may have negative implications for policy harmonization, as the regional policies tend to be amenable to just one or a subset of member states. Further, as demonstrated by the case of SADC, these international power differentials are likely to arise in regions with high levels of income disparities among their member states. Hence,

P6: Regions with lower levels of income disparity will have higher levels of policy harmonization than those with higher levels of income disparity.

However, it may also be that regions with high levels of income disparity are also more likely to embrace countries that are far behind in developing regulatory frameworks. Without pre-existing regulatory frameworks onto which new policies must be grafted, these countries may be more likely to adopt regional model policies, and do so completely.

4.4. Summary and discussion

These six propositions encompass a variety of factors that are likely to influence a regions’ effectiveness in stimulating policy harmonization across member states. Many factors included in these propositions, as well as factors discussed in Section 3, have the potential to either increase or decrease the likelihood of harmonization and the effectiveness of regional policy making in general. An expanded view on the factors likely to influence regional policy making and their relationships

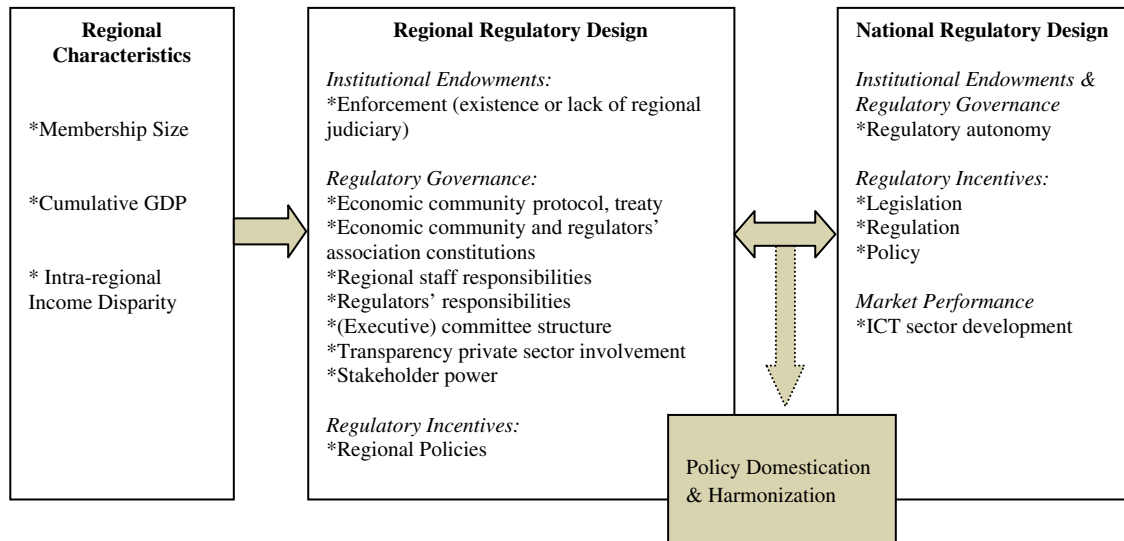


Fig. 2. Regional telecommunications policy making and harmonization.

are shown in Fig. 2. In particular, depicted are key factors that constitute both regional and national regulatory governance and institutional endowments that through mutual interaction shape the extent of policy harmonization.

The diagram in Fig. 2 refers back to Levy and Spiller's (1994) concept of the 'regulatory design problem' in which the goal is to establish administrative procedures that generate effective policies to stimulate market performance. Here the regional characteristics are seen as shaping the regulatory design of the region, which together with the national regulatory design, or that of member states, influences the degree of domestication and harmonization.

The relationship between regional and national governance and institutional endowments is bidirectional, and thus through interaction mutually influence each other. Due to the dynamic nature of telecommunications markets as well as changing economic and political regional and national landscapes, regulatory governance continually changes. Finally, even though the concepts of Levy and Spiller show some similarities across the regional and national levels, differences in specific underlying dimensions exist as well: particularly differences in the institutional endowments imply that theories of national policy making may not fully explain regional policy-making phenomena.

5. Concluding remarks

The interaction between regional and national telecommunications policy making is a complex, yet increasingly important, phenomenon. As the capabilities of regional authorities continue to grow, the level of mutual influence is likely to increase. The propositions presented in this study provide a basis for future investigations in this realm. By integrating Levy and Spiller's (1994) concepts of regulatory governance and institutional endowments, that have demonstrated applicability in diverse economic contexts, this study has provided a theoretical basis for future empirical research on this increasingly important phenomenon.

Future empirical research will likely generate new and innovative concepts that account for the unique regional context. Building on the constructs of Levy and Spiller (1994) applied here, these new constructs will add greater nuance to our understanding of the implications of such unique regional characteristics such as intra-regional diversity in governance and institutions, as well as demographic characteristics such as wealth, market development and languages, on the policy-making processes. These new constructs will serve as the basis for a new regional telecommunications policy-making theory.

Toward this goal, inter-regional studies can potentially identify optimal configurations for regional regulatory governance. For example, the initial comparisons made herein suggest that to be effective, regional regulators' associations must pay explicit attention to the influence that powerful member states and external stakeholders wield over their less powerful counterparts. Inter-regional comparisons may help to identify ways in which regional regulators' associations can moderate such influences.

While these suggestions point to issues that ideally be examined in a variety of regions, studies in developing regions will provide particularly useful insights. This is because compared to the highly integrated and wealthy EU, developing regions are likely to have less formal mechanisms for policy coordination, and lessons learned in one may be transferable to another. Furthermore, as the EU expands its membership and has begun to experiment with what are referred to as 'softer' forms of coordination, the lessons from developing regions may provide insight for the European context as well.

Regions of particular interest for future studies include the Southern African Development Community (SADC) and the Association of South-East Asian Nations (ASEAN). SADC is a region confronted with significant intra-region income disparities, but, however, was the first region in Africa to set up a regulators' association, upon whose experiences subsequently the West African Telecommunications Regulators Association (WATRA) and the Association of Regulators of Information and Communication for Eastern and Southern Africa (ARICEA) were built. Further, ASEAN, which has a diverse membership in terms of levels of development of its member states, including some very poor countries, also has a formal relationship with China, South Korea and Japan through ASEAN +3. As such, the ASEAN case may provide valuable insights into the role of economic powers in regional policy making. Through the study of diverse regions more insights will be gained into different paths of regional integration and the various benefits and challenges that regionalization brings.

References

- Altman, J. A., & Petkus, E. (1994). Toward a stakeholder-based policy process: An application of the social marketing perspective to environmental policy development. *Policy Sciences*, 27(1), 37–51.
- Barendse, A. J. (2003). *Harmonizing the implementation of regional regulation: The cases of IRG/ERG, TRASA & ECTEL*. Paper presented at the World Dialogue on Regulation on Networks Economics Expert Forum, Denmark.
- Barendse, A. J. (2006). *Regional regulation as a new form of telecom sector governance: The interactions with technological socio-economic systems and market performance*. Delft, the Netherlands: Delft University of Technology.
- Barendse, A. J. (2007). Regional regulation of telecom markets in the organisation of Eastern Caribbean states. In A. K. Mahan, & W. H. Melody (Eds.), *Diversifying participation in network development: Case studies and research from WDR research cycle 3* (pp. 171–183). Uruguay: Montevideo.
- Bartle, I. (2005). *Globalization and EU policy-making: The neo-liberal transformation of telecommunications and electricity*. Manchester: Manchester University Press.
- Borras, S., & Jacobsson, K. (2004). The open method of coordination and new governance patterns in the EU. *Journal of European Public Policy*, 11(2), 185–208.
- Busch, P., & Wilson, D. T. (1976). An experimental analysis of a salesman's expert and referent bases of social power in the buyer–seller dyad. *Journal of Marketing Research*, 13(1), 3–11.
- Cherry, B. A., & Wildman, S. S. (1999). Institutional endowment as foundation for regulatory performance and regime transitions: The role of the US constitution in telecommunications regulation in the United States – A documentary history, vol. II. *Telecommunications Policy*, 23(9), 607–623.
- Christensen, T., & Laegreid, P. (2007). Regulatory agencies—The challenges of balancing agency autonomy and political control. *Governance: An International Journal of Policy and Administration*, 20(3), 499–520.
- Cricelli, L., Gastaldi, M., & Levaldi, N. (1999). Vertical integration in international telecommunication system. *Review of Industrial Organization*, 14(4), 337–353.
- DeFreitas, D., Kenny, C., & Schware, R. (2001). Caribbean cooperation: Rise of the regional regulator. *Info: The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media*, 3(3), 189–193.
- Drahos, P., & Joseph, R. A. (1995). Telecommunications and investment in the great supranational regulatory game. *Telecommunications Policy*, 19(8), 619–635.
- EC. (2002). Directive 2002/21/EC of the European parliament and of the council of 7 March 2002. *Official Journal of the European Communities*, L 108/33 (Downloaded June 18, 2008 from <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0033:0050:EN:PDF>>), L 108/133–150.
- EC. (2007). Regulation (EC) no. 717/2007 of the European parliament and of the council of 27 June 2007. *Official Journal of the European Communities*, Downloaded June 18, 2008 from <http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/l_171/l_17120070629en00320040.pdf>, L171/132–140.
- ECTEL. (2006a). *ECTEL consultation document: Recommendation of the Eastern Caribbean telecommunications authority (“ECTEL”) to the national telecommunications regulatory commission to consult on draft telecommunications (Wholesale) regulations*. Downloaded June 18, 2008 from <http://www.ectel.int/ectelnew-2/consultations_files/Wholesale%20Regulations%20Consultation%20Document%20250706-1.pdf>.
- ECTEL. (2006b). *ECTEL regional radio spectrum plan* <<http://www.ectel.int/Regulatory%20Framework/ECTEL%20REGIONAL%20RADIO%20SPECTRUM%20PLAN%20%202006%2003%2023.pdf>> Last accessed June 10 2008.
- ECTEL. (2007). *Council approved USF regulations*. Downloaded June 18, 2008 from <<http://www.ectel.int/Current%20Consultations/USF%20Regulations%20-%20Council%20Approved.pdf>>.
- Gillwald, A. (2005). Good intentions, poor outcomes: Telecommunications reform in South Africa. *Telecommunications Policy*, 29, 469–491.
- Haufbauer, G. C., Schott, J. J., Greico, P. L. E., & Wong, Y. (2005). *NAFTA revisited: Achievements and challenges*. Washington, DC: Institute for International Economics.
- Hooghe, L., & Marks, G. (2001). *Multi-level governance and European integration*. Boulder: Rowman and Littlefield.
- Horwitz, R. B., & Currie, W. (2007). Another instance where privatization trumped liberalization: The politics of telecommunications reform in South Africa—A ten-year retrospective. *Telecommunications Policy*, 31(8–9), 445–462.
- Humphreys, P. (2008). *The problem of inconsistent regulatory implementation and the review of European Union regulatory policy*. Paper presented at the 17th biennial conference of the International Telecommunications Society.
- Humphreys, P. J., & Simpson, S. M. (2005). *Globalization, convergence and European telecommunications regulation*. Northampton: Edward Elgar.
- Hurrell, A. J. (2005). The regional dimension of international relations theory. In M. Farrell (Ed.), *Global Politics of Regionalism* (pp. 38–53). London: Pluto Press.
- Kaiser, R., & Prange, H. (2005). Missing the Lisbon target? Multi-level innovation and EU policy coordination. *International Public Policy*, 25(2), 241–263.
- Koontz, T. M., & Johnson, E. M. (2004). One size does not fit all: Matching breadth of stakeholder participation to watershed group accomplishments. *Policy Sciences*, 37, 185–204.
- Levi-Faur, D. (1999). The governance of competition: The interplay of technology, economics, and politics in European Union electricity and telecom regimes. *Journal of Public Policy*, 19(2), 175–207.
- Levy, B., & Spiller, P. T. (1994). The institutional foundations of regulatory commitment: A comparative analysis of telecommunications regulation. *Journal of Law, Economics, & Organization*, 10(2), 201–246.
- Liefferink, D., & Andersen, M. S. (1998). Strategies of the 'green' member states in EU environmental policy-making. *Journal of European Public Policy*, 5(2), 254–270.
- Lodge, M., & Stirton, L. (2002a). Embedding regulatory autonomy in Caribbean telecommunications. *Annals of Public and Cooperative Economics*, 73(4), 667–693.
- Lodge, M., & Stirton, L. (2002b). Regulatory reform in small developing states: Globalisation, regulatory autonomy and Jamaican telecommunications. *New Political Economy*, 7(3), 415–433.
- Maitland, C. F. & Van Gorp, A. F. (2009). Beyond harmonization: ICT policy making in supranational regional economic communities. *The Information Society*, in press.
- Majone, G. (2005). *Dilemmas of European integration: The ambiguities and pitfalls of integration by stealth*. Oxford: Oxford University Press.

- McCall, M. K., & Minang, P. A. (2005). Assessing participatory GIS for community-based natural resource management: Claiming community forests in Cameroon. *The Geographical Journal*, 171(4), 340–356.
- McCormick, P. K. (2003). Telecommunications reform in Southern Africa: The role of the Southern African development community. *Telecommunications Policy*, 27(1–2), 95–108.
- McCormick, P. K. (2005). The African telecommunications union: A pan-African approach to telecommunications reform. *Telecommunications Policy*, 29(7), 529–548.
- Melody, W. H. (1999). Telecom reform: Progress and prospects. *Telecommunications Policy*, 23(1), 7–34.
- Murphy-Ives, P. (2003). Negotiating global change: Progressive multilateralism in trade in telecommunications talks. *International Negotiation*, 8(1), 43–78.
- OECS (2000). *Treaty establishing the Eastern Caribbean telecommunications authority*. St. Georges, Grenada: OECS.
- Pelletier, D., Kraak, V., McCullum, C., Uusitalo, U., & Rich, R. (1999). The shaping of collective values through deliberate democracy: An empirical study from New York's North Country. *Policy Sciences*, 32(2), 103–131.
- Sampson, C. (2006). *Competition and regulatory institutional structures in micro-states: "The Case of the Caribbean"*. Paper submitted under the First Research Cycle of CUTS Competition, Regulation and Development Research Forum (CDRF) 2005–2007.
- SATCC (1998). SADC Telecommunication Policies & Model Telecommunication bill. Retrieved January 20, 2006, from <http://www.trasa.org/bw/files/attachments/sadcmodelelecombill_english.doc>.
- Scott, C. (2003). Organizational variety in regulatory governance: An agenda for a comparative investigation of OECD countries. *Public Organization Review: A Global Journal*, 3, 301–316.
- Simpson, S. (2008). *Review of the EU's electronic communications regulatory framework: The significance of a possible European electronic communications markets authority*. Paper presented at the 17th biennial conference of the International Telecommunications Society.
- Stern, J., & Holder, S. (1999). Regulatory governance: Criteria for assessing the performance of regulatory systems. An application to infrastructure industries in the developing countries of Asia. *Utilities Policy*, 8, 33–50.
- Stirton, L., & Lodge, M. (2002). *Embedding regulatory autonomy: The reform of Jamaican telecommunications regulation 1988–2001*. London: Centre for Analysis of Risk and Regulation at the London School of Economics and Political Science.
- Sutherland, E. (2001). International roaming charges: Over-charging and competition law. *Telecommunications Policy*, 25(1–2), 5–20.
- Szysczak, E. (2006). Experimental governance: The open method of coordination. *European Law Journal*, 12(4), 486–502.
- Van Gorp, A. F. (2008). *Increasing regulatory capacity: The role of the region in shaping national ICT policy in Southern Africa*. Unpublished Ph.D. thesis, the Pennsylvania State University, University Park.
- Wilson, E. J., & Wong, K. (2003). African information revolution: A balance sheet. *Telecommunications Policy*, 27(1–2), 155–177.