

WORKING PAPERS

**Transportation policy networks
in cross-border regions.
First results from a social
network analysis in
Luxembourg and the Greater
Region**

Sabine DÖRRY
Antoine DECOVILLE

CEPS/INSTEAD Working Papers are intended to make research findings available and stimulate comments and discussion. They have been approved for circulation but are to be considered preliminary. They have not been edited and have not been subject to any peer review.

The views expressed in this paper are those of the author(s) and do not necessarily reflect views of CEPS/INSTEAD. Errors and omissions are the sole responsibility of the author(s).

Transportation policy networks in cross-border regions. First results from a social network analysis in Luxembourg and the Greater Region¹

Sabine Dörry

Department of Geography and Development (GEODE), Centre for Population, Poverty and Public Policy Studies (CEPS/INSTEAD), Luxembourg, Email: sabine.doerry@ceps.lu

Antoine Decoville

Department of Geography and Development (GEODE), Centre for Population, Poverty and Public Policy Studies (CEPS/INSTEAD), Luxembourg, Email: antoine.decoville@ceps.lu

April 2012

Abstract

Despite continuing processes of economic and political integration in the European Union (EU), borders have been proven to be persistent. Politically backed and financially supported by the EU, cross-border regions are subject to economic and cultural coalescence. However, the established top-down cross-border policy network structures do not necessarily lead to the results originally aimed at. Policy networks are supposed to make the proclaimed economic, socio-cultural, and spatial EU integration process work on a local level. By empirically analysing cross-border policy networks in one specific though highly central policy domain – the public transportation – we reveal contradictions/inconsistencies and impediments caused by the ‘border effect’ and the complex nature of a specific cross-border policy network in the field of public transportation. With the technique of the social network analysis we trace and discuss such a kind of network. Our empirical findings lead us to critically examine what Hooghe and Marks (2003) describe as ‘type-II-governance’ in cross-border regions.

Key Words: Cross-border metropolitan regions, public transportation, Luxembourg and the Greater Region, social network analysis, multi-level governance

JEL classification codes: F15; F16; R50; R58

¹ The case study at hand is part of an ongoing research project, which analyses the cross-border metropolitan governance in four European case-studies: Lille, Luxembourg, Vienna-Bratislava and Basel. This research is part of the ‘MetroNet: Cross-Border Metropolitan Governance in Europe: A Network Analysis Approach’ project supported by the Luxembourg ‘Fonds National de la Recherche’ (FNR Project C09/SR/03) and by core funding for CEPS/INSTEAD from the Ministry of Higher Education and Research of Luxembourg. The authors would like to thank Frédéric Durand, Christian Lamour, Christophe Sohn, and Olivier Walther for critical comments and helpful suggestions on earlier drafts of the paper.

“Transnational public transport stops at the border in many respects.” (Interview sequence, German actor, 15/06/2011)

Introduction

Two major processes increased the importance, need, and complexities of cross-border public transportation policies in European Union metropolitan regions in the recent past. One is the inter-urban competition in today’s globalised world. These new urban dynamics in metropolitan regions forced transportation policies into the centre of spatial planning, since economic growth strongly relates to a region’s physical accessibility in the broader sense. The other vital explanation is provided by the aspired European Union (EU)-wide regional harmonisation process and the (politically intended/enforced) establishment of cross-border regions. In both cases, efficient transportation, information and communication infrastructures for the regions’ accessibility are of crucial importance, thus putting the public transportation policy field on the centre stage of our attention. Luxembourg and the Greater Region can be considered an exceptional case worldwide in terms of its huge numbers of daily commuters towards Luxembourg. A common cross-border public transportation strategy therefore becomes a significant need in this specific example of a European cross-border metropolitan region (CBMR).

The set-up of the European Spatial Development Perspective (European Commission, 1999) prioritises specific spatial issues. First, there has been a strong emphasis on large transportation networks to enable and connect parts of different EU regions with each other, where infrastructural gaps were progressively reduced, among others financially supported by EU programmes (Hajer, 2000). Second, there has been a push in favour of polycentric urban regions as the most efficient scale to implement territorial cohesion policies, preventing centre-periphery predicaments (Newman, 2000; Scott, 2002). Third, border regions have now received particular attention and funding (INTERREG programmes), which focuses on the transformation of nation state’s territorial peripheries into regions with common economic interests and co-operation. This redirection of the EU spatial policies is further based on an encouragement of mobility (Jensen and Richardson, 2004) to overcome physical and mental barriers and to enable free-flows of people, capital, goods, and services to raise a region’s international competitiveness. European policies encourage the ra-

tionale to resolve economic, social, and spatial inequalities based on interactions and exchanges between different places rather than on a containment of relationships within places. Consequently, the cross-border regionalism is an integral part of the proclaimed de-bordering process within the EU (Diez, 2006; Durand and Nelles, 2012).

The recently formulated EU growth strategy *EUROPE 2020* emphasises “that the benefits of economic growth spread to all parts of the Union (...) is about access and opportunities for all” (European Commission, 2010: 16). Translated into a spatial logic, territorial cohesion and inclusive growth are defined EU key territorial/spatial goals (ESPON, 2010). This holds especially true for CBR, of which the EU accounts for 387 NUTS III border regions (Topaloglou et al., 2005). Luxembourg and its Greater Region is a cross-border region (CBR) which consists of parts of four nation states and is characterised, among others, as a functional urban area (Decoville et al., 2010). We also depict this CBR, in line with the Council of Europe (1995), as a region “disrupted by the sovereignty of the governments ruling on each side of the frontier”. Financially supported by the INTERREG program, such CBRs are considered “‘active’ spaces and key areas for cross-border policy development” (van Houtum, 2000: 64) to aid a Europe with more ‘elastic’ boundaries exceeding national limits (O’Dowd, 2002). However, whilst the political will on the European level has been shaping CBRs for decades now, the criticism remains that “states (...) are generally unwilling to hand over portions of their sovereignty and political authority to the structured forms of cooperation, sometimes prohibiting and frustrating direct and efficient dialogue between partners in the border regions” (van Houtum, 2000: 66).

The complex ‘behind the scene’ relations of such cross-border governance structures require to be further investigated. There is a specific research need for unravelling the building of cross-border cooperation structures, as well as for a better understanding of the modalities of the interactions between the different actors of these structures. Even though CBR’s actors are increasingly engaged in the specific field directly concerning the region, the question remains whether decision-making processes are still fragmented and deeply anchored in traditional national decision-making structures? In other words, due to the assumed strong embeddedness of the cross-border policy networks at hand in their distinct jurisdictions or ‘territorialities

of law' (Schmidtchen and Schmidt-Trenz, 2006), do borders truly limit regional co-operation still embedded?

Hence, our paper aims to provide empirical evidence on cross-border policy network structures and relations. Based on an empirical survey and a social network analysis (SNA) approach, we seek to reveal the complex nature of the specific cross-border policy network of public transportation in the bordering area of Luxembourg, Germany, France, and Belgium, thus illuminating foundational elements of the policy network such as the centrality of involved actors or their importance in the decision-making process. By doing so, we aim to provide a new grid of analysis and understanding of the limits and trade-offs faced by the cross-border cooperation concerning public transportation issues. More explicitly, we shed light on the process of exchange of information and explain in detail the roles of the different actors in the decision making. Further, we argue for a careful differentiation between the overlapping but interacting networks of information brokers and decision-makers. Our empirical findings finally lead us to question the assumption of cross-border as favourable environments for the emergence of type-II-governance (Hooghe and Marks, 2003), which is – characterised as task-specific – one of two “contrasting visions of multi-level governance” schemes (Marks and Hooghe, 2004).

After introducing the issue of cross-border cooperation in the policy domain of public transportation in the subsequent section, section two characterises the case of Luxembourg and the Greater Region. In a third section, we describe our methodological approach and discuss the benefits of the SNA as an empirical and quantitative tool to look behind the cross-border governance scene. In the following results' discussion, we question the characteristics of the type-II-governance applied in a cross-border context and conclude with a short outlook on the potential of future empirical research in such settings with the help of the SNA.

1 EU metropolitan regions beyond borders and challenges for governance structures

A number of scholars discussed the management of border regions and specific cross-border issues and thus highlighted the importance of the nation state as a locus of a territorially defined jurisdiction (Anderson and O'Dowd, 1999; Perkmann,

1999). In fact, EU border regions underwent a transformation from limiting barriers into actively designed policy spaces during the last decade (Newman, 2011; Paasi, 2011). The complexity and dynamics of such border regions are strongly rooted in the evolution of the nation states themselves, being shaped by contextual features such as “cultural, political, and economic practices and discourses” (Paasi, 2011: 27) and societal power relations (Newman, 2003). These features thus contributed to processes such as the institutionalisation of territories and the determination of borders as symbols and institutions (Anderson, 1996; Paasi, 1996). Even though trans-border regions evolve “and in some cases, hybridity is created” (Newman, 2011: 33), it is often still argued that borders themselves inherit a strong perseverance. Even within the EU – in economic terms the world’s largest single market and with regard to its encompassing Euro currency a borderless economic entity – national particularism and territorial anxieties still shape the daily agenda (Scott and van Houtum, 2009). Scholars substantiate that (national) territorial policies of “ordering, bordering, and othering” (van Houtum and van Naerssen, 2002: 126) portray borders as the “skin of the state” (Megoran et al., 2005), which are often rooted “in powerful cultural, economic and political inequities” (Nicol and Minghi, 2005: 681). These phenomena have surely become stronger during the recent Euro crisis and the closely linked ‘solidarity’ discourse among the EU member states (e.g., Scharpf, 2011). On the one hand, the inclusion|exclusion debate on borders still illustrates its perception as territorial traps and mental or cultural distances; yet, on the other, the ‘border’ also reflects a positive meaning of potentials and benefits for the respective region. One of such “barriers to success” (van Houtum and Ernste, 2001: 103) may be lying in the expansion and harmonisation of cross-border public transportation, hence shaping a crucial cross-border policy domain within the EU. Based on the deficiency of a powerful actor in the form of a central government in the decision making processes in such EU cross-border policy domains, the assumption is that it “leaves no room for hierarchical decision-making. Instead, the emphasis is on negotiations and cooperation (...) what Scharpf (1997) describes as a context of minimal institutions” (de Vries, 2008: 48). In this vein, our empirical findings in the next sections portray Luxembourg and the Greater Region in a more distinct way.

With the decline of the Keynesian welfare state, the paradigm of multi-level governance – defined by an intensification and flexibilisation of relations and the in-

creased interactions of actors on different spatial scales – held sway in Europe. According to the flexible multi-level governance arrangements, the involved actors in CBRs are meant to overcome the fragmentation of public authorities. However, due to their contradicting competencies, they complicate and may even hinder cross-border co-operation. Working examples of multi-level governance are the institutionalised structures of cross-border cooperation within the EU. They can be considered an outcome of the public policies' Europeanisation process and increasingly involve, besides the necessary governmental organisations, non-political actors (cf. Herrschel and Newman, 2002; Marks and Hooghe, 2004; Paraskevopoulos, 2006).

Access to efficient mass transportation and information networks have been essential to the process of metropolisation. This enabled urban growth poles to be broadly embedded into other metropolitan regions and to significantly contribute to the organisation of the global economy. Accessibility to CBRs is strongly linked with the optimisation of the daily commuters' mobility and the securitisation of crucial multimodal strategies, which facilitate existing ties between efficient and smoothly run local mobility systems and the transportation nodes connected to larger scale networks. In this vein, Perkman (2003) suggests that functional integration often lacks evidence on a cross-border scale, an argument we critically examine on the case of Luxembourg and the Greater Region in the subsequent sections.

2 Specifics of Luxembourg and the Greater Region as EU cross-border region

2.1 Functional settings

CBRs are embedded in a European 'co-opetitive' environment. Besides contradicting notions of interests between actors embedded in different judicial spaces, CBRs may also be able to seize opportunities unavailable in their respective nation states (O'Dowd, 2003). Luxembourg and its Greater Region is, like other CBMRs, heavily influenced by an urban centre, in this case Luxembourg-City, which, compared to its regional surroundings and despite its modest size, concentrates the highest metropolitan functions (for detailed information for Luxembourg and the Greater Region, see Sohn, 2012b). The region's economic dynamics are closely linked to the strong financial sector hosted by Luxembourg-City with approximately 63,000 employees

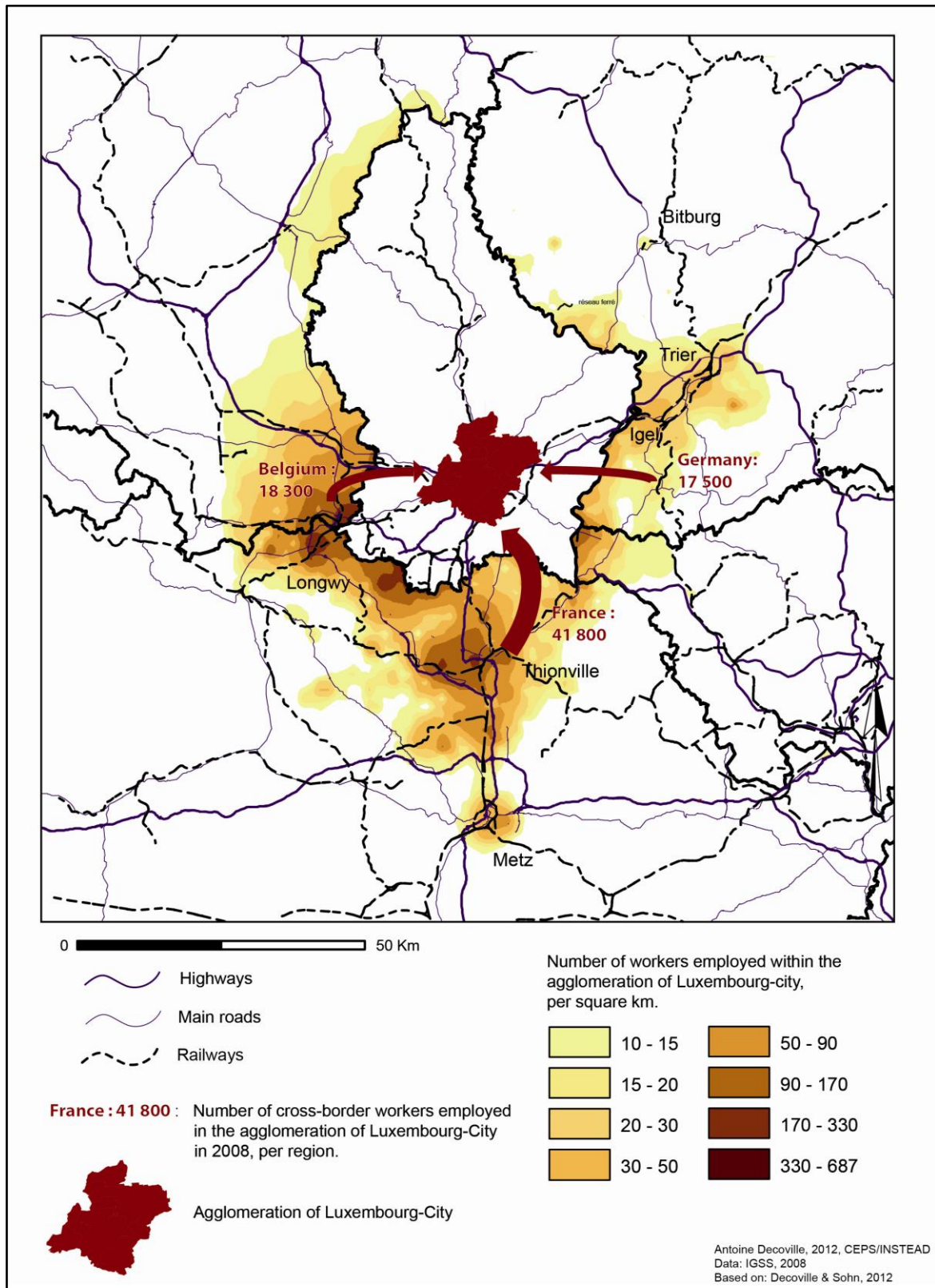
(39,000 direct and 24,000 indirect) and a 38 percent share of Luxembourg's GDP (Luxembourg for Finance, 2012). Embedded in such conditions, Luxembourg exercises state sovereignty and is hence able to enact attractive fiscal and regulatory measures (Sohn et al., 2009) as well as to attract the necessary qualified labour from abroad, mostly from the neighbouring countries (Decoville et al., 2010: 9). Physical mobility is the key to the intensification and coalescence across national borders and expands *per definitionem* beyond administrative borders. Thus, trans-border mobilities touch different territorialities of law and require efficient cross-border governance solutions to plan and foster inter- and intra-regional transportation strategies.

The case study of Luxembourg and the Greater Region at hand offers a rich example of the stakes and difficulties that underpin the building of cross-border governance on (public) transportation issues. The borderland under scrutiny is among the most functionally integrated CBRs in Europe based on significant numbers of daily interaction with Belgian, German and French border areas (Sohn, 2012a: 30): In 2011, 153,372 workers crossed the border every day to work in Luxembourg (STATEC, 2012) and approximately half of them converged in the centre of the metropolitan region, the urban agglomeration of Luxembourg-City. Parts of the regional economies of the four involved countries – Luxembourg, Belgium, Germany, and France – are firmly embedded in the dynamic CBMR (Figure 1). However, even within this specific setting, the city of Luxembourg is considered an extreme – and worldwide unique – example in terms of the sheer number of daily commuters from the neighbouring countries: The working population is by far larger than the resident population (with a ratio of 1.54 in the City of Luxembourg, in 2005) (SOHN and DECOVILLE, 2008), and the so-called 'atypical cross-border workers' exploit the prevailing economic disparities, e.g., lower living costs, within the CBR.

In 2004, Luxembourg implemented a spatial planning strategy (*Integratives Verkehrs- und Landesentwicklungskonzept*, Ministère de l'Intérieur et à la Grande Région, 2004) to increase the modal split of public transportation to 25% of the total number of daily trips. Even though the number has increased during the past three years, the score of the daily CB commuting flows, however, only reached 14% in 2010 (Schmitz and Gerber, 2011). Nevertheless, it depicts the increasing importance of public transportation across the involved adjacent country regions. In absolute

numbers, approximately 21,000 workers cross the borders to the agglomeration of Luxembourg-City every single work day by public transportation (Figure 1).

Figure 1: The Greater Region and its daily CB-commuters



2.2 Political and institutional setting

As a general rule, public transportation projects are costly and subject to strategic *national* decisions. CBMRs do not command their own budgets. Shrinking national public budgets/finances and only selective EU funding impose careful cost-benefit weighting in terms of financing infrastructural building in CBR by the nation states, which the respective regional parts of the CBR administratively belong to. Most of the projects in the field of public transportation can therefore only be realised by a decision backed and financed on a national level (MORO, 2009).

To understand the grown relational structures in the policy network of public transportation, we need to give some background specifics on the institutional setting in Luxembourg and the Greater Region. The proclaimed process of power sharing at the European level in the 1980s impacted not least on the inner European cross-border structures. With the successful founding of an Interregional Parliamentary Council (Conseil Parlementaire Interrégional, CPI) in 1986, the development towards a multi-level governance in the Greater Region cumulated in the ‘Greater Region Summit’ established in 1995, which is responsible for the promotion of the cross-border cooperation (Lamour and Clément, 2012: 216). Whereas this informal political body united CPI members as well as the French general councils of Moselle and Meurthe-et-Moselle, the French state (represented exclusively by the Regional Prefect) participated without voting and the German federal government did not participate at all. In 2005, the three co-existing political bodies – the intergovernmental commissions, the regional commissions, and the ‘Greater Region Summit’ – merged towards the ‘Summit of Executives’. The driving strategic idea behind the new body was to further promote the cross-border cooperation. However, the spatial enlargement of the organisation due to additional three Belgian administrative entities as well as a further fragmentation of the Euroregional executive power are critically being discussed. Whereas the management committee of the Greater Region was only comprised of three country members in 1980s, the coordination of a member structure with ten public authorities at different levels (state, region, local community) had become increasingly complex and challenging by 2005. The resulting cross-border policy body, however, still excludes the political representatives of the main cities in the Greater Region (Lamour and Clément, 2012: 216).

Against the background of the described development, figure 1 illustrates that Luxembourg's transportation infrastructure is part of a larger international road and rail network. The following three exemplified public transportation issues in the Greater Region mirror the prevailing cross-border contradiction between the proclaimed *borderless* regions (political rescaling, cf. Durand and Nelles, 2012) and the *national* decision making:

1) The French national railway company SNCF runs train connections, which serve more than 7,000 commuters daily² and link the French region Lorraine (Nancy, Longwy, Metz, Thionville) with Luxembourg-City (Figure 1). This rail's capacity is planned to be increased stepwise by 15 to 25 percent to alleviate the chronically overloaded road network and to further manage the constantly increasing commuting workforce from the French region Lorraine to Luxembourg-City. The joint strategic paper SMOT (*schéma de mobilité transfrontalière*) submitted in 2009 fosters the improvement of the public transportation services between France and Luxembourg and emphasises their joint efforts towards this goal. This increase in the supply will be possible only by creating new infrastructure because the railway network is already saturated during peak hours. However, the national decision structures in France and in Luxembourg differ due to their differences in country size, the according differences in decision making hierarchies, and the perceived importance of such projects by the Paris or Luxembourg-City, which sometimes delay decisions tremendously. Such a project will require intensive negotiations on cost and benefit sharing on either side of the border, more precisely between Paris and Luxembourg-City, as one interviewee stated:

"The problem is that national interests often take reign over transnational questions, while it is generally also dependent on people's capacities. Thus, determining project's objectives is not the only challenge but also the implementation, because more often than not national legislation and regulations provoke conflicts of interests." (Interview sequence, Luxembourgish actor, 17/05/2011)

2) Between Germany and Luxembourg, the only existing train connection links Luxembourg-City to Trier. Despite its importance, this rail/track is partly only single-tracked between Wasserbillig and Igel (Figure 1), and hence prevents the achievement of the aspired travel time decrease and enhancement of the share of public rail transportation. In 2010, the Deutsche Bahn and the German Federal Ministry of

² These figures were provided by the head of the regional department of SNCF.

Transport, Building and Urban Development in Berlin have abolished plans for these infrastructural enlargements (FAZ, 2011) they had already agreed on. Ironically, the new transport concept *Rheinland-Pfalz-Takt 2015* of the German Land Rhineland-Palatine foresees direct, more frequent and shorter travels between Koblenz and Luxembourg-City for cross-border commuters (Luxemburger Wort, 2011), their implementation strongly depending on the recently ceased infrastructural enlargement plans. However, the ceased infrastructural enlargements and the recent reduction of three out of five daily direct *Inter City*-train connections between Koblenz and Luxembourg-City emphasises the region's widespread perception as rather 'provincial' by the German federal policy makers in Berlin (Luxemburger Wort, 2012), now forcing the Luxembourgish government to respective action taking (Ministerium für Wirtschaft, 2011).

"Mr Juncker [Prime Minister of Luxembourg] may be more committed than Mr Beck [Minister-President of Rhineland-Palatine], but this is due to the fact that Luxembourg is far more dependent on external relations than Rhineland-Palatine, for the latter it's one topic of many. (...) but since in regard to Germany this is also about measures, which need to be anchored in Berlin, it can only happen via the Premiers. More pressure might help." (Interview sequence, German actor 03/02/2011)

3) To complement the existing train connections in the CBMR, a growing number of busses operate in the fairly remote areas of Lorraine (France), Wallonia (Belgium), or Rhineland-Palatine (Germany). For decades, there has been an ongoing controversy over a common public transportation tariff system (which also applies for the railway), which seems to be anchored in the different national models of public transportation. They range from strong government subsidies in Belgium, France, and Luxembourg to a relatively open market policy in Germany, all of them leading to distortions of price competition for the travellers/commuters, as one interviewee emphasised talking about the difficulties with an overarching tariff system for the Greater Region, which has existed for several years now:

"A joint transport association with total adjustments of tariffs for the Greater Region remains a utopian idea: The different member states' prerequisites are too drastically different." (Interview sequence, German actor, 28/02/2011)

In short, the projects show that both the differences in national policies, which hardly seem to allow an *inter*-national harmonisation, and national insensitivities towards the financing and the subsequent sharing of the common projects' trade-offs and benefits, have been hampering agreements between the involved regional part-

ners in the Greater Region as interview sequences with actors from France, Germany, and Luxembourg show (Annex, Table 5). Cross-border operative, strategic, and decisional tasks overlap; the work of actors on different scales overlap; but communication structures still seem to be hierarchically anchored and prevailing. More precisely, the differences in the administrative configuration of the local, the sub-regional, the regional, and the national levels in the four countries (Table 1) prevent direct communication. To give an example, representatives on the working level of a German Bundesland are not able to speak directly to the Luxembourgish Minister of Transportation. The latter usually seeks the communication with his equivalent in Rhineland-Palatine. Suggestions for solutions in this matter include among others the establishment of legal bodies like public transportation associations for the CBR, analogous to the model established in federal Germany. The challenges outlined by the interviewees depict the varying national systems and priorities in the cross-border policy field of public transportation, which – consisting of actors from regions in four different countries – do not form a homogenous group.

Table 1: Complex responsibilities in the regions involved in the cross-border transportation policy network in Luxembourg and the Greater Region

| | Belgium | France | Germany | Luxembourg |
|--------------|--|--|----------------------------|--|
| Bus | Local and regional levels: Région/Province | Local and inter-local (cooperation) levels | Local level: Gemeinde | Local and inter-local (cooperation) levels |
| Train | Federal state | Région | Federal State (Bundesland) | Central State |

The CBR on the *German* side consists of parts of Rhineland-Palatinate (RP) as well as of parts of Saarland, which are sovereign constituent states (*Bundesländer*) of the Federal Republic of Germany. The competencies of German federal states are strong. According to Germany's constitution (Basic Law, § 29(1)), each *Land* is responsible for performing functions of economic efficiency and the requirements of local and regional planning effectively. In terms of CB cooperation in the policy domain of public transportation this means that the respective transportation ministries of the federal states are responsible for public transportation. Both are ranked in a much lower position in terms of centrality and decisional power than the Luxembourgish Ministry. This gap shows that the *Länder* are less directly impacted by the

CB issue. The capital cities of those *Länder* – Mainz and Saarbrücken –, which are also the seats of their central political power, are not embedded but rather touched by this central policy issue in the CB area. Another key source of (financial) power is located in Berlin.

In *France*, the regional railway (besides the international high-speed railway network) competencies have been progressively transferred from the state to the regions. This can be referred to as a decentralisation process. This started in some pioneer regions in 1996 and was finally realised with the implementation of the French law “Loi relative à la solidarité et au renouvellement urbains” in 2000. Hence, the Région Lorraine organises the regional public railway transportation nowadays.

In *Belgium*, the regionalisation process transferred the competencies regarding the urban transportation from the nation state to the regions in 1988, while the federal government remained responsible for the national railway. As a consequence, the organisation of the local transportation, i.e., bus lines, has since been the responsibility of the regions.

In *Luxembourg*, the railway is a national competency, whereas the bus lines benefit from cross-funding between the communes and the nation state. In general, public transportation is heavily subsidised in Luxembourg as well as in France and Belgium. In contrast, the public transportation tariff system remains more market-oriented in Germany. This creates trade-offs in terms of a common cross-border regional public transportation tariff system.

So far, one can state that until recently cross-border connections were hardly considered a high priority by the involved national transport planning policies. This is, however, in the process of growing awareness and (slow) change.

3. Methodology

The outlined analytical framework is based on a comparative analysis between organisations of four nation states, Belgium, France, Germany, and Luxembourg, belonging to the same cross-border policy network. We applied the methodology of social network analyses (SNA) (Borgatti and Everett, 1997; Cross et al., 2002; Cross et al., 2005; Freeman, 2004; Hanneman, 2001; Scott, 2000; Wasserman and Faust, 1994) to go beyond the classical modes of observations of governance structure and changes/dynamics in cross-border policy networks. To broaden our knowledge about the involved actors and motives on the observed governance trade-offs, we designed complementary semi-structured interviews with experts in the policy field of cross-border public transportation. These experts were – besides their attributed characteristics as experts – at the same time (nominated) members of the respective (policy) network. Following the interviews with the experts, we transferred our empirical findings from an expert level towards the organisational level, which they belonged to.

One of the major difficulties in SNA is the definition of appropriate ‘boundaries’ within the investigated network. Similar to approaches in other empirical social contexts (e.g., Fainstein, 1994; Lai, 2006), we selected our network actors by applying a ‘snowballing’ technique or ‘reputational method’, in which our interview partners nominated other network members whom they perceived as crucial/important from their point of view. Due to the high turnover of network members (i.e., the experts/actors belonging to organisations) but also a resulting lack of updated network member listings, we applied a two waves’ snowballing technique (Christopoulos, 2006a, b, 2008). It allowed us to identify and nominate the most important actors and organisations in all of the four involved CBR’s countries and therefore proved a very practicable method.

The response rates of the application of the snowballing technique were as follows:

Number of interviews conducted:

| Country | Wave 1 | Wave 2 | Total |
|--------------|-----------|----------|-----------|
| Belgium | 2 | 1 | 3 |
| France | 7 | 2 | 9 |
| Germany | 14 | 4 | 18 |
| Luxembourg | 11 | 0 | 11 |
| Total | 34 | 7 | 41 |

Overall response rate:

| | Planned | Not relevant/not existing ³ | Refused | Interviewed | Response rate |
|--------------|-----------|--|-----------|-------------|----------------------|
| Wave 1 | 44 | 2 | 8 | 34 | 34/44 (81%) |
| Wave 2 | 12 | 1 | 4 | 7 | 7/11 (63.6%) |
| Total | 56 | 3 | 12 | 41 | 41/53 (77.4%) |

A questionnaire of both open- and closed-ended questions guided us through 41 face-to-face interviews with the experts; 12 rejected our interview request. For the subsequent SNA, we only considered actors nominated by others at least three times and hence excluded the pendants and actors merely nominated twice from our analysis.

The closed-ended questions included a number of tables and Likert-scale questions (to be ticked by the expert) and formed the basis of the subsequent SNA, with which we then illustrated the structure of the networks and the (multiple-directed) organisation of information flows (Figure 3). That provided us with essential information/data to facilitate the interpretation of the results of the SNA. In contrast, the open-ended questions served the purpose of better understanding the different experts' assessment on the achievements, development, satisfaction, further challenges and other sensitivities within the cross-border policy field of public transportation.

Our gained information covers the network and policy situation of about three years. We asked our interview partners to consider a rough two years' time frame be-

³ The individuals/organisations targeted but not relevant or not existing anymore are not taken into account for the calculation of the response rate.

tween 2008/09 and 2010/11 in their answers. We selected these timeframes as an indication for our interviewees because cross-border cooperation in public transportation is predominantly project-based. Indeed, assessing the evolution and dynamics of the cross-border governance would require repeated interviews with the same individuals. It is, however, important to note that the turnover of people in such positions is high.

In total, we interviewed 41 experts who belong to 34 organisations (Table 2). Large organisations generally have diverse subdivisions where sub-decisions regarding a larger project or policy field are made. In case the interviewees belonged to the same umbrella organisation, i.e., a ministry with different sub-divisions covering a number of aspects regarding cross-border transportation issues, we merged the individual answers. In case of different answers we took the decision of the more senior level person interviewed. In our paper, we call the organisations ‘actors’, not referring to individual perspectives anymore.

Table 2: List of interviewed organisations

| Organisation / interviewees’ affiliation | Function⁴ |
|---|-----------------------------|
| City of Arlon | passive |
| Wallonia Region | active |
| Economic and Social Council of the Greater Region | active |
| Lela+ | passive |
| Quattropole | active |
| EUREGIO | passive |
| Chamber of Commerce (Saarland) | passive |
| Chamber of Commerce Trier (Rhineland-Palatine) | passive |
| INFO-Institut (Saarland) | passive |
| City of Kaiserslautern | active |
| Ministry of Economic Affairs, Transport, Agriculture and Viticulture (Rhineland-Palatine) | active |
| Ministry of Environment, Energy and Transport (Saarland) | active |
| Ministry of Internal and European Affairs (Saarland) | passive |
| Regional Planning Community of Trier | active |
| City of Saarbrücken | active |
| SPNV-Nord Regional Transportation Association (Rhineland-Palatine) | active |

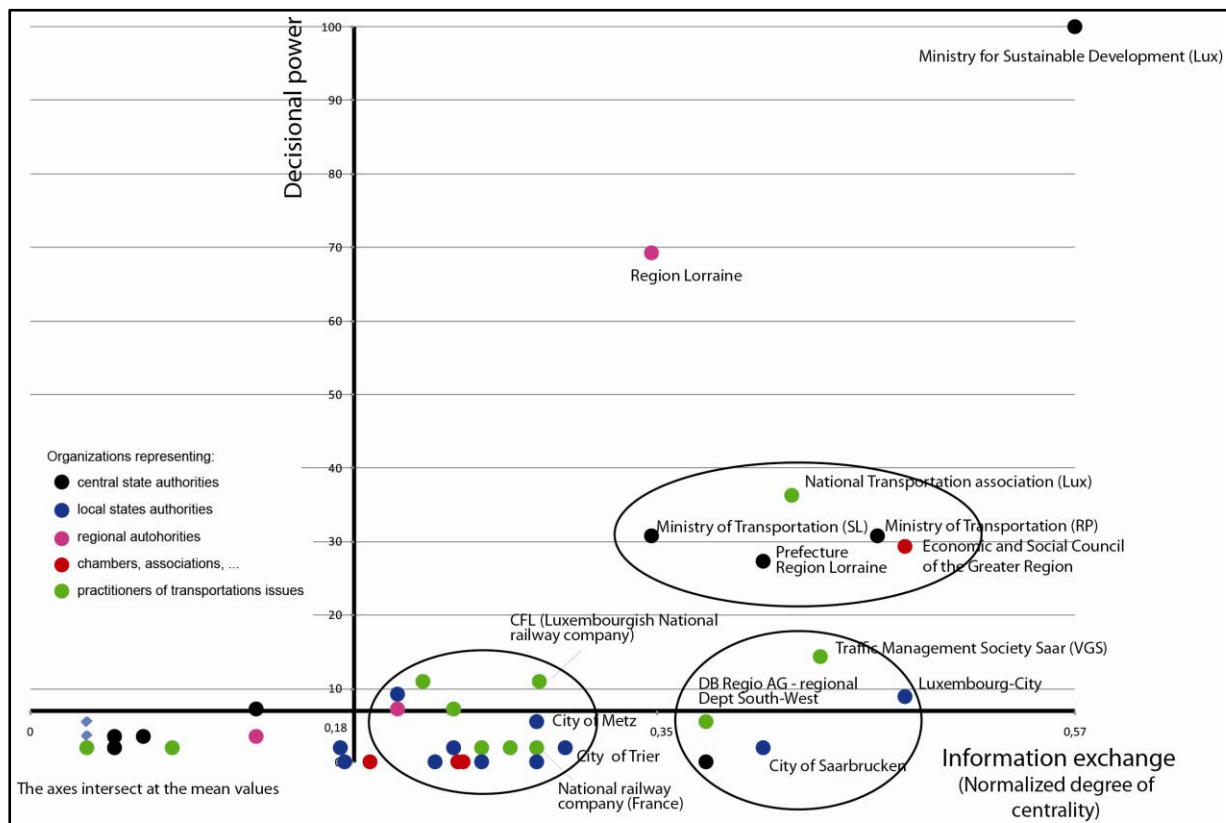
⁴ This refers to our questionnaire, in which we asked the interviewees to indicate whether their organisations were actively (project initiators, coordinators, cooperators) or passively (observer, experts, sponsors, lobbyists) involved in cross-border public transportation projects.

| | |
|---|---------|
| City of Trier | active |
| VRT Regional Transportation Association Trier (Rhineland-Palatine) | active |
| VGS Traffic Management Society Saar (Saarland) | active |
| DB Regio AG – Regional Department South-West | active |
| AGAPE Regional Planning Association (France) | passive |
| City of Longwy | passive |
| City of Metz | passive |
| Region Lorraine | active |
| Trans Fensch Regional Transportation Association (France) | active |
| SNCF (Société nationale des chemins de fer français) | active |
| Prefecture of Lorraine | active |
| SMITU Regional Transportation Association (France) | active |
| City of Esch/Alzette | passive |
| Forum Europa | passive |
| City of Luxembourg | active |
| Ministry of Sustainable Development-Department of Spatial Planning Luxembourg | active |
| National Transport Association (Luxembourg) | active |
| CFL (Luxembourgish national railway company) | active |

The list of the involved cross-border governance is long and reads very heterogeneous in terms of the levels the actors operate on. With reference to the two dimensions of the *information exchange*, drawing on the notion of the normalized degree of centrality, i.e., who has the highest social power based on his/her connectedness within the cross-border policy network?, and the *decision making (or decisional) power*, i.e., who holds the power to finally decide on projects?, we will discuss the fluid and intertwined relationships between the multiplicity of actors and the resulting forms of governance.

To reduce the heterogeneity and to be able to generalise our empirical findings, we clustered the different actors in as many homogeneous groups as possible (Figure 2). We applied the method of the observed thresholds to define the different clusters.

Figure 2: Identified clusters



The SNA analytical approach builds on the supposition that relationships among interacting actors are crucial, that actors and their actions are interdependent, and that because of their relational ties they are able to channel flows of (in-)tangible resources (Wasserman and Faust, 1994: 4). Similar considerations apply to our cross-border policy network at hand. With the help of the SNA we aim to illuminate:

- ...which actors play a central role in strategic planning?
- ...what are the determinants that structure their power relations?
- ...to what extent is the presence of a state border affecting the forms of the networks and the role of actors?
- ...and to what extent does the structure of our policy network explain policy outcomes?⁵

In our paper we present an augmented network, more explicitly a network combining both the interviewed actors and the nominated actors. However, we did

⁵ These questions have among others been the MetroNet project's guiding research questions.

not consider the direction of the relations between the actors, instead we symmetrised and maximised them. This allows us to overcome the problem of missing out on actors when people forgot to mention established relations to other network actors whereas their counterparts did. However, the reader has to be aware that there might be a slight overestimation of the network's density of ties due to the symmetrisation.

The use of SNA further allowed us to evaluate and quantify the actors who have the most central position in the network and who are thus the 'best connected' actors, exchanging the most information with other network members. This *normalized degree of centrality* calculates the number of an organisation's links with the others within the network, divided by the total number of potential links.⁶ The *decisional power*, on the other hand, is not directly linked to the centrality measure. It refers to an organisation's capacity to accomplish decisions.⁷

4. Discussion of the empirical findings and critical reflections

Beyond the supposition that governance in general has become multi-jurisdictional, or multi-layered, involving actors from different administrative scales in today's processes of political decentralisation or re-scaling, there is no consensus on how such multi-level governance should be organised. This holds especially true for cross-border governance structures and policy networks. Marks and Hooghe (2004) identified two contrasting ways to establish such governance structures, distinguishing between a type-I and a type-II-governance organisation. Their main features are specified in Table 3.

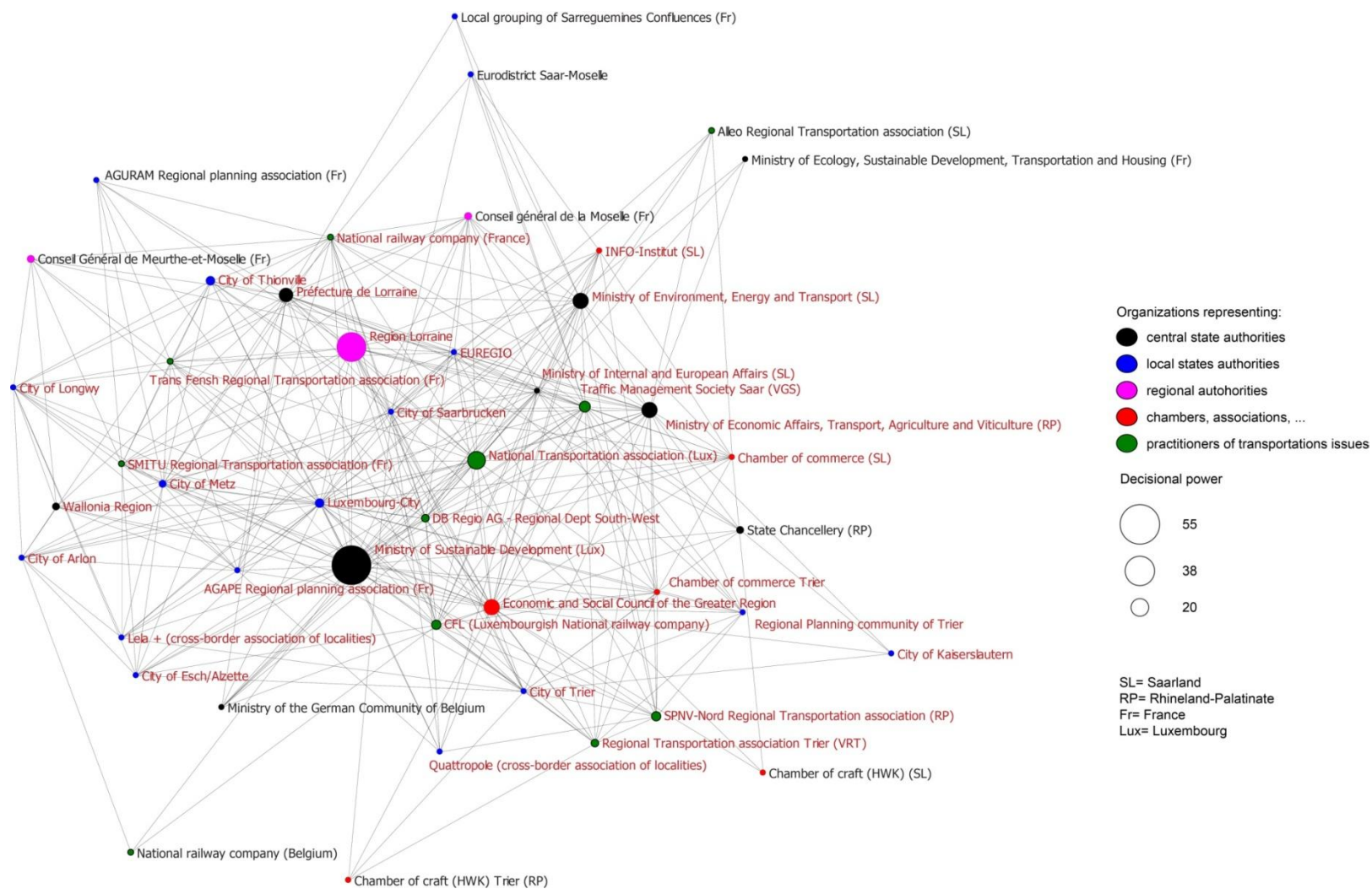
⁶ The *normalized degree of centrality* is obtained as follows: Number of links (35) / number of potential links (67) = 0.522. This value means, for instance, that 52% of the organisations that are considered to be members of the cross-border public transportation network exchange information with this ministerial department.

⁷ The *decisional power index* is based on the results of the closed-ended questions all the interviewees were asked. The value of an organisation, e.g., is obtained by the total of the number of times the individuals, who represent this organisation, were mentioned as being among the most important actors in the governance of CB public transportation issues. The results of the organisations were obtained by aggregating the results of all the individuals who represent an organisation, considering that "the social capital of people aggregates into the social capital of organizations" (BURT, 1992).

Table 3: Key characteristics of type-I- and type-II-governance regimes (Marks and Hooghe, 2004)

| Type I governance | Type-II-governance |
|--|--|
| General-purpose jurisdictions: decision-making powers are dispersed across jurisdictions, but bundled in a small number of packages. | Task-specific jurisdictions: multiple, independent jurisdictions fulfil distinct functions. |
| Non-intersecting memberships: membership is usually territorial, as in national states, regional, and local governments, but it can also be communal, as in consociational politics. Memberships of jurisdictions at higher and lower tiers do not intersect. | Intersecting memberships. |
| Limited number of jurisdictional levels: organises jurisdictions at just a few levels. | Many jurisdictions at diverse scales. |
| System-wide, durable architecture. | Flexible design: intended to respond flexibly to changing citizen preferences and functional requirements. |
| Not limited to federalism and intergovernmental relations. European integration and regionalization are viewed as complementary processes, in which central state authority is dispersed above and below the national state. | Capacity to take collective decisions and make them stick. |

Figure 3: CB policy network in the field of public transportation within Luxembourg and its Greater Region⁸ (based on own survey between 12/2010 and 07/2011)



⁸ Organisations with red coloured characters were interviewed, black coloured ones were not.

In our specific CBR example, political state centred traditions, such as in Belgium, France, and Luxembourg, meet federally organised state systems like the one in Germany. In this setting of highly different understandings, decision-making seems to be difficult and pervaded by a number of trade-offs. Hooghe and Marks consider the “densely populated frontier regions in North America and Western Europe” (2003: 237) as a case of the type-II-governance. However, the social policy network at hand seems to deviate from the given example. To discuss our empirical findings critically and theoretically informed, we transferred the characteristics of the ideal governance types I and II to our cross-border policy network at hand (see Figure 3).

According to the two analysis dimensions, decisional power and centrality (normalized degree of centrality), our cross-border policy network at hand suggests a typology of the involved actors (Table 4), derived from our performed cluster analysis (Figure 2).

Table 4: Typology of involved CB governance actors

| Category... | Degree of decisional power | Normalized degree of centrality |
|---------------------------------|----------------------------|---------------------------------|
| 1) ‘leaders’ | + | + |
| 2) ‘information diffusers’ | - | + |
| 3) ‘peripheral decision-makers’ | + | - |
| 4) ‘marginal actors’ | - | - |

We call important organisations, which combine a high degree of centrality with a high decisional power, ‘*leaders*’ (*category 1*), since they are inherently involved in the building of the collective strategy. By their very function they accompany and shape the whole process of decision-making. This means that their inclusion in the information exchange flows from the pre- to the post-decisions’ phase is crucial. The Ministry of Sustainable Development and Infrastructure appears as being both the most central (normalized degree of centrality = 0.52) organisation and also the one with the strongest decisional power (expert representatives of this organisation were nominated 30 times). This position is due to the fact that this ministry is both an initiator of projects as well as a strong decision-maker and hence has the means to lead the decision-making process due to its formal power resulting from le-

gal competencies. The involvement of this Luxembourgish ministry in the cross-border transportation policy network is linked to the priority of the cross-border transportation policy field on the national agenda.

The Région Lorraine is another organisation combining both a high normalized degree of centrality (0.343) and a high decisional power (27). With the introduction of the French decentralisation law in 2002, this organisation has received the competence to organise the public railway transportation. The CB accessibility towards Luxembourg is an important issue for this regional authority, since Luxembourg is an important job provider for the Northern part of the region, which has been seriously affected by the industrial decline since the end of the 1970's. Moreover, the links between Thionville and Luxembourg (Figure 1) constitute a simple extension of the South-North orientated railway corridor that links the different nodes of the Lorraine polycentric metropolis.

The *second category of 'information diffusers'* covers public and private organisations, which present high degrees of centrality, while also featuring quite a reduced decisional power. The most representative examples of this category are the cities. Most of them are highly involved in the exchange of information (with normalized degrees of centrality ranging between 0.46 for Luxembourg-City, 0.29 for Trier and 0.28 for Metz), whereas they hardly have power in the decision-making process. This information is confirmed by interviewees who represented the cities:

“Overcoming national interests; attempting to improve information policy. ... The cities cannot really influence these problems. The community level definitely has a position, but ultimately the government and private actors have the decision-making power. And they have to talk to their competitors in the neighbouring countries; this is solving fare/tariff disputes between bus and railway.” (interview sequence, German actor, 26/05/2011)

Luxembourg-City, which is the most influential city in the decision-making process, was mentioned only five times as being a key decisional actor. The competencies of the cities are limited to their own territories, or to the fact that they provide inter-municipal bus services. As a consequence, cities do not really have the means of realising their ambitions and still depend on the decisions that are made by higher levels in the administrative hierarchy. In this respect, Luxembourg-City, Metz, Saarbrücken, or Trier are all in the same situation. Other than in CBRs such as Lille, cross-border transportation in the case at hand is an *inter-city* transportation, which

per se means that the cities cannot be the key actors in the decision making process. In the Lille CBRS, the public transportation is organised within the agglomeration of Lille, and hence, the cities hold responsibility for it.

The *third 'peripheral decision-makers' category* includes organisations that have significant decisional power but are weakly embedded in the network of information exchange. The Préfecture de la Région Lorraine, the Région Wallonne, or the German Bundesministerium für Verkehr, Bau und Stadtentwicklung (Federal Ministry of Transport, Building and Urban Affairs) belong to this category. These organisations have the capacities to finance projects or the power to implement decisions, yet they are not very actively involved in the exchange of information within the concerned cross-border policy network. The cross-border issue appears to be quite peripheral on these actors' political agenda. In general, the Luxembourgish government deals with the equivalent level in the other countries, namely Paris, Brussels, and Berlin. The French example shows that this entails tensions for the Préfecture de la Région Lorraine, which might be bypassed by such communication levels in terms of cross-border regional transportation issues.

The interview passages (Annex, Table 5) give evidence that the actors in our case study generally meet these overall characteristics but still seems to lack resources or will to make this type-II-governance cross-border structure work. The affected parties in our case are numerous, for which, as Scharpf (1997: 70) describes the dilemma, “negotiated solutions incur exponentially rising and eventually prohibitive transaction costs”. Further, there is no general blueprint for the way CBRs with these flexible governance arrangements should work. Political re-scaling processes (Durand and Nelles, 2012) in the Greater Region are still in their infancy. One reason may be that the particular CBR's implemented regional governance structures remain strongly dependent on powerful state actors such as in Berlin, Brussels or Paris. Even though the CBR command over a functionally specific policy network with influential and diverse regional public and private actors, in which information flows and exchange is the key, interviewees referred to a strong state as a necessary precondition to make this flexible governance work in the case at hand (Annex, Table 6). The limited time period politicians are usually elected for and the comparatively long preparation of negotiations and operational processes towards cross-border public

transportation projects might be strong contradictory elements in the pursued political re-scaling process. While generally cooperation among cross-border actors on a working level seems to run smoothly and well-rehearsed, this is not always the case on a political level (see interview sequences, Annex, Table 6).

The differences these results highlight between the competencies or the level of involvement of the organisations regarding cross-border public transportation issues points towards the difficulties the actors are confronted with. Accentuating all these difficulties is crucial because it contributes to explaining the complexity of creating an efficient network of collaboration. Our empirical results advocate the need to initiate the “organisation building (...) [as] an essential part of the emergence of such type-II-governance structures” (Perkmann, 2007: 865). The suggested development seems to be a substantial prerequisite “for noncentral state agencies to build organisational capacity to pursue public and semipublic governance functions” (Perkmann, 2007: 866), which at the moment do not fully apply to the Greater Region. Obstacles in the form of a still prevalent distinction of *we* and *the other* (Paasi, 2011) may be one of the reasons that still determine the absence of a cross-border regional governance in which both the public and private actors as well as national and local actors have a – though unequal – voice in the process of decision making.

Political and economic *border effects*, i.e., the limiting or enabling repercussions as a result of the border (Sohn, 2012a: 26), are assumed to still play a crucial role in CBRs (de Gijssel et al., 1999; de Vries, 2008; Steiner and Sturn, 1993; van den Tillart and Busse, 1994; van Houtum, 1998, 1999, 2000). In the case at hand, the border effect seems to be ambivalent. On the one hand, it can be described as being much weaker in the policy field of transportation than in other possible cross-border regional policy fields, e.g., cross-border regional marketing. In cross-border metropolitan regions, physical access and thus transportation render the key for local/regional actors to exploit not only economic advantages but also to mobilise political resources. The strong need for transportation as a crucial infrastructural element for development processes in such regions weakens the border effect in our example.

On the other hand, the border effect can nevertheless be regarded strong. Luxembourg and its Greater Region is challenged by similar general (policy) complexi-

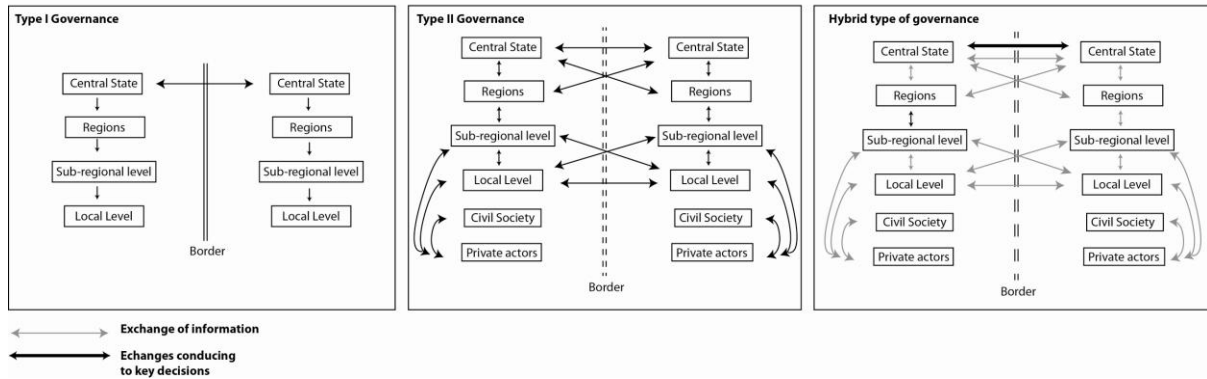
ties other cross-border regions are faced with (e.g., the case of the Lille-Kortrijk-Tournai Eurometropolis, Durand and Nelles, 2012). However, the Luxembourg case entails very specific characteristics which enhance the border effect on the opposite side. Luxembourg-City is the gravitational centre of the region and relies on qualified labourers from the adjacent regions in Belgium, Germany, and France. Accessibility for such workers is crucial. Hence, in Luxembourg, other than in the CBRs of Lille or Basel, we have a very star-shaped organised mobility and transportation network, which strongly brings the border effect to the fore.

The different elements presented above are schematic. They illustrate, however, the resilience of the determinant role of central state actors, who conserve their sovereignty, at least in the policy field of transportation. Our results depict that in the cross-border context at hand, the application of Hooghe and Marks' type-II-governance is still limited or rather in its infancy, if one considers the overcoming of borders to be a process along a continuum of possibilities, in which the setup of governing border management structures is a series of discourse, negotiations and structural settings. Such settings need time to evolve and find acceptance among their participants. To date, there still seems to be a strong inertia of classical hierarchical power on the central administrative levels in the decision-making process, despite the interest expressed by numerous local players to get more involved in this issue.

As type-II-governance regimes “come and go as demands for governance change” (Marks and Hooghe, 2004), the cross-border region at hand, Luxembourg and the Greater Region, constitutes a “complex fluid, patchwork of innumerable, overlapping jurisdictions” (Waterhout et al., 2009: 3) in terms of its structure and organisation. One of our preliminary conclusions drawn from our empirical results could therefore be that for the time being our policy network acts in a *hybrid* governance regime (Figure 4).¹ In such a setting similar to the type-I-governance regime, the final (financing) *decisions* are still made by a very restricted number of actors, mainly the national states involved in the cross-border region – the “sovereign state with clear national interests is still alive and kicking” (de Vries, 2008: 57) –, whereas the precursory *discussion* and mediation processes are based on a broad foundation of involved actors and their respective information flows.

¹ We thank Christophe Sohn for an extensive and fruitful discussion on this point.

Figure 4: Types of governance (source: authors)



However, in our cross-border context, both the exchange of information and the making of decisions are two sides of the same coin. Final decisions are crucial but every decision in cross-border contexts needs preparation. Aside from the long period of time some decisions in our analysed cross-border transportation policy network need to be made, the discussion process of the involved actors on multiple levels of influence has taken shape. Information exchange is well established, decision-making processes cannot be imagined any longer without such extensive and regular information exchange processes. Information exchange forms the basis for advocacy and lobbying for shared interests, coalition and consensus building as well as the development of a shared vision for the region as such but also means influencing the decision-makers and the decision making processes; all of them are factors and elements leading at best to a stronger formation of a type-II-multi-level governance in the (near) future.

Nevertheless, it seems to be a long way to go yet. A start is made with the establishment of official cross-border structures, in which the transportation policy network is evolving and also operating. Despite some recent success stories worth mentioning, the transportation policy field remains a severely competitive sphere with national and inter-national concerns at stake within the cross-border context, leaving involved actors at times to frustratingly state:

“As a region that claims to be the core region of Europe, it should be a matter of course to create a joint public transport system, without it taking decades.” (Interview sequence, German actor, 09/03/2011)

References

- Anderson A, 1996 *Frontiers: Territory and State Formation in the Modern World* (Polity, Oxford)
- Anderson J, O'Dowd L, 1999, "Borders, Border Regions and Territoriality: Contradictory Meanings, Changing Significance" *Regional Studies* **33** 593-604
- Borgatti S P, Everett M G, 1997, "Network analysis of 2-mode data" *Social Networks* **19** 243-269
- Burt R, 1992 *Structural Holes: The Social Structure of Competition* (Harvard University Press, Cambridge, MA)
- Christopoulos D C, 2006a, "Governance Capacity and Regionalist Dynamics" *Regional & Federal Studies* **16** 363-383
- Christopoulos D C, 2006b, "Relational attributes of political entrepreneurs: a network perspective" *Journal of European Public Policy* **13** 757-778
- Christopoulos D C, 2008, "The Governance of Networks: Heuristic or Formal Analysis? A Reply to Rachel Parker" *Political Studies* **56** 475-481
- Council of Europe, 1995, "Manuel de coopération transfrontalière à l'usage des collectivités locales et régionales en Europe", (Council of Europe, Strasbourg)
- Cross R, Borgatti S P, Parker A, 2002, "Making invisible work visible: using social network analysis to support strategic collaboration" *California Management Review* **44** 25-46
- Cross R, Liedtka J, Weiss L, 2005, "A practical guide to social networks" *Harvard Business Review* **March** 124-132
- de Gijssel P, Janssen M, Wenzel H J, Woltering M, 1999 *Understanding European Cross-Border Labour Markets, Issues in Economic Cross-Border Relations* (Metropolis, Marburg)

de Vries J, 2008, “Breaking the Deadlock: Lessons from Cross-Border Spatial Projects in Flanders and the Netherlands” *disP* **172** 48-61

Decoville A, Durand F, Sohn C, Walther O, 2010, “Spatial integration in European cross-border metropolitan regions: A comparative approach”, Working Paper No 2010-40 (CEPS/INSTEAD, Esch-sur-Alzette)

Decoville A, Sohn C, 2012, “Mapping the Structuring of a Cross-border Metropolis. The Functional Urban Region of Luxembourg”, in Luxembourg. An Emerging Cross-border Metropolitan Region Ed C Sohn (Peter Lang, Brussels) pp 119-139

Diez T, 2006, “The Paradoxes of Europe’s Borders” *Comparative European Politics* **4** 235–252

Durand F, Nelles J, 2012, “Political Rescaling and Metropolitan Governance in Cross-Border Regions: Comparing the cross-border metropolitan areas of Lille and Luxembourg” *European Urban and Regional Studies* **forthcoming**

ESPON, 2010, “New Evidence on Smart, Sustainable and Inclusive Territories. First ESPON 2013 Synthesis Report” (European Observation Network, Territorial Development and Cohesion (ESPON), Luxembourg)

European Commission, 1999, “ESDP – European Spatial Development Perspective. Towards Balanced and Sustainable Development of the Territory of the European Union” (Office for Official Publications of the European Communities, Luxembourg)

European Commission, 2010, “EUROPE 2020. A European strategy for smart, sustainable and inclusive growth” (European Commission, Brussels)

Fainstein S S, 1994 *The City Builders. Property Development in New York and London*, (Blackwell, Oxford)

FAZ, 2011, “Ungeliebter Wegezoll” [Unwelcomed Road Toll] *Frankfurter Allgemeine Zeitung*, 21 April, p 11

- Freeman L C, 2004 The development of social network analysis. A study in the sociology of science (Empirical Press, Vancouver)
- Hajer M A, 2000, "Transnational networks as transnational policy discourse: some observations on the politics of spatial development in Europe", in The revival of strategic planning Eds A Faludi, W Salet (KNAW, Amsterdam) pp 135-142
- Hanneman R A, 2001, "Introduction to Social Network Methods" (Department of Sociology, University of California, Riverside, CA)
- Herrschel T, Newman P, 2002 Governance of Europe's city regions: planning, policy and politics (Routledge, London)
- Hooghe L, Marks G, 2003, "Unraveling the Central State, but How? Types of Multi-level Governance" American Political Science Review **97** 233-243
- Jensen O B, Richardson T, 2004 Making European space: mobility, power and territorial identity (Routledge, London)
- Lai K P, 2006, "'Imagineering' Asian emerging markets: Financial knowledge networks in the fund management industry" Geoforum **37** 627-642
- Lamour C, Clément F, 2012, "Governance of the Greater Region and Cross-border Metropolitan Management", in Luxembourg. An Emerging Cross-border Metropolitan Region Ed C Sohn (Peter Lang, Brussels) pp 207-227
- Luxembourg for Finance, 2012, "Etude d'impact de l'industrie financière sur l'économie luxembourgeoise" (Luxembourg for Finance, Luxembourg)
- Luxemburger Wort, 2011, "Luxembourg zahlt acht Millionen Euro" [Luxembourg pays eight million Euro] Luxemburger Wort, 21 April, p 20
- Luxemburger Wort, 2012, "Im Bummel-Tempo" [At a snail's pace] Luxemburger Wort, 20 February, p 3
- Marks G, Hooghe L, 2004, "Contrasting Visions of Multi-Level Governance", in Multi-level Governance Eds I Bache, M Flinders (Oxford University Press, Oxford) pp 15-30

- Megoran N, Raballand G, Bouyjou J, 2005, "Performance, Representation and the Economics of Border Control in Uzbekistan" *Geopolitics* **10** 712-740
- Ministère de l'Intérieur et à la Grande Région, 2004, "Ein Integratives Verkehrs- und Landesentwicklungskonzept für Luxemburg" (Innenministerium, Luxembourg)
- Ministerium für Wirtschaft, Verkehr, Landwirtschaft und Weinbau Rheinland-Pfalz, 2011, "Takt 2015 – Zukunftskonzept Nahverkehr für Rheinland-Pfalz" (Ministerium für Wirtschaft, Verkehr, Landwirtschaft und Weinbau Rheinland-Pfalz, Mainz)
- MORO (Modellvorhaben der Raumordnung), 2009, "Überregionale Partnerschaften in grenzüberschreitenden Verflechtungsräumen" (MORO-Informationen 5, Bonn)
- Newman D, 2003, "On Borders and Power: A Theoretical Framework" *Journal of Borderland Studies* **18** 13-24
- Newman D, 2011, "Contemporary Research Agendas in Border Studies: An Overview", in *The Ashgate Research Companion to Border Studies* Ed D Wastl-Walter (Ashgate, Surrey) pp 33-47
- Newman P, 2000, "Changing Patterns of Regional Governance in the EU" *Urban Studies* **37** 895-908
- Nicol H N, Minghi J, 2005, "The Continuing Relevance of Borders in Contemporary Contexts" *Geopolitics* **10** 680-687
- O'Dowd L, 2002, "Transnational integration and cross-border regions in the European Union", in *Transnational democracy: Political spaces and border crossings* Ed J Anderson (Routledge, London) pp 111-128
- O'Dowd L, 2003, "The changing significance of European borders", in *New Borders for a changing Europe: cross-border cooperation and governance* Eds L O'Dowd, J Anderson, T M Wilson (Frank Cass Publishers, London) pp 13-36
- Paasi A, 1996 *Territories, Boundaries and Consciousness* (Wiley, Chichester)

Paasi A, 2011, "A Border Theory: An Unattainable Dream or a Realistic Aim for Border Scholars?", in *The Ashgate Research Companion to Border Studies* Ed D Wastl-Walter (Ashgate, Surrey) pp 11-31

Paraskevopoulos C J, 2006, "EU Enlargement and Multi-Level Governance in European Public Policy Making: Actors, Institutions and Learning", in *Adapting to EU Multi-Level Governance: Regional and Environmental Policies in Cohesion and CEE Countries* Eds C J Paraskevopoulos, P Getimis, N Rees (Ashgate, Aldershot) pp 3-24

Perkmann M, 1999, "Building Governance Institutions Across European Borders" *Regional Studies* **33** 657-667

Perkmann M, 2007, "Policy entrepreneurship and multilevel governance: a comparative study of European cross-border regions" *Environment and Planning C: Government and Policy* **25** 861-879

Scharpf F W, 1997 *Games Real Actors Play: Actor-Centered Institutionalism in Policy Research* (Westview Press, Oxford)

Scharpf F W, 2011, "Monetary Union, Fiscal Crisis and the Preemption of Democracy" (Max Planck Institute for the Study of Societies, Cologne)

Schmidtchen D, Schmidt-Trenz H-J, 2006, "Territoriality of Law and the International Trade Game: Towards a New Institutional Economics of International Transactions. Festschrift in Honor of Rudolf Richter on the Occasion of his 80th Birthday", in *Institutions in Perspective* Eds U Bindseil, J Haucap, C Wey (Mohr Siebeck, Tübingen)

Schmitz F, Gerber P, 2011, "Voiture ou transports en commun ? Comment les frontaliers se rendent-ils au travail en 2010?", in *Vivre au Luxembourg* (Statistics Portal Grand Duchy of Luxembourg, Luxembourg) p 2

Scott J W, 2002, "A Networked Space of Meaning? Spatial Politics as Geostrategies of European Integration" *Space and Polity* **6** 147-167

Scott J W, van Houtum H, 2009, "Reflections on EU territoriality and the 'bordering' of Europe" *Political Geography* **28** 271-273

- Scott J, 2000 Social Network Analysis. A Handbook (Sage, London)
- Sohn C, 2012a, "The Concept of the Cross-border Metropolitan Region and its Relevance to Luxembourg", in Luxembourg. An Emerging Cross-border Metropolitan Region Ed C Sohn (Peter Lang, Brussels) pp 17-37
- Sohn C, 2012b Luxembourg: an emerging cross-border metropolitan region (Peter Lang, Brussels)
- Sohn C, Reitel B, Walther O, 2009, "Cross-border metropolitan integration in Europe: the case of Luxembourg, Basel, and Geneva" Environment and Planning C: Government and Policy **27** 922-939
- STATEC, 2012, "Travailleurs étrangers occupés au Luxembourg selon la nationalité (en 1 000 personnes) 1974 – 2010", (STATEC)
- Steiner M, Sturn D, 1993, "From Coexistence to Cooperation: The Changing Character of Austria's Southeastern Border", in Theory and Practice of Transborder Cooperation Eds R Ratti, S Reichman (Helbing & Lichtenhahn, Basel and Frankfurt) pp 347-376
- Topaloglou L, Kallioras D, Manetos P, Petrakos G, 2005, "A Border Regions Typology in the Enlarged European Union" Journal of Borderland Studies **20** 67-89
- van den Tillart H, Busse G, 1994 Unternehmer ohne Grenze? (ITS, Nijmegen)
- van Houtum H, 1998 The Development of Cross-Border Economic Relations. A Theoretical and Empirical Study of the Influence of the State border on the Development of Cross-Border Economic Relations between Firms in Border Regions of the Netherlands and Belgium (CentER, Tilburg)
- van Houtum H, 1999, "Internationalisation and Mental Borders" Tijdschrift voor economische en sociale geografie **90** 329-335
- van Houtum H, 2000, "An Overview of European Geographical Research on Borders and Border Regions" Journal of Borderland Studies **15** 57-83

van Houtum H, Ernste H, 2001, "Re-imagining spaces of (in)difference: Contextualising and reflecting on the intertwining of cities across borders" *GeoJournal* **54** 101-105

van Houtum H, van Naerssen T, 2002, "Bordering, Ordering and Othering" *Tijdschrift voor economische en sociale geografie* **93** 125-136

Wasserman S, Faust K, 1994 *Social Network Analysis. Methods and Applications* (Cambridge University Press, Cambridge/MA)

Waterhout B, Faludi A, Stead D, Zonneveld W, Nadin V, Milder J, 2009, "Reinventing spatial planning in a borderless Europe: emergent themes", in 23rd Congress of the AESOP (Liverpool/UK)

Annex

Table 5: Selected interview sequences (German and Luxembourgish actors), own empirical survey

| |
|---|
| <p>“On a working level (...) it is necessary to abandon the division of the national and community level by rather bringing them together in one board. (...) There’s no distinct regional level in Luxembourg. (...) The Luxembourgish Minister only communicates with the Ministry of RP and not with me. This is a problem.” (Interview sequence, German actor, 3/02/2011)</p> |
| <p>“The balancing act between international and rather local demand remains very difficult.” (Interview sequence, German actor, 09/03/2011)</p> |
| <p>“There is no network in respect to transnational public passenger transport. (...) If you take this matter seriously, there must be formalised network infrastructures in regard to transnational public transport. (...) There ought to be a legal personality, who has the same responsibilities in this region that (<i>Mr. x</i>) has on a national level (in Germany).” (Interview sequence, German actor, 21/05/2011)</p> |
| <p>“There is too much talk about a unified Europe but in regard to public transport nothing is being done. Pilot projects have been started here and there but the realisation of these projects fail more often than not due to a lack of clearly defined responsibilities as well as interventions etc. (...) For a transnational public transport system, the opening of markets in all involved countries is inevitable. And a transnational transport authority must be defined, who can make decisions in matters of traffic flows!” (Interview sequence, German actor, 15/06/2011)</p> |
| <p>“It is difficult to find the right partners on the French side, because they have very small-scale structures, in strong contrast to Germany, where you’ve got transport associations.” (Interview sequence, Luxembourgish actor, 22/03/2011)</p> |
| <p>“It is fundamental that actors on both sides of the border lose their prejudice. Luxembourgish who think that the French system is complex and hierarchical, and French who think that political practices in Luxembourg are opaques” (Interview sequence, French actor, 22/02/2011)</p> |
| <p>“The problem is: the decision making in regard to transnational transport is basically done on the level of the ministries. This is a disadvantage because ministries are not directly in contact with the general public. Hence, they should not make decisions alone but in close cooperation with the communities, who are actually confronted with these problems every day.” (Interview sequence, Luxembourgish actor, 25/05/2011)</p> |

Table 6: Selected interview sequences (German and Luxembourgish actors), own empirical survey

| |
|--|
| <p>“Locally, there are often common wills, without dissenting voice. (...) It is at the central level that it’s often more complicated” Interview sequence, Belgian actor, 24/05/2011)</p> |
| <p>“On either side, a strong politician is missing, someone who has the political authority to make a difference. The problem is that politicians are always elected for a limited time frame. It’s almost impossible to temporarily have strong actors on all sides that want to move forward and also cooperate well. Great projects in the past have shown that at least two politicians have to act in concert transnationally. If that is not the case, you have to go the long way via all the different authorities. Then numerous actors will be involved, with which you need to find agreements. And when you’ve reached these agreements, it remains a question of financing. (...) If nobody is keen on promoting the project, someone who can persuade the minister and get his approval if necessary, then you have a problem.” (Interview sequence, Luxembourgish actor, 7/04/2011)</p> |
| <p>“You need politicians who promote projects and bring them forward. On a working level, staff members mostly cooperate. However, political support is necessary to initiate projects but there’s a lack of necessary commitment here and there. Usually it is a question of money but you also get the impression that there’s a lack of dedication. (...) The problem also is that border regions have been neglected as fringe areas for years (...) [and] the development and creation of entirely new regions was hardly noticed. (...) But there are suddenly completely new, functioning, strong structures (...) It would be good to sharpen the national ministers’ perception in Brussels, Paris and Berlin.” (Interview sequence, German actor, 26/05/2011)</p> |



3, avenue de la Fonte
L-4364 Esch-sur-Alzette
Tél.: +352 58.58.55-801
www.ceps.lu