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THE EVOLUTION OF THE GOVERNANCE OF REGULATORY NETWORKS: THE CASE OF THE EUROPEAN TELECOMMUNICATIONS REGULATORY NETWORK

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Abstract: Networks are by now popular inter-organizational coordination modes. And we know very little regarding how networks are governed and how their governance evolves through time. Yet, studies point to the fact that the governance of networks is a strong determinant of their performance. This paper addresses the research question how does the governance form of networks evolve in time by empirically studying the European telecommunications regulatory network. We find that the network's governance system is determined by the dialectical tension between network members (National Regulatory Agencies) and an external very influential body (the European Commission, EC). This tension unifies the group in the classic external conflict-internal cohesion fashion. We also identify a second dialectical tension internal to the network among its members. The tensions are triggered by evaluations carried out by an external actor (the EC). In general, the process observed confirms the propositions that predict a formalizing of the governance as the network grows older.

Table of Contents

1	Introduction.....	3
2	The Governance of Inter-Organizational Goal-Directed Regulatory Networks.....	4
2.1	The Network as an Inter-Organizational Coordination Mode.....	4
2.2	Social Networks, Goal-Directed Networks, and Regulatory Networks.....	5
2.2.1	Types of Goal-Directed Networks.....	7
2.3	The Governance of Networks.....	7
3	Network process.....	10
4	Methods.....	14
5	The case study.....	16
6	Findings.....	19
6.1	The teleological dialectics of network evolution.....	19
6.2	The grand dialectic of BEREC’s creation.....	20
6.3	Mobilizing support to block EECMA.....	23
6.4	Intra-network dynamics.....	24
7	Discussion.....	27
8	Conclusion.....	29
9	References.....	31

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Introduction

Networks are by now popular inter-organizational coordination modes in many different domains, complementing and substituting hierarchical and market modes (Powell 1990). In the public sector, networks are present in such fields as public service delivery (Provan, Milward 1995), local economic development (Agranoff, McGuire 2003), and international regulatory coordination (Levi-Faur 2010) — the latter subset constituting this paper's empirical subjects. However, we know very little regarding how networks are governed and how their governance evolves through time (Provan, Kenis 2008). Yet, studies point to the fact that the governance of networks is a strong determinant of their performance (Dyer et al. 2007).

This paper addresses the research question *how does the governance form of networks evolve in time* by empirically studying the European telecommunications regulatory network. One specific domain where networks are increasingly spreading as a coordination mode is international regulatory harmonization. At the international level, as globalization increases international business interconnectedness, so does the need for global regulation (Levi-Faur 2010, Mattli, Woods 2009). However, given the fragmentation caused by the persistence of national sovereignty, networks become the sole inter-organizational transnational coordination mode available to national regulatory agencies (Kahler, Lake 2009). Research regarding regulatory networks is incipient (Coen, Thatcher 2008). While a few studies are starting to look at regulatory networks (Levi-Faur 2010), more research is called for (Levi-Faur 2010), in particular regarding their governance and their evolution.

The paper goes as follows. We first present the concept of network as an organizing form—an interorganizational coordination mode—and present a typology of different goal-directed network types. We then review the literature on the governance of goal-

directed networks as well as on process research from an organization theory perspective. We then present our methodology and the empirical material. The discussion of our findings and their relation to the literature follows. The paper finishes with a brief conclusion.

The Governance of Inter-Organizational Goal-Directed Regulatory Networks

This first section of the literature review sets out our main theoretical framework regarding the governance of networks. We first define the network as an inter-organizational coordination mode, we then specifically identify different types of networks, and, lastly, we review existing knowledge on the governance of networks.

The Network as an Inter-Organizational Coordination Mode

Networks are by now popular inter-organizational coordination modes, complementing and substituting hierarchical and market modes (Powell 1990). This popularity can be attributed to today's complex world, which increases "wicked" problems (Rittel, Webber 1973), and to the need for organizational forms combining dispersed power with unification (Agranoff, McGuire 2001).

At the international level, as globalization increases international business interconnectedness, so does the need for global regulation (Levi-Faur 2010, Mattli, Woods 2009). However, given the fragmentation caused by the persistence of national sovereignty, networks become important inter-organizational transnational coordination modes among national regulatory agencies (Kahler, Lake 2009).

As a logic of organizing, networks have been contrasted to traditional forms of markets and hierarchies (Powell 1990). These latter two forms have been the main conflicting images of interorganizational coordination modes (Williamson 1975)—the means to organize the relationships between the different organizations. The market mode is clearly not applicable to interaction among NRAs, since these do not compete among themselves offering services to the same set of users/buyers. Perhaps its

conceptual equivalent would be non-programmed coordination via “laissez faire” (Keohane, Nye 2000), where commitments among parties is low and interaction sporadic, ad-hoc and informal. In contrast, European central banking is an example of hierarchical mode: where national central banks are subordinated and dependent on the European Central Bank.

The third inter-organizational mode, the network, implies complementarity and mutual adjustment between autonomous organizations which are interdependent (Powell 1990). The table below summarizes the characteristics of the three governance modes.

Table 1. Summarized comparison among different inter-organizational governance modes			
Key Features	Market	Hierarchy	Network
Normative basis	Contracts and property rights	Employment/Ownership relationships	Complementarity and mutual adjustment
Means of communication	Prices	Routines	Relational
Conflict resolution mechanisms	Resort to courts	Administrative fiat	Reciprocity and reputation
Commitment among organizations	Low	Medium – high	Medium – high
Dependence between organizations	Independent	Dependent	Interdependent
(Powell 1990)			

Social Networks, Goal-Directed Networks, and Regulatory Networks

As opposed to social networks—an analytical concept describing a social structure made up of individuals (or organizations) connected by some sort of interdependencies—goal-directed networks are defined as “groups of three or more legally autonomous organizations that work together to achieve not only their own goals but also a collective goal” (Provan, Kenis 2008). The object of this paper are

goal-directed inter-organizational networks setup by national regulatory agencies (NRAs).

As regulation-by-network increases in practice, it is starting to draw attention from scholars. In many regulated fields where regulatory responsibilities have not been effectively delegated to a supranational entity, goal-directed networks are the only viable international coordination mode among autonomous national regulatory agencies [NRAs].

Regulatory networks, as a subset of public networks, have certain peculiarities. As Herranz (2008) points out “unlike for-profit networks, public networks are often characterized by additional legal, procedural, and political accountability relationships that constrain a public network’s capacity to flexibly form, expand, contract, or disband (3).” Two are the most relevant specificities of regulatory networks, when compared to other inter-organizational goal-directed networks. First, regulatory networks may be mandated by legislation, as is the case for several European networks composed by NRAs and legally recognized by the European Commission as consultative bodies. Mandated networks are not as capable as other networks to modify their characteristics: i.e. purpose, rules, membership. Such modifications may require legislative action. Thus, mandated networks are not fully autonomous to modify themselves. For important changes to happen to mandated networks, these may have to be approved externally by a legislative body or any other non-member. For example, modifications to certain European regulatory networks need to be decided by the Council of the EU and the European Parliament.

Another major specificity of these networks is membership. Membership in regulatory networks, in particular if these are mandated networks, is often fixed. That is, members may not have the power to invite new members, who have not been specified in the network’s founding mandate, to join the network: not everybody is eligible to partake in the network. Moreover, membership may be obligatory for some. And in addition, participation in many regulatory networks is by right, it is not as a result of credible commitments (Kelemen, Tarrant 2011). In our analysis of the case study, we bear in mind these singularities of regulatory networks.

Types of Goal-Directed Networks

In addition, regulatory goal-directed networks may differ according to their purpose. In essence, public networks may deal incrementally with information exchange, member capacity-building, collective strategy-development, and joint execution (Agranoff 2007). This conceptual framework of different types of goal-directed networks will help us in exploring the evolution of the network studied.

The Governance of Networks

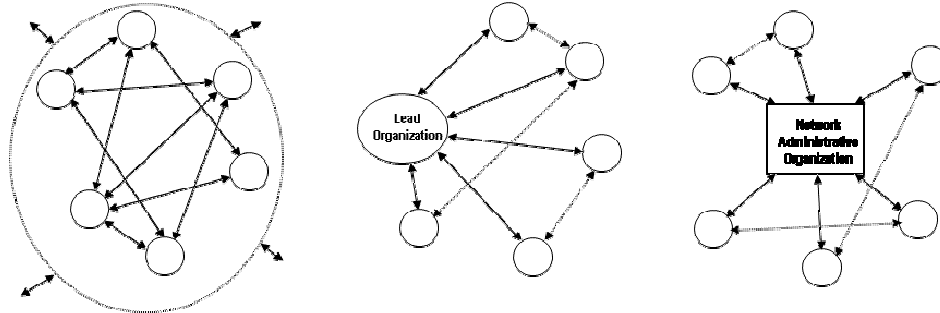
Irrespective of their purpose, goal-directed networks must somehow be governed to ensure coordinated action to achieve their goals (Saz-Carranza, Ospina 2011). Provan and Kenis (2008) define the governance of networks as “the use of institutions and resources to coordinate and control joint action across the network as a whole” (231). There is a lack of studies understanding how networks are governed. Indeed, network scholars (Provan, Kenis 2008, Milward, Provan 2006) argue that attention to governance is essential to any understanding of the dynamics of inter-organizational collaboration and the determinants of goal-directed network performance. Studies conclude that the governance of networks is a strong determinant of network performance (Dyer et al. 2007).

It is well known that governing networks—or any other kind of interorganizational set—work is an inherently difficult task and by no means easy (Human, Provan 2000). Business scholars estimate that more than 50% of alliances fail (Kelly, Schaan & Jonacas 2002, Park, Ungson 2001). Failure rates are not available regarding public networks, but Huxham and Vangen (2000) have identified how collaboration often succumbs to what they term collaborative inertia. Thus, more work is necessary in the field of the governance of networks in general (Provan, Kenis 2008, Saz-Carranza, Ospina 2011).

Provan and Kenis (2008), provide a typology of governance forms of goal-directed networks. They propose three structural forms for goal-directed network governance: shared governance among network members; the network governed by one of its members; and delegation of its governance to a network administrative organization

(NAO). The NAO is “a separate entity...set up specifically to govern the network and its activities” (Provan, Kenis 2008). These three forms allude to the structural dimension of network governance: i.e. the formal institutions and resources designed to coordinate and control joint action.

Figure 1. Three Different Governance Forms (Provan, Kenis 2008)



These forms conform a continuum along centralization and formalization. Shared governance among members is the least formalized and most decentralized (Provan, Kenis 2008). When the network is governed by one of its members or a non-member specialized NAO, the network’s governance form is more centralized and formalized. We refer to centralization when significant decision-making occurs only in one organizational unit. This does not mean that this unit—i.e. the NAO—makes decisions unilaterally, but that this unit is the place where decisions are made and legitimized—whether by consensus, voting, or otherwise (Provan, Kenis 2008). Formalization indicates the extent to which the rights and duties of the members of the organization are written down in rules, procedures, and instructions (Provan, Kenis 2008, Ring, Van de Ven 1994).

Provan and Kenis’ (2008) ground-breaking work on network governance does not explicitly provide a specific set of defining elements of the governance form. From their description of the three governance forms we here derive the following elements:

- centralization of coordination activities
- the nature of member interaction

Jerusalem Papers in Regulation & Governance

- the power balance among members
- the formalization of the governance form
- and distribution of cost of governance

The following table summarizes the characteristics for each governance form.

Table 2. Characteristics of Different Governance Forms					
	Coordination activities	Member interaction	Power balance	<i>Formalization of form</i>	Cost
Shared	Decentralized	Multilateral	Symmetrical	<i>Low</i>	Distributed
Lead-member	Centralized (lead-member)	Bilateral (via lead-member)	Asymmetrical	<i>Medium</i>	Concentrated
NAO	Centralized (NAO)	Bilateral (via NAO)	<i>Symmetrical</i>	<i>High</i>	<i>Distributed</i>
Source: Provan, Kenis 2008					

Provan and Kenis (2008) also identify the key predictors of network governance forms: namely, trust, number of participants, goal consensus, and need for network-level competencies. High density of intra-member trust allow for shared governance, while centralized trust and medium density trust call for lead member governance and NAO-governance, respectively. Similarly, high level of goal-consensus may allow for shared-governance, while on the other end low goal-consensus would require lead-member governance. As number of participants and/or need of network level competencies increase, the governance form should go from shared governance all the way to NAO governance forms. The following table summarizes their contingent governance form model.

Table 3. Predictors of Different Governance Forms

Governance Form	Trust	Number of Participants	Goal Consensus	Need for Network-Level
Shared Governance	High density	Few	High	Low
Lead Organization	Low density, highly centralized	Moderate number	Moderately low	Moderate
Network Administrative Organization	Moderate density, NAO monitored by members	Moderate to many	Moderately high	High

Source: Provan, Kenis 2008

It is worth mentioning that while goal-directed network type and governance type are related they are not the same. It may well be that two action networks have different network governance forms. While we theoretically predict action networks to be NAO-governed and information networks have shared governance, the governance form and type of network goal are distinct network characteristics.

Network process

In this second part of the literature review, we lay out the conceptual framework we use--in combination with the network literature above presented—to explore the development process of the governance of the European telecoms regulatory network. Following (Van de Ven, Poole 1995), we define development as “a change process, i.e. a progression of change events that unfold during the duration of an entity's existence—from the initiation or onset of the entity to its end or termination (512)”¹.

Van de Ven and Poole (1995), in a seminal article on organizational process theorizing, identify four types of process theories: linear-sequential lifecycle, teleological (repetitive circular), evolutionary (driven by environment), and dialectical.

They propose the framework for researchers to use and identify which of the four process theories is applicable to the case in point. They contend that all organizational

¹ We define process theory as “an explanation of how and why an organizational entity changes and develops (Van de Ven, Poole 1995).”

theories explaining change use one or more of these theoretical “primitives”. Thus, in studying developmental processes, scholars should first identify which of these theories are acting and how they relate to each other if more than one theory is relevant.

Life-cycle theories follow a linear sequence of prescribed inevitable stages and represent the organizational equivalent of the biological sequence of life. All of such theories comprise at least the following three stages: emergence, evolution and termination. This type of theory is by far the most popular in management and organizational literature.

Interorganizational relations scholars have proposed that in the evolution stage, actors start the “housekeeping” and “learning” as the network starts functioning, implementation takes place, and the relationship solidifies. The actors then recognize failures or changes within the network, which either produce changes to the network’s agreements and functioning or may, ultimately, terminate it (Commission 2003, Larson 1992, Lowndes, Skelcher 1998, Kanter 1994, Saz-Carranza, Vernis 2006).

However, scholars differ about the changes along a collaborative’s life-cycle. E.g. some scholars predict trust will grow with the collaboration, while others that it is an initial precondition and that it decreases as the collaborative is socialized within the participating organizations (Commission 2003, Larson 1992, Lowndes, Skelcher 1998, Kanter 1994, Saz-Carranza, Vernis 2006).

Specifically regarding network governance form evolution, very little has been said. Provan and Kenis (2008) tentatively suggest a life-cycle process in which the form “is likely to evolve in a predictable pattern from shared governance to a more brokered form and from participant governed to externally (NAO) governed (246).”

Teleological theories imply a repetitive, circular sequence of goal formulation, implementation, evaluation, and, if necessary, modification. Often, teleological theories incorporate the idea of equifinality—that difference equally effective paths may exist to achieve the same goal. These theories tend to assume highly rational actors—in that they define goals and evaluate actions accordingly—but do accept that goals are socially constructed and do also change. This social-constructionist and

dynamic characteristics of goals make the teleological process an infinite set of iterations.

A cyclical approach to interorganizational collaboration consists of reiterative sequences of negotiation and commitment—where actors bargain and agree to rules—execution, and evaluation (Ring, Van de Ven 1994, Ariño, de la Torre 1998, Doz 1996). As new situations are encountered and problems arise, the actors enter again the negotiation stage and will modify only those aspects perceived as problematic while retaining the other previously reached commitments. Learning occurs throughout the cycle (Weiss, Visioni 2003).

Dialectic theories pose that change (or the absence of it) occurs due to colliding forces that compete with each other for domination. Thus, these theories suggest that a thesis is challenged by an antithesis, which then result in a synthesis. These theories do allow for stability and non-change in those cases where the thesis overwhelmingly overpowers the anti-thesis, thus generating a synthesis which is identical to the thesis.

Dialectical approaches are certainly not new in organizations studies. During the late '70s, Benson (1975) and Zeitz (1980) used a dialectics approach to organizational theory and interorganizational relations, respectively. In the '80s, Astley and Van de Ven (1983) proposed to reconcile central debates in Organization Theory² via a dialectical perspective. A decade later, Nutt and Backoff (1992) proposed a dialectical approach to strategy. Yet, to our knowledge, a dialectical process approach to network governance has not been applied.

Evolutionary theories also parallel the biological principles of variation-selection-retention which is at the basis of (neo)Darwinism. Organizations inevitably experiment variations (usually randomly though these theories do not exclude rational modifications). Organizations then compete with each other for scarce resources and only the fittest are selected (i.e. survive). Surviving organizations retain the variation.

² E.g.: Organizations as rational or subjective; change by internal adaptation or environmental inducement; determinism or agency; organizational or population-level action; and populations as simple aggregates or something more than the sum.

The four theories imply very different characteristics. Thus, evolutionary and life-cycle theories are deterministic in that some sort of inherent imprinted routine paces the emergence-evolution-termination and variation-selection-retention sequences. Teleological and dialectical are, on the contrary, open-ended and socially constructed. Evolutionary and dialectical theories imply at least two actors in competition or in conflict, respectively. On the contrary, life-cycles and teleology are self-referential in nature—though they allow for more than one unit to be involved in the process. Additionally, each theory implies very different mechanisms: life-cycle theories imply compliance to best fit the present stage, teleology involves purposive analysis, conflict is at work in dialectics, and variation and competition in evolutionary theories. Lastly, each of the theories involves different event sequences. The table below summarizes these characteristics.

Table 4. Characteristics of Process Theories				
Theory	Nature of process	Minimum set of units	Mechanism at work	Sequence of events
Life-cycle	Prescribed, deterministic	1, unit of study	Compliance	1_Emergence 2_Evolution 3_Termination
Teleology	Open-ended, socially constructed	1, unit of study	Purposive analysis	1_Goal-setting 2_Execution 3_Evaluation 4_Modification
Dialectics	Open-ended, socially constructed	2, conflicting units	Conflict for control	1_Thesis, Antithesis 2_Conflict 3_Synthesis
Evolutionary	Prescribed, deterministic	2, competing units	Competition for scarce resources	1_Variation 2_Selection 3_Retention
(Van de Ven, Poole 1995)				

The above description allows the researcher to analyze the change studied and identify its main characteristics. He or she can then use one, or more, of the change theories that apply and further explore, describe, and explain the development.

For example, if when exploring a developmental process the researcher finds that two units are in conflict to take control over the same object then it should consider the dialectical approach. If he/she finds that an organization—or several organizations collaborating and thus behaving as one—modifies its action to better direct itself towards the achievement of a specific goal, then he/she should use a teleological approach in theorizing the development.

These different theorizing approaches are not exclusive of one another other. Van de Ven and Poole (1995) are very pungent in their call for combining more than one “primitive” process theory when constructing a specific theory of change.

They justify drawing on different process theories because of several reasons. First, by definition organizational process phenomena extend in time and space. Therefore, different process theories may come into play at different points in time or space. Second, any of the above four process theories, are inherently incomplete: key components in all theories are exogenous to the phenomenon studied, i.e. how is emergence triggered in the life-cycle model? How is dissatisfaction triggered in a teleology model; antithesis in dialectics; or variation in the evolutionary model?

When the researcher identifies more than one theory applicable, then he/she will have to determine how are the different change theories related. The relationship between theories may be nested or at the same level of analysis. Theories may operate simultaneously or sequentially.

Methods

Our research design consists of a qualitative case study using content-analysis of documents and transcripts of in-depth interviews. Three reasons justify in-depth qualitative research as the most appropriate methodology to address the inquiry: the dynamic nature of the topic, the absence of previous empirical research, and the exploratory character of the research question (Agranoff and Radin 1991; Marshall and Rossman 1995; Saz-Carranza and Ospina 2010).

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The European telecommunications regulatory network is officially called the Body for European Regulators for Electronic Communications (BEREC). With respect to its selection, BEREC represents a purposive, theoretically-driven sample. Regulatory networks are becoming key governance mechanisms in the EU (Levi-Faur 2010). Among EU regulatory networks, those in the telecoms, energy, and financial sectors are experiencing important transformations and political deliberations and have recently finalized a third wave of integration. BEREC was finally selected because we were able to secure access to this network.

Data collection was based on in-depth individual and group interviews with staff of both the network and NRAs. The interviews elicited the interviewee to describe its personal experience with the network, to narrate how the network was designed and why, to identify which were the most difficult and conflictive moments during network evolution and how they were resolved. A fluid interpretive technique allowed flexibility to move the conversation in any direction to capture these broadly and deeply.

We also analyzed documents, in particular documents proposing and determining network governance forms and rules of procedures. We also analyzed correspondence between the key actors involved in the network design.

Our data is based on documentation and interviews with 15 distinct interviewees from 6 different National Regulatory Agencies (NRAs), the European Commission (EC) and the BEREC Office. The interviews could not be recorded since interviewees would not allow to it, but detailed notes were taken from the conversations.

Interview sampling was based on a snowball strategy (Miles, Huberman 1994) . We started with one NRA with whom we had access and then we moved on through the network. The four most influential NRAs identified by the interviewees are included, as well as the EC and the incipient BEREC office. For NRAs, the equivalent to the director for international affairs were interviewed—who are those most involved in the negotiation and those who prepare the meetings of the different NRA chairmen.

Both the detailed notes from the interviews as the main documents were coded. AtlasTi was used to help organizing documents and quotes during the coding process. We coded the interview notes using an inductive coding strategy (Miles, Huberman

1994): we had no theory-based codes to start off with. Based on our interview questionnaire structure, we tagged any instance that pointed towards negotiation or conflict between any different parties. We also coded any piece of information that explained any change or attempt at changing any network characteristic. After several coding waves, we ended with a final set of codes which ultimately led to our narrated findings.

The case study

During the 1990s, the EU started the process to create telecom competitive markets in all member countries (MS) as well as the first steps towards market integration across Europe. This process culminated in the first telecom regulatory package in 1998 composed of a series of directives on competition, licensing, and interconnection and standards. The main discussion in the field of telecommunications in the EU regarded the amount of independence the NRAs should have, incumbent Public Telephone Operators (PTOs) and on the fact that states were failing to transpose correctly the EC legislation. Both the EC and the EP repeatedly called for a Euro-telecoms regulatory authority to prevent fifteen differing regulatory areas developing (Thatcher, 2001). Nonetheless, EC member states opposed this proposition as they were not ready to accept such a powerful authority. The EC called for, at a minimum, veto powers of national regulatory decisions contrary to openness and competition. The European Council denied the EC such powers. Also during those years, in 1997 to be more precise, different European NRAs set up the International Regulators Group (IRG) as a unofficial forum to share information and best-practices. The EC is not a member of the IRG.

In preparing for a second regulatory package, the EC launched a communications and public review (EC Communications Review, 22.12.1999). Among the proposals discussed, the EC presented the idea of a High Level Communications Group (HLCG), essentially a network of NRAs that would advise the EC, monitor NRA activities, and resolve international inter-NRA disputes. The NRAs publicly responded that such an advisory body was not needed, given the existence of the IRG, and that conflict-resolution responsibilities were inappropriate for such advisory body: “Regulators were...skeptical about the HLCG (EC Communication on Public

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Consultation, 26.04.2000).” Nevertheless, the EC’s directive proposal for a new regulatory package included the HLCG but without the conflict-resolution powers (EC Proposal for a Directive on a Common Regulatory Framework, 12.07.00). The Council, however, “deleted the provisions related to the High Level Communications Group, on the advice of the Council Legal Service. The Commission can reluctantly accept this, and will examine the possibility of setting up such a group at its own initiative (Commission position on Council common position, 18.09.01)”.

While the framework directive did not include an NRA advisory group, in 2002, a decision of the EC created the European Regulators Group (ERG) as an advisory body to the European Commission (Kelemen, Tarrant 2011). The ERG, the seed that would later develop into the present Body of European Regulators of Electronic Communications (BEREC), consisted of 27 EU NRAs plus the European Commission (EC) as a non-voting member. The difference between IRG and ERG is that the former does not include the EC but includes EFTA and EU-candidate states, while the latter includes only EU members and the EC. Both IRG and ERG coexisted. ERG was an officially recognized advisory body, where the EC was a non-voting member, while IRG still is an association of NRAs where the EC is not present. With respect to the original HLCG initially proposed by the EC, the ERG did not have either conflict-resolution powers nor NRA activity monitoring duties.

The third wave of regulatory harmonization arrived a few years later. As the need for further regulatory consistency at a European level advanced, the EC first sent a letter to ERG in 2006 stating that it would seek greater powers to be able to overrun some national regulations produced by NRAs, and later proposed in 2007 the creation of the European Electronic Communications Market(s) Authority (EECMA): a structure closer to a hierarchy, i.e. an “authority” or European level agency, rather than a network. The governance system of this proposed agency was composed of a Board of Regulators and an Administrative Board of twelve members: six appointed by the European Commission and six by the Council.

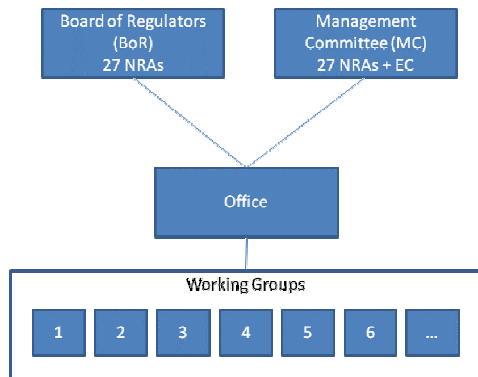
NRAs reacted. They decided to strengthen ERG sufficiently to signal a more committed stance towards regulation harmonization. Thus, they decided to set up an IRG/ERG secretariat in Brussels.

Negotiations between the European Commission, the Council and the European Parliament ensued. These eventually gave birth to BEREC, a revamped ERG, a network structure composed by all European NRAs and the EC. While the EC may attend BEREC’s governance board (called the Body of Regulators [BoR]), it has no voting power.

The 2009 regulation that creates BEREC states that its propositions must be taken in “utmost” account by the EC and NRAs. BEREC thus has stronger implications than ERG had (which was merely an information-sharing network). While national-level implementation is left to each NRA, BEREC is a network where members pool decisions and coordinate their action.

BEREC has currently set up the Office with 18 staff that works for the network itself. The Office is overlooked by the Management Committee—which is essentially the name that the BoR adopts when taking on issues regarding BEREC’s Office, operations, staffing, and budgeting. The main difference between the BoR and MC, in addition to their varying responsibilities, is that the EC has vote in the MC while it does not have vote in the BoR.

Figure 2. BEREC’s structure



IRG still exists and—based on our interviews—NRAs do not seem to have any intention of eliminating it. IRG remains the forum where the NRAs can get together away from EC surveillance. This is important for NRAs when discussing EC public consultations or when preparing responses to EC requests.

Findings

The teleological dialectics of network evolution

Based on our analysis of the main documents and interviews, we propose that the dialectic mode is the most appropriate process model to understanding BEREC's evolution. This we believe for the following reasons:

Conflict and tension between NRAs and the EC first, and among NRAs later, were evident in the interviews. All interviewees recognized the tension between the EC and the NRAs, and many also recognized tensions among NRAs in defining the small-print of BEREC's rules of procedures.

ID	Quotes
P4	BEREC is a compromise. EC wanted an euro-regulator. NRAs opposed centralization because proximity to diverse national markets is essential (for example, Germany's prices are 10 times those of Austria). Countries vary a lot in markets, in how NRAs function...
P5	BEREC regulation was part of a package with several dimensions to it. The Council...opposed the European agency. The Parliament, on the other hand, proposed strengthening ERG. Hence, BEREC was the result.
P7	NRAs were against EECMA since it did not respect balance of power between EC, member states, and EP. And it didn't respect the Meroni doctrine ³ .
P10	Tension between EC and NRAs is that between uniform regulation versus jealous autonomy
P10	Major change between proposal and final solution: BEREC Office' smaller in size (150 to 28). Danger was that BEREC Office could turn into an instrument of the EC. Now, there is a balance between BEREC Office and NRAs.
P12	BEREC is a compromise between NRAs and EC. EC was disappointed with slow harmonization and proposed a Euro-regulator (i.e. EECMA). NRAs reacted defensively to preserve "status quo". They first conveyed a unitary message and then contacted their ministries.
P13	The compromise is rather a compromise [of the EC] with the Council (and to a lesser extent probably with EP), than a compromise with the NRAs.

³ According to the Meroni doctrine, applied for the first time by the European Court of Justice in 1958, delegation of powers to independent agencies must be limited to implementing powers clearly defined and entirely supervised.

An evolutionary perspective does not seem applicable with respect to BEREC, since neither NRAs nor BEREC itself compete with the EC for survival. Nor do NRAs compete among themselves for survival. Although one may argue that, ideally in a globalized world economy, NRAs compete to attract business and to make their national regulated markets more competitive, this they do not do within, or through, the BEREC network. BEREC itself does not have competitors and the struggles related to it have to do with deciding its form rather than its survival.

The life-cycle model is not either appropriate since there seems to be no inevitable process of growth and decay. The findings do show an evolution towards a more centralized and formalized structure—as Provan and Kenis (2008) predict—but no intrinsic code determining BEREC’s lifecycle seems at play.

Lastly, teleology seems to come at play in that it is the macro-framework in which the dialectical processes are nested. There appears to be two specific moments in time where the EC in particular revises the European strategy of regulatory harmonization of electronics communication. In these two moments—2002 and 2006—the EC proposes changes to IRG and ERG, respectively. During these moments, first ERG is created (based on IRG) in 2002, and later the dialectical process between EC and ERG is unleashed, eventually resulting in BEREC.

The grand dialectic of BEREC’s creation

The dialectical process can be reduced in analytical terms as a tension between the hierarchy as a coordination mechanism advocated by the EC at one end, and the most informal and decentralized network form advocated by NRAs (and the Council) at the other end. Using Provan and Kenis’ (2008) framework, the table below summarizes the different proposals and forms advocated for and (in some cases) implemented.

Table 6. Evolving Governance Forms of the European Telecoms Regulatory Network					
	Coordination activities	Member interaction	Power balance	Formalization of form	Cost
IRG	Decentralized (rotating lead-member)	Multilateral	Symmetrical	Low	Distributed

Jerusalem Papers in Regulation & Governance

HCLG [2000 EC proposal]	Centralized	Bilateral via (EC)	Asymmetrical (in favor of EC)	High	Concentrated (EC)
2002 Directive	-	-	-	-	-
ERG (2002-2007)	Decentralized-rotating lead-member	Multilateral	Symmetrical	Low	Distributed
EC letter 26/11/06 [Proposal]	Centralized (EC)	Bilateral (via EC)	Asymmetrical (in favor of EC)	High	Concentrated (EC)
I/ERG w/ secretariat (2007-2010)	Centralized (NAO)	Bilateral (via NAO)	Symmetrical	Medium	Distributed
EECMA [Proposal]	Centralized (Agency)	Bilateral (via Agency)	Asymmetrical (in favor of Agency)	High	Concentrated (EC)
BEREC	Centralized (NAO)	Bilateral (via NAO)	Symmetrical	High	Concentrated (EC)

The following figure illustrates this dialectic dynamic and nests it within a teleological process. The first bold move towards a more formalized network occurred in the EC's 2000 Directive proposal. The EC proposed a formal advisory network whose secretariat would be provided by the EC itself. The Council rejected the entire idea of a formal network of NRAs—formally justifying this on legal arguments, but actually looking to maintain maximum national autonomy regarding the telecoms market (Simpson 2011).

The EC, however, did not give up and in 2002, through its decision 2002/627/EC, set up ERG as an advisory group to the EC. ERG is essentially the name that IRG adopts when it officially responds to an EC request. In such circumstances, the EC participates in ERG but has no vote.

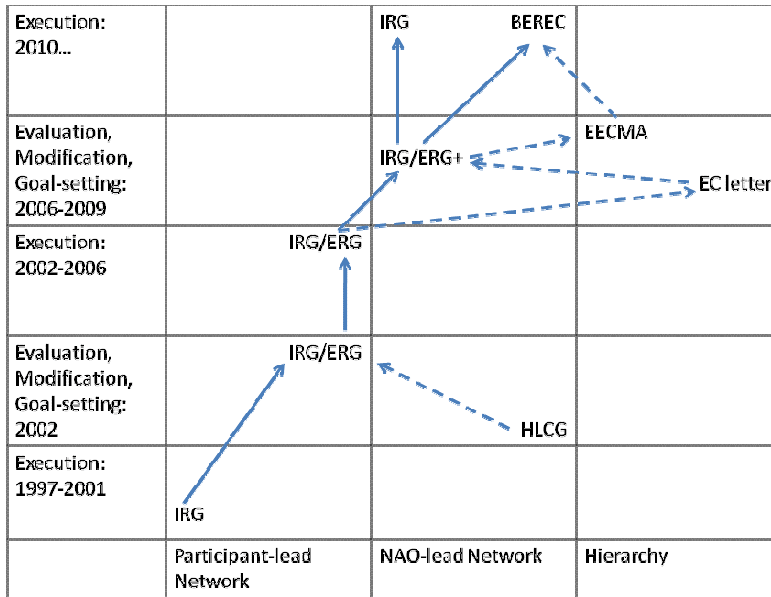
The second and central trigger for subsequent enhancements and formalizations of ERG occurs in late 2006, after the EC writes to ERG announcing it is planning to request stronger powers to impose remedies on NRAs. In other words, the EC aims at being able to impose regulations that NRAs will have to enforce and to block regulations by NRAs. In essence, its proposal aimed at subordinating NRAs for certain issues. The EC states it is disappointed with the limited progress in harmonized regulations of telecom markets around Europe.

Table 7. Correspondence between EC and ERG
<p><u>26/11/2006: EC to ERG</u></p> <ul style="list-style-type: none"> • “You are aware about the serious concerns of many market participants, which are shared by the European Commission, about the present lack of consistency as regards the application of the regulatory framework.” • “I envisage, as indicated to you at our meeting, to include in the future regulatory framework a clause allowing the Commission to: (1) request that a national regulatory authority replaces an inappropriate measure by a regulatory action that will remedy the competition problem effectively; (2) request a national regulatory authority to undertake an analysis of a market and/or to adopt a remedy within a reasonable time-frame.” • “The institutional set-up of the ERG does not allow it to achieve, even with the best intentions, a consistent application of remedies or a common regulatory approach to cross-border issues.”
<p><u>18/01/2007: ERG to EC</u></p> <ul style="list-style-type: none"> • “In Bratislava, NRAs agreed to establish a permanent...Chairman's Secretariat, composed by two to four junior and middle officials seconded by NRAs.”
<p><u>30/01/2007: EC to ERG</u></p> <ul style="list-style-type: none"> • “Even though this improvement in the work of the ERG is welcome..., we believe that the present status of the ERG as mere advisory body to the Commission—working mainly on the basis of consensus, without powers of enforcing its decisions and without guaranteed transparency and accountability, in particular towards the European Parliament—could become a constraint on its evolution in the longer term.”
<p><u>27/02/2007: ERG to EC</u></p> <ul style="list-style-type: none"> • “ERG maintains its opposition to the Commission’s...proposal of a...“veto on remedies” plus the power to impose remedies on NRAs...on the grounds of subsidiarity.”

The first response by IRG/ERG is to upgrade their structure, setting up a secretariat in Brussels. Thus they move decidedly from a rotating participant-lead governance to a NAO governance form. Since IRG’s inception in late 90’s, the governance of the network had been shared by its membership. One NRA chaired the IRG and its “virtual” secretariat, composed of a few (up to 4) officers, was distributed: each officer working at its home NRA. By early 2009, IRG/ERG had a four-man team set up in Brussels: a Head, two Juniors Officers and an Administrative Aid.

In addition, this enhanced IRG/ERG exchanged several letters with the EC to argue for and justify its progress and impact so far.

Figure 3. The dialectics of BEREC's governance form



However, the EC paid little attention to the steps ERG made, and in mid 2007 proposed the Council and EP to set up EECMA, a quasi hierarchical European agency, that would in practice trump NRAs.

The main difference between a traditional hierarchy and EECMA is that in the latter the NRAs would have some say in its decision-making bodies: in the BoR all and only NRAs would have one vote each, but in the Administrative Board (AB) the EC would enjoy 50% of the weight while the Council the other 50%. This in essence, would have given the EC majority in the AB.

Mobilizing support to block EECMA

Once the EC proposes EECMA, NRAs went off to mobilize support in the Council and EP. NRAs responded with several strategies to the threat of losing power and autonomy in favor of a European authority. They influenced the EU's legislative process. The different NRAs contact their respective permanent representatives of the Council of the EU as well as the major groups of the European Parliament.

Table 8. Quote Supporting Findings re: NRA mobilization	
ID	Quotes
P1	NRAs lobbied to remain independent. In the council we contacted the permanent representation. We also contacted the parliament.
P4	All NRAs decided to go back and collect as much arguments as possible against EC proposal. The resistance was channeled through to the EU's political dimension. The process took a long time.
P5	Council did not see with good eyes a greater role for the Commission and did not understand that the agency would have been independent from the Commission. NRAs and powerful national champions influenced the Council.
P10	ERG reacted badly to proposal--It was not a good proposal--. First, ERG reacted with a joint communications effort and then NRAs lobbied their MEP
P12	NRAs reacted defensively to preserve "status quo". They first conveyed a unitary message and then contacted their ministries.

Intra-network dynamics

As NRAs joined forces to block the EC's proposal and to create a governance form that safeguarded the distinct NRA's turf, they also maneuvered trying to influence the internal decision-making of BEREC. The network form had prevailed over the hierarchy (or authority) thanks to the framing and mobilizing activities of the NRAs. Regulation 1211/2009 established the main procedures applicable to BEREC: membership, the importance of its contribution, and minimal rules. The regulation stated that "NRAs and the Commission shall take the utmost account of any opinion, recommendation, guidelines, advice or regulatory best practice adopted by BEREC". It also gave BEREC an Office, with legal personality as a Community body, to support its work, and established a Board of Regulators.

The regulation creating BEREC left it up to the network members to define in detail its decision-making, concretely the rules of procedure setting out in detail the arrangements governing voting. This resulted in some tough negotiations among NRAs to settle on the small print of the decision-making.

The defensive opposition to the European Commission was shared by all NRAs as the previous section states. The NRAs opposition to yielding power over to the EC was explicitly stated by all interviewees. NRAs also recognized the need to harmonize

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regulations across Europe as well as the need to share information and knowledge among NRAs. These uniting factors did not however eliminate the fact that NRAs are extremely different among them. As interviewees recognized, differences occur along language, culture, size, independence, and national market structure.

When defining the procedures for voting, the NRAs therefore strongly negotiated among themselves. In essence, a group of NRAs challenged the status quo of ERG and rejected the direct transposition onto BEREC of ERG's rules regarding voting.

At ERG, decisions were taken on the basis of simple majority of "yes" votes over "no" votes. Abstentions, both explicit and implicit (i.e. when a member present did not emit a vote, either yea, no, or abstention), were not taken into account. BEREC's BoR, on the other hand, according to its rules of procedure requires 2/3 majority of "yes" votes of total number of members. This change in voting was championed by a group of NRAs dissatisfied with the status quo. According to interviews, dissatisfied NRAs believed that ERG treatment of abstentions and its majority threshold benefitted the then-stronger NRAs since abstentions were numerous—either because of lack of capacity or group pressure (most voting was done openly). One of the dissatisfied NRAs proposed that decisions be taken by consensus.

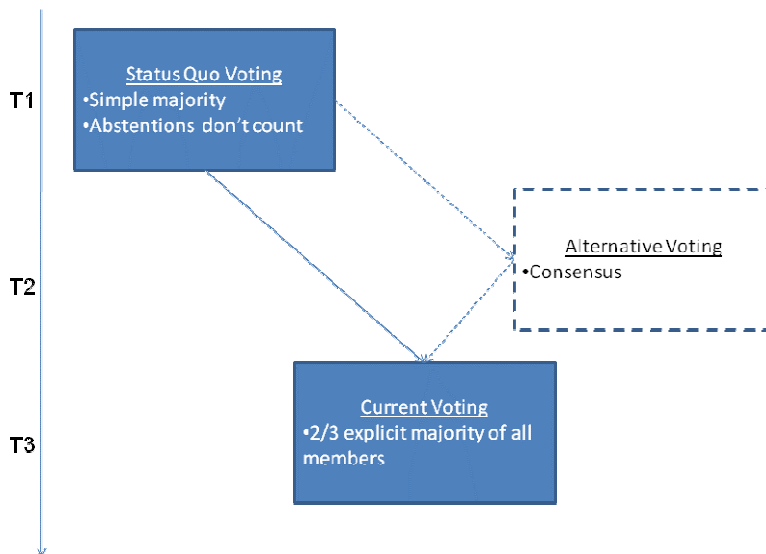
Facilitated by another dissatisfied NRA, the final proposal adopted requires 2/3 explicit and real majority.⁴

⁴ Electronic voting at BEREC is slightly different. It is divided into two phases. First a proposal is shared by the Chairman to which comments are made. A second proposal is produced incorporating the comments as far as possible. The second proposal is then voted using the same procedure as in physical voting. ERG did not have a specific procedure for such voting. This two-phase system was sponsored by some NRAs that were critical of the previous system, where the Chairman integrated the comments as far as possible and then directly accepted the proposal without going through any voting or further discussion.

Table 9. Quotes Supporting Findings re: Intra-network Dialectics	
ID	Quotes
P1	BEREC's decisions must be taken in "utmost account". That's why it was important to position oneself well in BEREC.
P11	[NRA X] was in favor of comitology procedures, [NRA Y] proposed decision-making by consensus. [NRA Z] proposed BEREC's current system as a middle course between [NRA X] and [NRA Y].
P10	BEREC procedures were debated lively. Not a controversial issue anymore. New responsibilities of BEREC needed more formal decision-making: The discussion made explicit the tension between good governance and effectiveness of decision-making procedures.

The figure below illustrates the dialectical process that occurred in defining the specific rules of procedures of BEREC. In essence, the status quo voting procedure—simple majority, where abstentions did not count—was challenged by an antithesis: consensus. The resulting synthesis was that all decisions required a 2/3 real and explicit majority of all members.

Figure 4. Internal Dialectics regarding voting procedures



Discussion

We here discuss our findings in relation to the literature. We discuss the process theories applicable to this case, their relationship and nesting, the congruence of our findings with predictions of network governance design, and relate our findings to European regulatory politics literature.

As we explained in the findings, the overall dynamics of BEREC's evolution is best represented by a dialectical process. This process is visible in the tension between the two opposing forces represented by the EC and the NRAs (these latter joining forces with the Council and, to a lesser degree, the EP). This recalls the out-group/in-group conflict proposed by the sociological literature. It is well known that being under attack or in front of a common enemy may unite parties: Out-group conflict is associated with in-group cohesion (Astley, Van de Ven 1983; Coser 1956). This phenomenon is clearly visible in IRG/ERG, and later in BEREC, where NRAs unite to counter the EC. This may be particularly interesting in mandated networks, where parties constituting the network may not be the ones in charge of designing and defining the network characteristics. Thus, a dialectical tension may be expected between network members and the party in charge of designing or deciding on the network characteristics.

Interestingly, in mandated networks, such as regulatory networks, strong mobilization and framing activities may be expected to occur prior to full formation or crystallization of the network. This contrasts with the network management literature where framing and mobilizing of the network occur continually (Agranoff, McGuire 2001, Saz-Carranza, Ospina 2011). This is understandable since mandated networks may require an external non-member to modify the network's structure (Herranz 2008).

We also find a second dialectical tension, this time fully comprised within the network itself, endogenous in nature. As soon as ERG is turned into BEREC, with more responsibilities, decision-making becomes important. IRG/ERG internal decision-making was not a contested issue among NRAs, since it was essentially an information-sharing network. However, when it turns into BEREC, NRAs do get heavily involved in framing internal procedures. As BEREC turns into a quasi-

binding advisory network, its decision-making—or in other words, how BEREC stands by a proposal—becomes central to NRAs. At this point a second negotiation occurs between those NRAs that wanted to translate the decision-making procedures of ERG over to BEREC and those NRAs that wanted a reform of the decision-making procedures.

Also related to the dialectical process described, we propose that the process is triggered by the evaluative stage of the EC's teleological cycle. That is, the tension arises when in 2006 the EC evaluates the harmonization of the regulations of the telecoms markets in Europe and decides to propose a radical new system, i.e. the EECMA. Van de Ven and Poole (1995) call for researchers of organizational processes to uncover and explain phenomena which the process theories leave unanswered. All process theories are inherently incomplete. Dialectical process theories cannot explain per se why an antithesis arises and thus generates tension—dialectics can only explain the developmental characteristics due to the clash between thesis and antithesis. The teleological prism applied to the EC does explain why the EC comes up with an antithesis to the then current status quo, unleashing the dialectical tension. (What teleological theories cannot explain per se, though, is what determines that the EC launches an evaluation and redesign in 2006: why not earlier, or later?) Thus, in a mandated network such as the one studied, the origin of the dialectical dynamics of change may lie in an external actor (the one mandating the network or in charge of designing the mandated network). The external actor may decide that the governance form of the mandated network is unsatisfactory and propose a change. It is reasonable to expect a reaction by network members to the proposal.

As mentioned, the evolution of the European telecoms regulatory network is in agreement of Provan and Kenis (2008) life-cycle linear incremental predictions. They argue that networks will tend to formalize and delegate coordinating activities as time evolves. In fact, our findings do coincide with their temporal predictions as with their design propositions. If IRG and BEREC are compared, their determining factors for network governance form apply. Thus, IRG seems to have high and distributed trust among members, moderate to high number of members (27), high goal consensus (to share information among NRAs), and a low need for network-level competences.

Such characteristics would call for a participant-shared governance form. In comparison, BEREC seems to have moderate trust (and intra-network activity monitored by the NAO), moderate to high number of members (27), moderate goal consensus (all NRAs agree that they have to advise the EC when requested but the content of BEREC's recommendations may be highly contested), and a need for high network-level competences (due to its increased responsibilities). BEREC's governance form is then also congruent with Provan and Kenis (2008).

European Commission (EC) favored a European regulatory agency (Levi-Faur 2010, Kelemen, Tarrant 2011). According to Levi-Faur (2010), BEREC is the compromise arrangement between the Commission and the NRAs. On the contrary, Kelemen (2011) proposes that BEREC is a compromise between the EC and the Council. Nevertheless, Kelemen (2011) do acknowledge that "once created, NRAs may become relevant actors in the debates over the allocation of powers, and they generally seek to maximize their own authority, either by resisting delegation to supranational bodies or by seeking to repatriate authority that had already been delegated to supranational authorities". Both authors agree that the "institutional ecology is shaped by the preferences of the relevant political actors, mediated by the rules of decision-making in the relevant sectors" (Kelemen, Tarrant 2011) but they differ in who are the relevant political actors (the Council or NRAs). From our interviews, NRAs consider themselves as key political figures in countering the EC's proposal, and recognize that they got involved in political activity to achieve their goal. In fact, as early as in the 1999, the EC officially stated in its public consultation report that NRAs (not the Council) had objected to the creation of a formal NRA network (the HLCG). However, all NRA representatives recognized that they worked via the Council, who was neither very supportive of the EC's proposal.

Conclusion

In this paper, we set out to explore the process by which public networks evolve in time. Specifically, we focused on how the governance form evolved in a European regulatory network. Based on organization theory and public management literatures, we identify a dialectical dynamic triggered by teleological evaluation cycles.

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We find that the network's governance system is determined by the dialectical tension between network members (National Regulatory Agencies) and an external very influential body (the European Commission, EC). We also identify a second dialectical tension endogenous to the network: that between the status quo and an alternative group of members. The first tension unifies the group in the classic external conflict-internal cohesion. The latter tension exists among the members. The tensions are triggered by evaluations carried out by an external actor (the EC) with enough capacity to influence the network's governance form.

In general, the process observed confirms the propositions that predict a formalizing of the governance as the network grows older. However, the evolution is neither lineal nor continuous. We also point out how the form evolves as more responsibilities are assigned to the network. And we also see the effect of the "shadow of hierarchy" on the levels of cooperation within the network.

As all studies, this one has various short-comings. The main one is that we used a single-case study as our empirical material. We justify this due to the exploratory nature of the study, as well as with the depth and richness of the data sought. Future studies will have to confirm our findings.

Bibliography

- Agranoff, R. & McGuire, M. 2003, *Collaborative Public Management: New Strategies for Local Governments*, Georgetown University Press, Washington, DC.
- Agranoff, R. 2007, *Managing Within Networks: Adding Value to Public Organizations*, Georgetown University Press, Georgetown.
- Agranoff, R. & McGuire, M. 2001, "Big questions in public network management", *Journal of Public Administration Research and Theory*, vol. 11, no. 3, pp. 295-327.
- Alter, C., Jerald 1993, *Organizations working together*, Sage Publications, Newbury Park, Calif.
- Ariño, A. & de la Torre, J. 1998, "Learning from failure: towards an evolutionary model of collaborative ventures", *Organization Science*, vol. 9, no. 3, pp. 306-326.
- Astley, G. & Van de Ven, A. 1983, "Central Perspectives and Debates in Organization Theory", *Administrative Science Quarterly*, vol. 28, pp. 245-273.
- Benson, J. 1975, "The interorganizational network as a political economy", *Administrative Science Quarterly*, vol. 20, pp. 229-249.
- Coen, D. & Thatcher, M. 2008, "Network Governance and Multi-level Delegation: European Networks of Regulatory Agencies", *Journal of Public Policy*, , no. 28, pp. 49-71.
- Commission, E. 2003, *Guidelines for successful public-private partnerships*, European Commission, Brussels.
- Coser, L.A. 1956, *The functions of social conflict*, Free Press, Glencoe, Ill.
- Doz, Y. 1996, "The evolution of cooperation in strategic alliances: initial conditions or learning processes?", *Strategic Management Journal*, vol. 17, no. 1, pp. 55-79.
- Dyer, J.H., Powell, B.C., Sakakibara, M. & Wang, A.J. 2007, "The Determinants of Success in R&D Alliances", *Proceedings of the Academy of Management Annual Meeting*, vol. Philadelphia.
- Herranz, J. 2008, "The Multisectoral Trilemma of Network Management", *Journal of Public Administration Research and Theory*, vol. 18, no. 1, pp. 1-31.
- Human, S.E. & Provan, K.G. 2000, "Legitimacy Building in the Evolution of Small-Firm Multilateral Networks: A Comparative Study of Success and Demise", *Administrative Science Quarterly*, vol. 45, no. 2, pp. 327-365.
- Huxham, C. & Vangen, S. 2000, "Leadership in the shaping and implementation of collaboration agendas: how things happen in a (not quite) joined-up world", *Academy of Management Journal*, vol. 43, no. 4, pp. 1159-1176.

- Kahler, M. & Lake, D.A. 2009, "Economic Integration and Global Governance: Why So Little Supranationalism?" in *The politics of global regulation*, eds. W. Mattli & N. Woods, Princeton University Press, Princeton, pp. 242-277.
- Kanter, R.M. 1994, "Collaborative advantage", *Harvard business review*, vol. 72, no. 4, pp. 96-109.
- Kelemen, R.D. & Tarrant, A. 2011, "The Politics of the Eurocracy: Designing EU Regulatory Agencies and Networks", *West European Politics*, vol. 34, no. 5, pp. 922-947.
- Kelly, M.J., Schaan, J. & Jonacas, H. 2002, "Managing alliance relationships: Key challenges in the early stages of collaboration", *R & D Management*, vol. 32, no. 1, pp. 11-37.
- Keohane, R.O. & Nye, J.S. 2000, "Introduction" in *Governance in a globalizing world*, eds. J.S. Nye & J.D. Donahue, *Visions of Governance for the 21st Century*; Brookings Institution Press, Cambridge, Mass.; Washington, D.C., pp. 1-43.
- Larson, A. 1992, "Network dyads in entrepreneurial settings: a study of the governance exchange relationships", *Administrative Science Quarterly*, vol. 37, no. 1, pp. 76-105.
- Levi-Faur, D. 2010, "Regulatory Networks & Regulatory Agencification: Towards a Single European Regulatory Space?", *Jerusalem Papers in Regulation & Governance*, , no. 30.
- Lowndes, V. & Skelcher, C. 1998, "The dynamics of multi-organizational partnerships: an analysis of changing modes of governance", *Public Administration*, vol. 7, no. 6, pp. 313-333.
- Mattli, W. & Woods, N. 2009, *The politics of global regulation*, Princeton University Press, Princeton.
- Miles, M.B. & Huberman, A.M. 1994, *Qualitative data analysis an expanded sourcebook*, Sage Publications, Thousand Oaks.
- Milward, H.B. & Provan, K.G. 2006, *A Manager's Guide to Choosing and Using Collaborative Networks*, IBM Endowment for the Business of Government, Arlington, VA.
- Nutt, P. & Backoff, R.W. 1992, *Strategic management of public and third sector organizations a handbook for leaders*, Jossey-Bass Publishers, San Francisco.
- Park, S.H. & Ungson, G. 2001, "Interfirm rivalry and managerial complexity: A conceptual framework of alliance failure", *Organization Science*, vol. 12, no. 1, pp. 37-54.
- Powell, W.W. 1990, "Neither Market Nor Hierarchy: Network Forms of Organization", *Research in Organizational Behavior*, vol. 12, pp. 295-336.
- Provan, K.G. & Kenis, P. 2008, "Modes of Network Governance: Structure, Management, and Effectiveness", *Journal of Public Administration Research & Theory*, vol. 18, no. 2, pp. 229-252.
- Provan, K.G. & Milward, H.B. 1995, "A Preliminary Theory of Interorganizational Network Effectiveness: A Comparative Study of Four Community Mental Health Systems", *Administrative Science Quarterly*, , no. 40, pp. 1-33.

- Ring, P. & Van de Ven, A. 1994, "Developmental processes of cooperative inter-organisational relationships", *Academy Management Review*, vol. 19, no. 1, pp. 90-119.
- Rittel, H.W. & Webber, M. 1973, "Dilemmas in a General Theory of Planning", *Policy Sciences*, vol. 4, no. 6, pp. 155-169.
- Saz-Carranza, A. & Ospina, S. 2011, "The behavioral dimension of governing interorganizational goal-directed networks—Managing the unity/diversity tension", *Journal of Public Administration Research & Theory*, , no. 212, pp. 327-365.
- Saz-Carranza, A. & Vernis, A. 2006, "The Dynamics Of Public Networks: A Critique Of Linear Process Models", *International Journal of Public Sector Management*, vol. 19, no. 5, pp. 416-428.
- Van de Ven, A. & Poole, M.S. 1995, "Explaining development and change in organizations", *The Academy of Management Review*, vol. 20, no. 3, pp. 510-541.
- Weiss, J. & Visoni, L.J. 2003, in *Relationship management; Mastering alliance strategy: a comprehensive guide to design, management, and organization*, eds. J.D. Bamford, B. Gomes-Casseres & M.S. Robinson, Jossey-Bass, San Francisco, pp. 119-133.
- Williamson, O.E. 1975, *Markets and hierarchies: Analysis and anti-trust implications*, Free Press, New York.
- Zeitzi, G. 1980, "Interorganizational Dialectics", *Administrative Science Quarterly*, vol. 25, no. 1, pp. 72-89.