Network governance work: evidence from the video game industry

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Abstract: Many call for research invites for further investigation of the underlying processes, practices and specificities of governance in the network context. Through an examination of what governance involves and how does it occur in a French cluster of video game companies, our multimethod study provide useful insights in the functions and purposes of governance in an inter-organizational and collaborative context, the main tools and mechanisms that are being used and the structure supporting these purposes and mechanisms. Our findings shed also light upon the processual nature of governance in network context. Governance is a set of processes, or a "meta-process", that are geared toward the creation, the maintenance and the evolution of collaboration relationships and the network as a collective actor. We refer to this process of governance functioning, evolution and continuous (re) evaluation as governance work.

Keywords: network governance, interorganizational networks, video game industry, creative industries

Introduction & theoretical background

Supposed to be an efficient and viable alternative to markets and hierarchies, inter organizational networks (hereafter networks), have been thoroughly debated in different literature streams including, but not limited to, strategic management, organizational theory and behavior, sociology, public administration etc (Provan et al. 2007; Borgatti & Foster 2003). Whether to gain on transaction or productivity costs, to improve inter-organizational learning or produce new knowledge and skills, networks are described in the literature as a superior governing form that outperform both markets and hierarchies by offering the advantages associated to both forms without their limitations (Ahmadjian & Lincoln 2001, Dyer & Singh 1998, Grandori & Soda 1995, Gulati & Gargiulo 1999). Thus, research is moving from a view of networks as a hybrid form on a continuum between markets and hierarchy towards their conceptualization as a distinct form of governance with its own features and characteristics (Grandori 1997, Grandori & Soda 1995, Powell 1990). As such, and because of the youth of this organizational form, research has primarily strived to understand the motives and rationales behind its selection. Studies have paid attention mainly to the conditions that will drive firms to make, ally or buy. The focus has also been on how they can reap benefits from their network membership and collaborative behavior and ultimately get a competitive advantage **(**Provan et al. 2007, Provan & Kenis 2007, Ring & Van De Ven 1994, Porter 1998, Ebers 1997**)**.

 However, recent calls for research are inviting scholars to go beyond these questions and try to understand network governance and open up the black box of network functioning (Ebbers & Wijnberg 2009, Humphreys 2008, O'Mahony & Ferraro 2007, Provan et al. 2007, Provan & Kenis 2007, Rodriguez et al. 2007, Winkler 2006; Ehlinger et al. 2007). There's a need to investigate how collective action is governed, organized and coordinated in the network context. Behind these new preoccupations are several theoretical gaps and practical concerns. As noted by Provan & Kenis (2007), networks have been conceived, so far, as "undifferentiated forms" (p. 232). Yet, the reality shows that networks can vary in forms, aims, origins and structuring processes and thus it could be

misleading to consider them as a unified and homogenous organizational form (Panicia 1998, Provan et al. 2007, Provan & Kenis 2007, Rodriguez et al. 2007, Winkler 2006;). Moreover, the proliferation of networks and collaborative arrangements and their polymorphous nature is contradictory with a study of network governance as solely a choice between different governing alternatives. What is more, reality shows that collaborative arrangements do not always fulfill their promise of positive outcomes for firms (Ahmadjian & Lincoln 2001, Bathelt et al. 2004, Dyer & Singh 1998, Gulati & Nickerson 2008, Gulati & Gargiulo 1999, Humphrey & Schmitz 2002, Granovetter, 1985). Researchers begin considering the dark side of networks. The organizational and managerial dilemmas and problems raised by this organizational form during its creation and its evolution require a better understanding of how the actions of the different network members are organized, governed and regulated in order to reach collective outcomes.

Being often considered as informal collaborative arrangements based on voluntary actions, social relationships and bonds of trust and solidarity, networks are situated by many, scholars and practitioners alike, as being outside of the scope of governance in its traditional meaning (Borgatti & Foster 2003, Gereffi et al. 2005, O'Mahony & Ferraro 2007, Provan & Kenis 2007, Rodriguez et al. 2007, Winkler 2006). Governance is generally associated to matters of allocation of authority and power, of legal contracting, and of crafting of coordination and control mechanisms that ensure that management puts the principal's interests above its own (Fama & Jensen 1983). However, networks bring together and require the cooperation of heterogeneous organizations and collective actors each having its own interests, ways of organizing and organizational culture. Multilateral coordination of collective joint actions require, generally on a voluntary basis, the interaction of these organizational actors for the achievements of collective outcomes that are determined at the whole network level and thus supposed to satisfy and bring utility to the majority of the participants. On the other hand, networks don't have at their disposal the traditional bureaucratic tools that permit the allocation of authority and thus accountability in the corporate context. Besides, many other problems which are particular to the

network context could be expected to influence the network governance, its design and its functioning in ways that are different from what is known or done in the classical corporate context. Some of these specificities stems from the polymorphous nature of the network, its flexible and continuously moving boundaries, the lack of bureaucratic and authority tools and mechanisms that allow for accountability and clear decision-making and sharing of the created value afterward (Ahmadjian & Lincoln 2001, Bell 2005, Dyer & Singh 1998, Ebbers & Wijnberg 2009, Gulati & Nickerson 2008, O'Mahony & Ferraro 2007, Porter 1998, Uzzi 1997). Moreover, networks do not always pursue economic and efficiency aims. More than often, networks are founded and created for relational or institutional aims. As such, they are not always oriented toward the production of economic goods.

This research takes a step forward toward filling these gaps by examining, empirically, how a network is governed and thus how a governance system is designed and what actually governance involves in a network context. Through our examination of the governance system in a French cluster specialized in the video game industry we tried to open up the black box of network governance and the processes and practices underlying it. Our in-depth case study of a French cluster in the video game industry, allowed us to analyze the network governance system and to understand its main objectives and purposes and the challenges and problems it has to deal with during its evolution. Our results permitted us to highlight the functioning of the network governance and how it occurs during the evolution of the network and the ways in which governance is adapted to the imperatives of the network and its evolution. We refer to this process of functioning and its evolution as "governance work" and explain it further in our discussion. Our results shed also light on the necessity of dissociating network governance effectiveness from the network performance. Whereas the achievement of network high performance and the attainment of the collaboration collective goals, set voluntarily or emerging throughout the evolution of the network, are among the primary functions of network governance, our results showed that it would be dangerous for practitioners and misleading for theorizing to blend both network performance and network governance effectiveness. Beyond the achievement of the collective

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goals of the network, the governance system, and thus one of its effectiveness criteria, should aim at evaluating the relevance and suitability of these objectives to the economic reality of the network.

This contribution is structured as follows: a first section is dedicated to describing the data collection and explaining the adopted methodology. A second one introduces some of the results highlighted in this research focusing in particular on a depiction of the network governance system and how governance work occur throughout the evolution of the network and its mutation. The discussion links the principal contributions of our work to the existing literature and analyzes the possible extensions of the results to other contexts.

Methodology and research context

We have chosen to focus on the video games industry which, as a creative industry, displays distinctive characteristics and features, making it an interesting field for a comprehensive investigation of governance in the network context. The literature on creative industries has revealed the tendency of firms for clustering in tight agglomerations and their reliance on projects and intense social interactions for the organization of their production activities. Networking is a main features and an important activity both at the organizational and the individual level. This predominance of inter-organizational and inter-individual relationships are due mainly to the ambiguity of product markets and technologies, the pervasive uncertainties that weigh on production and innovation outcomes and the rapid configurations of projects according to markets and technologies evolutions. The social and production networks introduce some stability into these rapidly evolving industries and help bind together collective and individual actors into more enduring relationships than those associated to the short-duration projects that characterize this industry. It also provides a fertile and dense ground that allows the formation of inter-organizational projects and their smooth functioning, the creation of interdependencies and their adequate leveraging. The external portfolio of relationships and the embeddedness of a firm play as

much an important role as its resources endowments and idiosyncratic competencies (Aoyama & Izushi 2003, Cohendet & Simon 2007, DeFillippi et al. 2007, Grabher 2002, Humphreys 2008, Johns 2005, Caves, 2002).

To study the issues of interest within the video games industry as thoroughly as possible, we conducted, first, 17 exploratory interviews with experts, well-known professionals and senior managers within the industry (Studios, Publishers, Suppliers and service providers, Business associations, Public Agencies, research institutes and key persons in ministries). We also attended professional events and meetings of many well-known business associations in the industry (governmental and private). We also collected secondary data about the industry in general and firms operating in this industry and their products. In line with our main question of research, our aim was to identify the prevailing forms of collaborative arrangements in this industry and in a second step choose a network whose specific features would enhance the generalization potential and external validity of our study.

The comprehensive aims of this research call for inductive design and a case study approach that can be used ultimately in theory development. We used qualitative data collection, analysis, and reasoning methods as developed in the literature (Glaser & Strauss 1967, Lincoln & Guba 1985, Hlady-Rispal 2002, Yin 1994 ; Eisenhardt 1989 ; Langley 2007). Inductive case-based methodology is considered to be an appropriate way to explore new research issues and build testable theoretical propositions (Yin, 1994; Eisenhardt 1989).

In order to address the present research issues, we analyzed the case of Capital Games, which is the cluster reuniting most of the video game companies located on the region Ile-de-France (IDF). It counts around 40 members which represent more than 60% of the main activities of the video game industry in France. Capital Games seems an interesting case to study for both its history and the features it displayed (used here interchangeably with cluster). Clusters are common territorial networks with specific features that make them interesting for the investigation of network governance (Bathelt et al. 2004, Bell 2005, Ehlinger et al. 2007, Gereffi et al. 2005, Gordon & McCann 2000, Humphrey & Schmitz

2002, Porter 1998, Saxenian 2000). Its strong embededdness within the local context (Granovetter, 1985) is also an important factor for our analysis. Capital Games has been created in 2003 as a LPS (local productive system) which is a label recognized by local authorities. This formal basis is also present in the legal status of the network which is an "association 1901". The formal side of Capital Games co-exists with a strong informal structure of personal relationships which ties many of the participants. Members collaborate within oriented and collective actions and projects carried out by Capital Games, but they also collaborate outside of the network for their normal business deals and projects. One of the key aims of the network is to provide a platform for hosting R&D projects around which many companies could gather especially when these projects are too huge or too uncertain to be carried by a single firm. The network presents also of variety of aims and is not only limited to production and efficiency finalities. Among its many functions, the cluster plays also the role of an intermediary linking the video game companies of the region to the local collectivities and political authorities. Thus it acts as a privileged representative of the local firms and one of its main aims is to defend the interests of the studios, centralize their demands and needs and negotiate aids and rights for the sake of the industry at the regional level. Moreover, one of the main objectives of the cluster is to bring together the different firms and introduce them to each other and thus contribute to the creation and maintenance of a dense and favorable ground for collaboration among the different companies in the region. Besides, our investigation shows that the network has evolved in size and scope of activities, an evolution which, at some point, had led to a crisis in the functioning and direction of the network and almost resulted in the dissolution in its dissolution. Important efforts of restructuration, which involved a rethinking of the governance system, its objectives and tools, have been undertaken. Now, the cluster is emerging from this restructuring phase. Opinions are unanimous about the success of this restructuring. For our analysis, this restructuring is an important factor for the understanding of network governance and its effectiveness.

We conducted a total of 22 semi-structured interviews between March 2009 and May 2010 with the managerial and administrative staff, members of the board of directors and the most active members, which have been identified with the aid of the general director. Each interview lasted between one and three hours, and was tape-recorded and retranscribed. In order to get complementary information, we also carried out secondary data collection and analyses (e.g. website, official documents) both before and after the interviews. Furthermore, we gathered archival and attended many meetings like the General Assemblies, workshops organized by the cluster and launching projects meetings to get an idea of the main characteristics of the network but also to observe governance in action and how it is carried out. Thus, our method allowed us to triangulate data sources and the collected empirical material.

During our data collection, our aim was to understand the multiple facets of governance, the purposes it serves and the way cluster organize collective actions to achieve its main objectives. We invited the interviewees to describe the activities and organization of the cluster and the general issues and challenge the network faces in its daily activities and how these difficulties are managed. We also tried to trace back the evolution of the network and understand the transformations it had undergone and their implications for its governance.

Our data analysis was conducted as instructed by Glaser and Strauss (1967) and Lincoln & Guba (1985) with iterative and frequent goings back-and-forth from data to literature. We aimed to develop cohesive constructs through a systematic linking between our findings and the existing concepts and frameworks in the literature. Thus, at first, we proceeded to a content analysis in broad categories. We tried to identify the governance actors, its purposes and objectives (dissociated from the network objectives) and the mechanisms and tools which are being used to achieve these purposes. However, we felt this analysis was static and there were different dynamics and interactions at play which needs processual thinking in our analysis and in the handling of the main concepts. This proved helpful and relevant. Our findings highlight the processual nature of governance. In order to fathom what network

governance refers to, we identified the purposes of governance and its endeavors. Then we focused on the sequence of events and interactions that allow for the achievement of these purposes and functions. During this phase, we tried to make out if some actions or sequences of activities are intended to attain some precise purposes more than others. Thus, we would be able to highlight some patterns in the way sequences of activities are oriented towards the achievement of governance purposes. We also tried, whenever it was possible to highlight the mechanisms of governance that are being used and identify the direct purpose(s) they serve.

Main results

Since the creation of the cluster, the formal structure of governance is organized around two mains actors: the board of directors and the executive committee. This organization is very similar to what can be observed in the classic hierarchical context. The idea behind this design and the separation of the decision rights from their execution is to ensure that the network and its main actions reflect and take into account the main interests and needs, if not of all its members, at least of the main majority and within the limit of the available resources.

The board of directors is constituted of 8 members who are elected on a democratic basis every three years. These members elect among themselves a president. Stemming from the legal status of the cluster, the president and the secretary-treasurer are its legal representatives and as such are accountable for their actions in front of the legal institutions (courts…). Accordingly, their rights and their scope of actions are more important.

Whereas the board members are chosen among the network participants and generally are CEO and founders of companies belonging to the cluster, the members of the executive committee are not necessarily entrepreneurs and just are required to have a good understanding and expertise of the specificities of the industry. The general director is appointed by the board members. He is an employee

of the network. Depending on the resources available, the general director, after the approbation of the board members, can appoint different collaborators to help him in the daily management of the cluster. The president is more involved, than the rest of the board members, in the daily functioning of the cluster and collaborates directly with the general director.

The activities and projects carried out by the cluster are structured around five main themes which are (1) the Research and Development, (2) Export and international development, (3) Human resources, (4) Financing, and (5) business development. The selection of these main orientations has also been the result of a democratic consultation. Studios and companies were invited to express their main concerns and needs and to specify the areas where there were a need for a collective and mutualized action at the regional and industrial level. This informal selection process occurred through different formal and informal meetings between the general director and firms' managers. These five directions and domain of actions have been selected during the creation of the cluster and since then haven't changed much. However, the relative importance and the resources allocated to each theme have evolved in accordance to the important changes that occurred in the industry. For example, international development which had been a secondary focus in the beginning has evolved and is now one of the main preoccupations of the cluster.

The actions of the cluster are destined to the satisfaction of different and specific goals which are renewed continually. But, they are generally in line with one or more of the five themes identified above. The concrete actions of the cluster are varied. For the most part, the cluster takes on the role of a partner on different projects that involve two or more network members. For many cases, the launching of the project is encouraged by the cluster and follows the identification, by the cluster, of different needs or potential interdependencies and mutualization. Even if the cluster (mainly the members of the executive committee) does not intervene during the project as an active collaborator especially when the main objectives are directly related to the production or development of new technologies and games, it remains in the backstage and keeps a role of coordinator and facilitator of the inter-

organizational collaboration. The collective actions of the cluster can also take the form of coaching. The cluster helps its members for specific actions like their international or business development. One of the main primary roles of Capital Games is to orient firms to potential partners (whether private or public). The cluster plays also the role of a networking platform, even if other local actors endorse also this role, whether directly by helping firms and orienting them in their selection of partners or simply by providing occasions for informal discussions and exchange of knowledge like the thematic workshops organized occasionally. The intermediary role of the cluster leads generally the cluster to act as the main representative of the video games companies of the region especially for negotiation with public actors and during the development of collective conventions with these actors. The gathering of funds and subsidies for the mutual projects is also one of the main purposes that Capital Games serves. The lack of understandings of the peculiar features of this industry by the politics and thus the inadequacy of many existing institutions, laws, norms and standards was also a strong factor behind the creation of the cluster.

The resources of the network are provided by the membership fees which are due once per year and are proportional to the annual profit of the firm. However, the total amount gathered represents a small portion of the real charges induced by the cluster. The major part of the financial resources comes from the governmental and local authorities' aids and subsidies. On the other hand, the concrete functioning of the network and projects that are carried out is highly dependent on the voluntary participation of the members and their contribution in terms of skills, competencies and working time. Thus, as expressed by our interviewees, the implication of the network' members is deemed fundamental for its success and continuous existence.

Concerning the governance process, the general functioning of the network is based on an iterative and constant coming back-and-forth between the members' needs and expectations on the one hand and on the other hand the actual actions and projects that are carried out by the cluster. The executive staff is generally and continuously gathering information from the network members. As specified by the

general director "one of our missions is to be always listening to the field". The objectives of the collective actions of the network are supposed to stem from the members and be representative of the interests of the majority. This continuous flow of information based on the frequent interactions of the executive staff with the network members and their personal social networks helps them to identify the future actions and orientations for the cluster and their concrete expression into short-term projects and missions. The executive staff can also propose actions through a benchmarking of what is done in other regional clusters in France and outside, in other countries.

These future actions, projects and missions are submitted afterward for approbation to the president and treasurer and ultimately to the board of directors. The local authorities can also intervene during the determination and the selection of the collective actions and projects that will be developed in the cluster. This intervention is however not direct but is possible through the funds and financing solutions that the local authorities provide and thus it gives them some kind of rights and authority. According to the resources available a selection can be done among the propositions submitted by the executive committee. On the other hands propositions for future collective actions and projects can be made by the board's members who are also video games professionals and thus can have an accurate view of what is needed for the industry's sake at the regional level. The selection decisions are generally driven by two formal factors: first the satisfaction of the majority interests and second the feasibility of the collective actions within the limit of the available resources. However, more informally, the selection decisions can also be motivated by fairness principles. Often, the projects are pushed forward by a number of network's participants. Executive staff and board members alike feel it is fair, whenever it is not against the majority principle, to privilege the projects and collective actions brought by active members in the cluster's live and previous or actual projects.

Generally, after this selection phase, an agenda is approved and the projects and joint actions can be launched and resources are committed. The propositions submitted include detailed descriptions of the resources needed, the potentials participants and their commitment and the advantages and benefits

expected from the joint action or project. Besides, the initial agreements (whether formal or informal) must specify the modalities of sharing concerning the added value that will result from the collective action. The role of the executive staff, depending on the collective action or project which is being undertaken can vary in its intensity and scope. The amount of the resources brought by the cluster, determine the role that the executive staff members can play afterwards. Thus on certain projects like the video game festival for example or for collective actions such as negotiations with local authorities and elaboration of collective conventions, the cluster can play a very active role including the coordination of joint actions, division and achievements of different tasks. Generally the role of the cluster is limited to bringing advice and shouldering the firms carrying the project during its evolution. However, the minimum expected of the cluster is a controlling role to verify the respect of the initial agreements and the effective accomplishment of the collective action. It is also expected to intervene when conflicts arise especially concerning the sharing of the created value.

The process described here is not however a linear and straightforward one. It involves many overlapping and iterative ongoings between the different sequences. Often, they involve a certain bargaining and coming back-and-forth between the executive staff members and the participants or between the staff members and the board of directors. It generally also requires compromises efforts on both sides especially regarding the resources that will be committed, their allocation, the number of participants, the perimeter of the collective action, allocation of decision rights. The thorniest question in this process is the sharing of the added value that will result from the joint actions and projects.

The staff members can face many difficulties and challenges associated with these processes. The cluster and its functioning are based for the most part on voluntary contributions and investments from the network members. The aims of the cluster and its collective action generally benefit the whole industry or a large group of companies. They are generally not directly linked to the production processes of the firms or they are associated to high uncertainties especially concerning the R&D projects. Many of the advantages and positive outcomes created are only available on the long run.

Thus, as for the case for collective goods (Agarwal 2001; O'Mahony & Ferraro, 2007), the incentives for voluntary contribution to the collective action are weak, too uncertain or not enough aligned and proportional to the initial investments brought by a member. The incentives for non participation or opportunistic behavior are on the other side important, since many outcomes are available for all the members without any real participation on their behalf apart from the membership fees (information, studies, workshops, collective public conventions….).

Moreover, there are no legal contracts or agreements which can bind the participants (normal members or board members alike apart from the president and the treasurer). Many forms of collective action are launched simply with only informal agreements based on the goodwill of the members and degree of trust between them and the staff or board members. Certain projects which are launched as consortiums for example can bind the participants and offer legal protection and tools. But, generally, there is no legal mean to hinder participants from withdrawing after the beginning or halfway throughout the evolution of the joint action or project. These features make the tasks of control and value sharing among participants very difficult for the staff members. Besides, accountability is not always possible given the lack of clarity and details concerning the initial agreements. As described in the literature, informal agreements and mechanisms as trust and social pressure through reputation are mobilized to remedy to the inexistence of formal contracts and legal agreements. Generally the promise of future returns and the continuity of relationships serve also to control the members' behavior and future expectations. However, the matter here is more about the incentives that will push the members to participate than the control and sharing of the created value. Like a virtuous cycle, in order to leverage the social mechanisms of control it is important to get enough members' and participations that will generate added value and benefits which will attract other members and thus allow the smooth functioning of the process described above and its control.

There are also others risks associated to this functioning. As our case study shows, there could be possible myopia concerning what would be advantageous for the industry' sake. The lack of resources

that would otherwise have been used for a formalized data collection concerning each member' expectations and need is the main cause. Executive staff members rely generally on informal relationships, discussions and meetings to gather information about the possible future joint actions and the needs of each member individually and the need of the industry at the regional level. Thus one of the main objectives of the executive staff is to get as much members as possible to participate in the formal and less formal events, consultations and workshops.

Moreover, one of the roles of the cluster is to uncover potential and dormant interdependencies and push their members into more collaborations and joint actions within the cluster' projects scope but also outside of it. Because of the reliance on the social network of personal relationships of the executive committee members, the cluster could suffer from lock-in and serves the interests of a minority which do not necessarily coincide of the majority and the industry interests'. The lock-in could also stem from the "clique" effect due to the reliance on personal networks and which can lead to the closure of the boundaries of the cluster to new entrants. This problem is also accentuated by the rapid evolution of the industry structure and the categories of actors involved. The software and development activities were mainly carried out in the industry by classic studios producing games for consoles, however recently it extended to include new studios that develop web browser games, online games, games for new platforms such mobile phones…. As the main representative of the software and game development activities at the region level, the cluster needs to include these new actors within its scope. These two problems were among the major factors that have led to the crisis known by the cluster and which have almost led to its disappearance. The cluster was victim of its own success. Because of lack of resources and of many projects and joint actions and missions launched during the same time, the general director came to rely more and more on its personal relationships and network.

Implications and future research

Throughout our observations, we can found similarities between the steps and objectives described here and what governance refers to in the classical corporate context. Governance devices and mechanisms are crafted in order to allow the alignment of the management interests (executive committee here) to those of the principal (participants represented by the board) (Fama & Jensen 1983, Denis & McConnell 2003, Erakoviç & Overall 2010, Burt, 1980). The governance process involves also the classic purposes of coordination, control and conflicts resolution. The process is a democratic one, and is based on the use of formal governance mechanisms such as the allocation of decision and property rights (O'Mahony & Ferraro 2007, Gottschalg & Zollo 2007). Positional roles are also used to allocate authority and thus regulate the interventions and interactions between the different actors involved in the cluster. However, and because of the voluntary basis of contribution and the lack of legal means that ensure accountability and prevent opportunistic behavior, governance rely also heavily on informal mechanisms such as trust, social control and reputation (Gulati & Nickerson 2008, Uzzi 1997, Powell 1990). Another critical purpose for governance is the formation of the network and of a sufficient volume of collective action and voluntary contributions that allow the use and leverage of social and informal mechanisms of governance and ensure that incentives are high enough to counterbalance the benefits of opportunistic behavior. Another critical factor and balance to found is about the sharing of the created value. Many contributions and "products" of the cluster are similar to collective goods (Agarwal, 2001). The development of the industry at the regional level is one of the fundamental aims of the cluster which justify also the public funds it receives. However, this complicates the matter of the right incentives to provide and requires that the governance actors find a balance between fairness and efficiency in this case. Fairness dictates that each member receives benefits and outcomes that are proportional to its initial contribution and initial investment. Efficiency on the other hand requires that the created value benefits to the whole industry especially at the regional level.

The iterative sequences described above are also similar to the process of negotiations-commitments-executions used by Ring and Van de Ven (1994) to describe the development of cooperative inter-

organizational relationships. Assessment is achieved for each stage according to the principles of efficiency and equity. In our case, these two principles drive also the evolution of the governance process described here. However, in our observations, this process is repeated in a more or less systematic manner especially whenever new actions and projects are being undertaken by the cluster or new evolutions occur or are predicted in the industry (legal, technological….). Thus, if considered at one point in time, it is possible to observe many collective actions that are structured in different forms (projects, public conventions, workshops, accompanying missions….) and which are at different stages of evolution according to this sequence of negotiations-commitments-executions. Thus, governance involves also managing different micro-processes of negotiations-commitments-executions that occur at different levels and different points in time.

From our observations, but also evidence is provided in the literature for this, governance is a set of different activities, set in motion, and geared toward the achievement of different aims. These aims do however evolve constantly as the main objectives of the network and its attributes evolve. They are also depending on the stage of the lifecycle of the network. Our findings allow us to put into light the processual nature of governance in the network context. Governance is a set of processes, or a "meta-process", that are geared toward the creation, the maintenance and the evolution of collaboration relationships and the network as a collective actor. For a better qualification of what have been observed, we refer to the governance functioning, evolution and continuous (re) evaluation as governance work. As suggested by Langley (2004), "adding the word 'work' to any apparently static and structural concept is an interesting device for forcing consideration of how human agency might operate on it" (page 276). From what we observed, governance results from the interplay between different, ongoing, iterative, and tightly intricate processes aimed at the accomplishment of different purposes ranging from coordination, to control, conflicts resolution and value sharing. It also involves many purposes which are specific to the network context as the formation and maintenance of a strong

basis and volume of voluntary participation and the crafting of informal and relational mechanisms and

governance devices that helps to achieve control, efficiency and fairness.

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