C Scientific Annexes

7 The logic of MUAs and FUAs in a cross-border context

7.1 Morphological and functional urban areas

Within the ESPON programme, the Morphological and Functional Urban Areas have been developed as an important spatial tool of spatial analysis. The starting point was the European research projects GEMACA I/II and POLYNET, and the system has been further developed throughout the ESPON programme: In the framework of the ESPON projects 1.1.1. and 1.4.3., the main methodology and delimitations have been settled. Statistical adaptations (in particular LUA2) and the EU Eastern enlargement have been taken into account. Most recently, this systematic has been updated in the framework of the ESPON FOCI project.

Starting point of this system are the Morphological Urban Areas that essentially are the densely built areas. More precisely, the MUAs are defined as agglomeration with a population density of not less than 650 inhabitants per square kilometre. On LUA2 level, also those territories below this threshold are included if they have more than 20.000 inhabitants. The final result in terms of MUA perimeter is controlled via the utilisation of satellite images.

The Functional Urban Area (FUA) is mainly defined by its commuting zone, calculated mostly on a municipal level. A FUA consists of one or more MUA(s) and its surrounding area where 10% of the active population commute towards the MUA(s).

7.2 The pyramidal approach

The starting point for the identification of CBPMRs is the ESPON Project 1.3.4 (2007) that identified 28 cross-border regions of which – within that project – 15 have been identified as being metropolitan to a certain extent.

Taking into account the additional criteria of polycentricity, the number of research areas has to be reduced to 11 regions (see Fig. 14): the threshold is to have at least 10 percent of the population living on either side of the border. For example,

the cross-border dimension was not strong enough in the cases of Milano and Tillburg-Eindhoven as more than 95% of the population of the cross-border area lives in one country. With regard to all other criteria, the selection procedure adopts the approach of ESPON 1.4.3. (Arnhem-Nijmegen and Twente-Nordhorn do not show a clear metropolitan dimension as evidenced by ESPON 2007: 1.4.3).

Four of these areas are parts of the case study regions Upper Rhine and Greater Region: Strasbourg and Basel on one side, and Luxembourg and Saarbrücken on the other side.

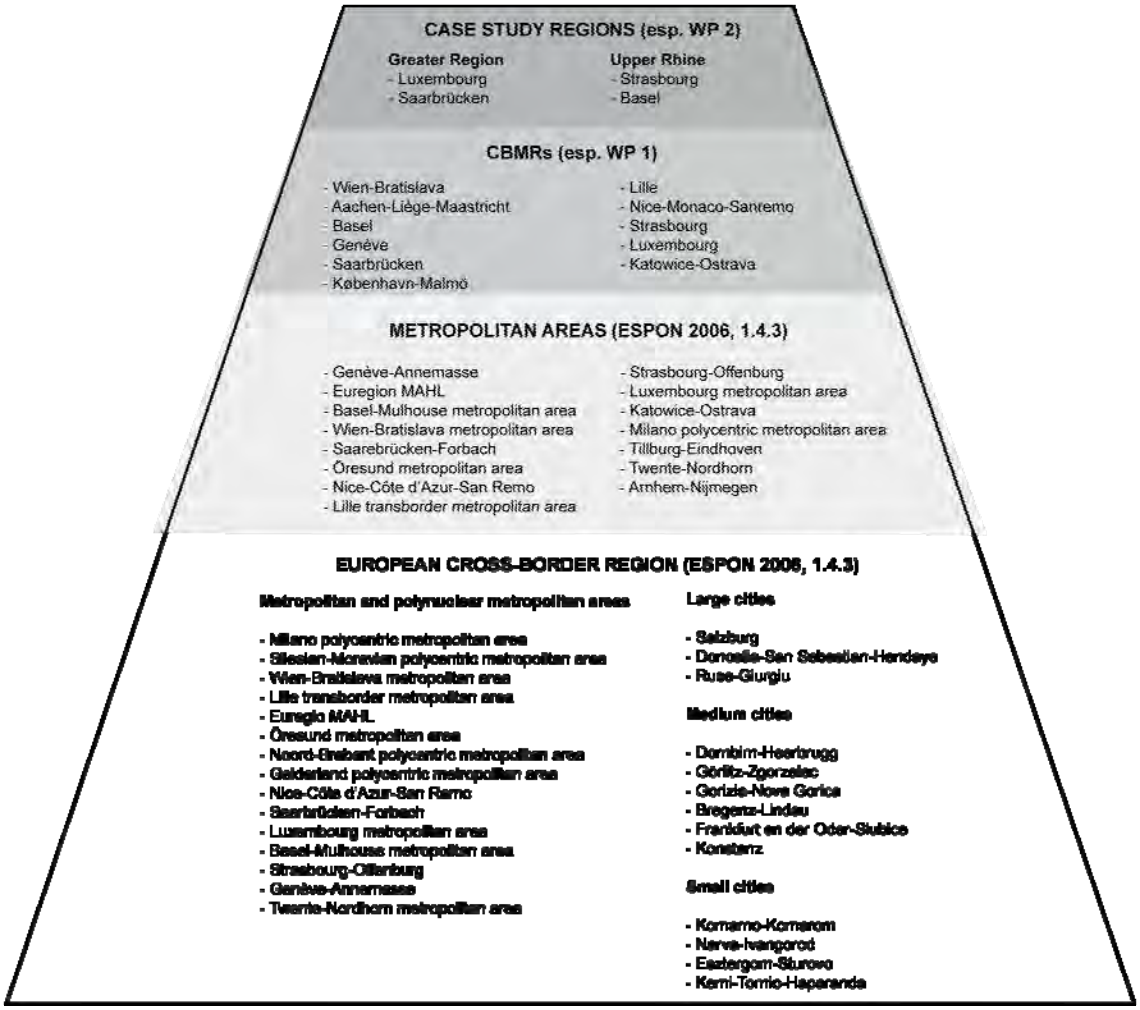


Fig. 14 Pyramidal approach to Cross-Border Metropolitan Regions (CBPMRs). Source: European cross-border regions and Metropolitan Areas according to ESPON 1.4.3 (2007).

The spelling of the CBPMRs relies on the respective domestic language. The name

of the cross-border metropolitan area refers to the largest city in terms of demographic size and not to any cross-border institutional cooperation area (e.g. MAHHL) or any geographical feature (e.g. Öresund). More than one city is only referred to if the population size is comparable (e.g. Wien-Bratislava).

7.3 From the municipal to the interregional level

Both the METROBORDER project specifications as the political dynamic in both case study regions stress the importance of the regional level that goes beyond the local level of the FUA system. Flow data on that scale are not available in the sense that a European comparison *and* the consideration of the cross-border dimension would be possible. Thus, the criterion of being adjacent is applied in order to potential integration zones.

The starting points are those cross-border core FUAs that cross the border itself and/or whose MUA at least touches the border.

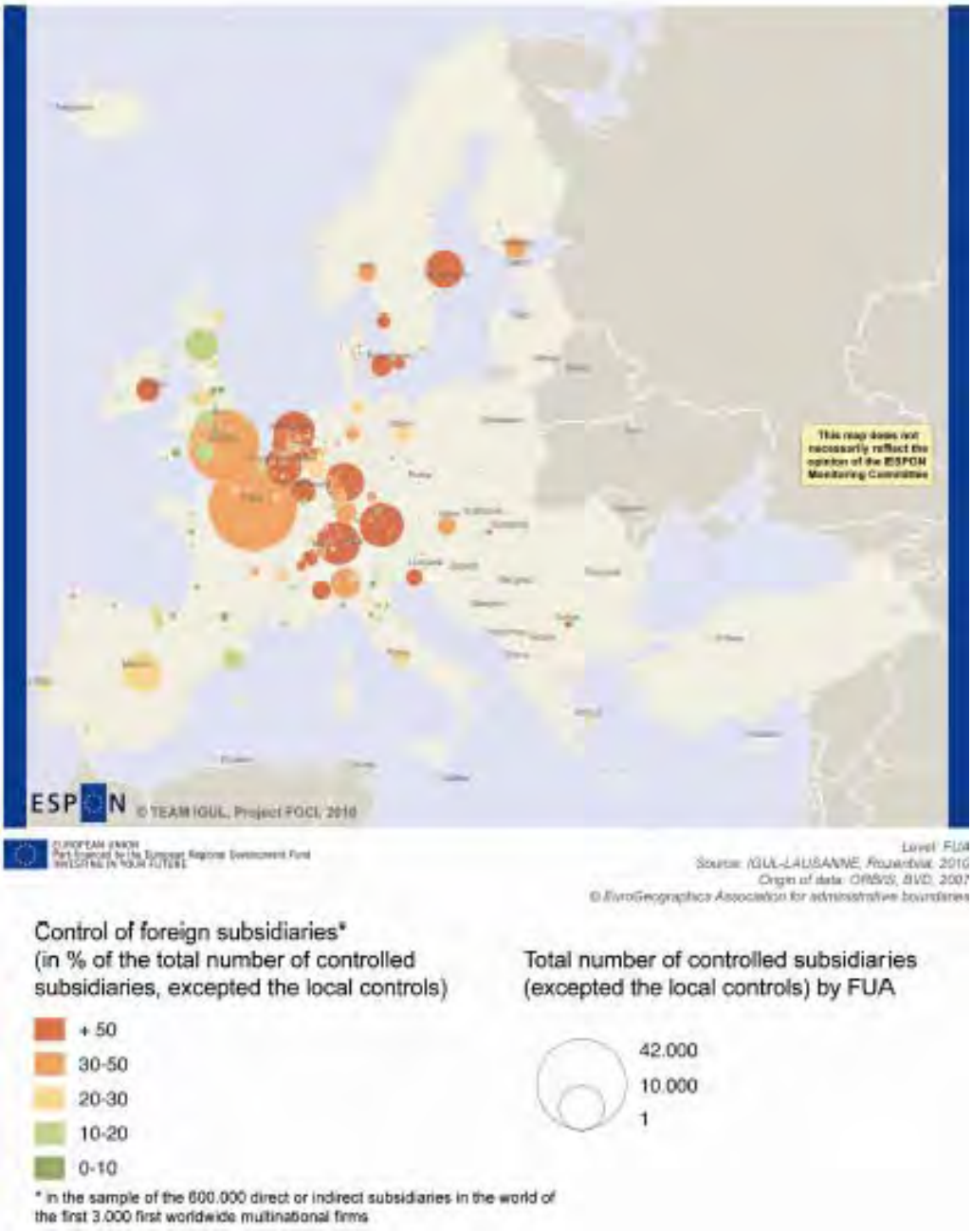
Then the adjacent ("neighbouring") FUAs are included. In a next step, the "surrounding" FUAs, adjacent to the latter ones, are included.

More concretely, after having started from the 1.4.3 cross-border FUAs, we consider those FUAs as cross-border core FUAs if the FUA crosses the border itself and/or if the MUA at least touches the border.

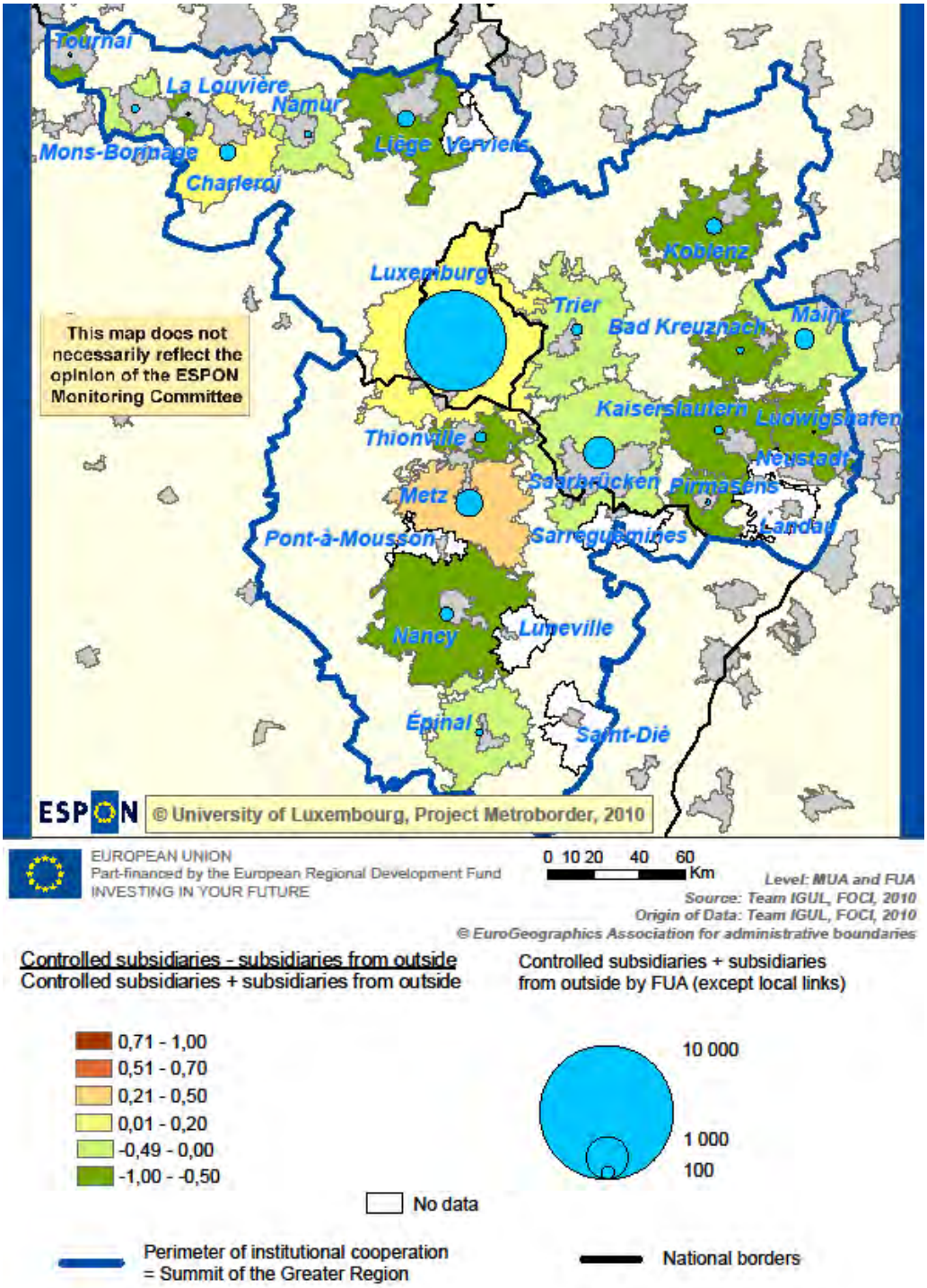
Adjacent FUAs are not embraced if the respective MUA has a higher population than the cross-border MUA that was the starting point of the selection process – this criterion safeguards the level of polycentricism as well as the cross-border character: Following this rule, e.g. Köln not considered to be part of Aachen-Liège-Maastricht CBPMR, etc.

8 The 'competitive nodes' approach – map annex

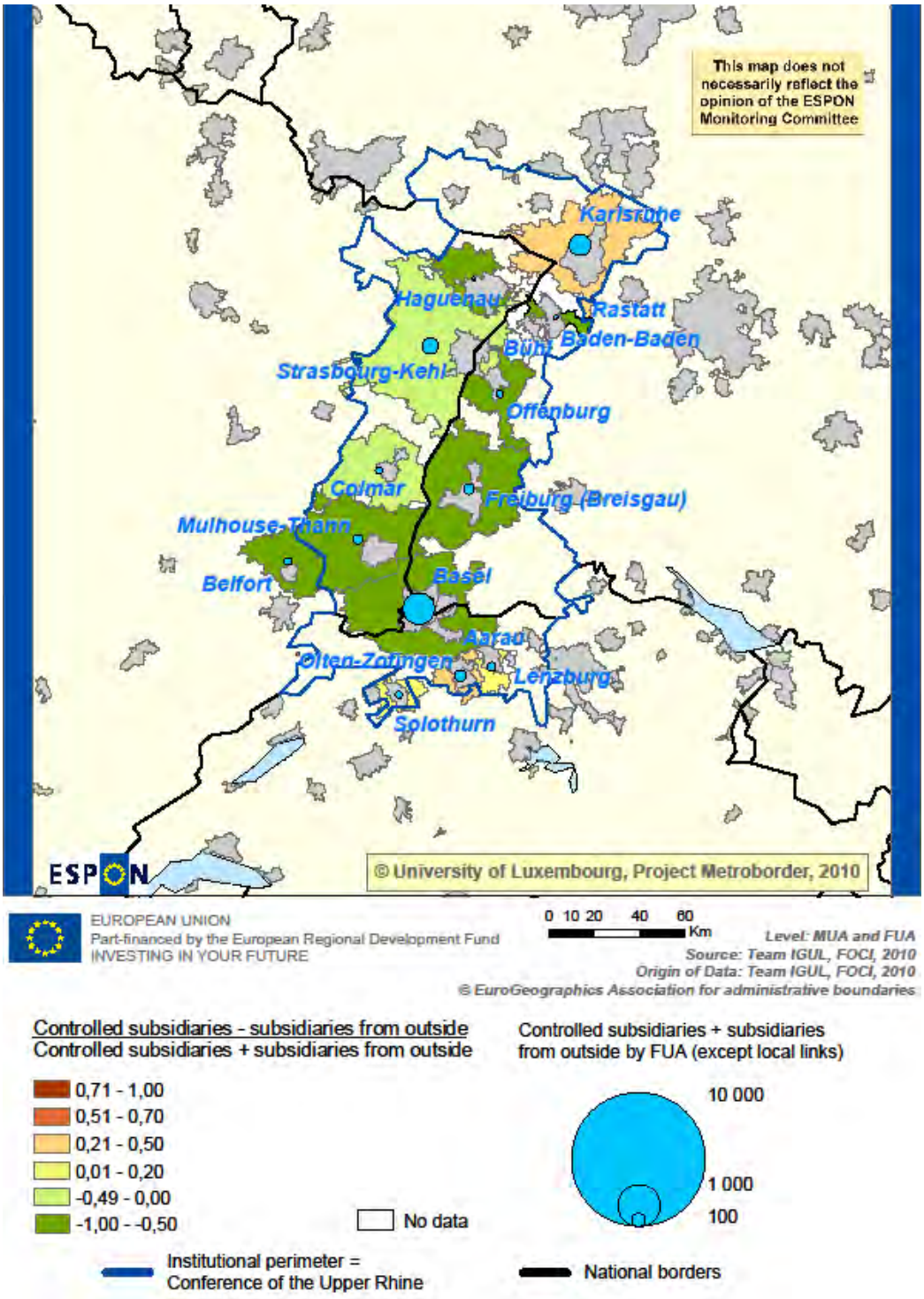
The following maps illustrate the reflections of chapter 3.4.



Map 18 Multinational firms networks – control of foreign subsidiaries by FUA (source: FOCI DFR 2010: 151)



Map 19 'Competitive nodes'-approach – zooming into the Greater Region



Map 20 'Competitive nodes'-approach – zooming into the Upper Rhine

9 Functional Integration

9.1 Indicator 1 - Cross-border commuting (2000/2006)

As detailed in chapter 4.1, the notion of spatial integration is applied in the context of the METROBORDER project by indicators of interaction and of convergence. The following sections will give a more detailed background on the methodological and empirical background.

The aim of the cross-border commuting indicator is threefold: to measure the intensity of home-work-flows that cross the borders in 2000 and 2006; to investigate the number of cross-border commuters in each country (asymmetry) at both points of time; and to study the evolution of the number of commuters between 2000 and 2006.

Case study	Number of cross-border commuters 2000	Number of cross-border commuters 2006	Proportion of commuters to each country 2000	Proportion of commuters to each country 2006	Average annual growth 2000-2006	Rank 2000	Rank 2006
Luxembourg	***87,908***	***127,251***			***6,4***	1	1
Luxembourg	87,300	126,723	99.3	99.6	6.4		
France	200	200	0.2	0.2	0.0		
Germany	108	196	0.1	0.2	10.4		
Belgium	300	132	0.3	0.1	-12.8		
Basel	***43,165***	***48,887***			***2.1***	2	2
Switzerland	42,565	48,287	98.6	98.8	2.1		
France	100	100	0.2	0.2	0.0		
Germany	500	500	1.2	1.0	0.0		
Genève	***28,382***	***47,514***			***9.0***	4	3
Switzerland	28,198	47,354	99.4	99.7	9.0		
France	184	160	0.6	0.3	-2.3		
Nice-Monaco-Sanremo	***28,592***	***34,073***			***3.0***	3	4
France	200	200	0.7	0.6	0.0		
Monaco	28,157	33,638	98.5	98.7	3.0		
Italia	235	235	0.8	0.7	0.0		
Lille	***19,500***	***27,500***			***5.9***	6	5
France	5,000	5,000	25.6	18.2	0.0		

Belgique	14,500	22,500	74.4	81.8	7.6		
Saarbrücken	***22,700***	***21,623***			***-0.8***	5	6
Germany	21,700	20,623	95.6	95.4	-0.8		
France	1,000	1,000	4.4	4.6	0.0		
Aachen-							
Liège-							
Maastricht	***16,587***	***17,695***			***1.1***	7	7
Netherlands	5,115	5,895	30.8	33.3	2.4		
Germany	10,308	10,375	62.1	58.6	0.1		
Belgium	1,164	1,425	7.0	8.1	3.4		
København-							
Malmö	***3,291***	***13,494***			***26.5***	9	8
Denmark	3,010	12,744	91.5	94.4	27.2		
Sweden	281	750	8.5	5.6	17.8		
Strasbourg	***6,409***	***5,959***			***-1.2***	8	9
France	70	70	1.1	1.2	0.0		
Germany	6,339	5,889	98.9	98.8	-1.2		
Wien-							
Bratislava	***N.A***	***1,055***				-	10
Austria	N.A	954	-	90.4	-		
Slovakia	N.A	101	-	9.6	-		
Katowice-							
Ostrava	***N.A***	***N.A***				-	-
Poland	N.A	N.A	-	-	-		
Czech							
Republic	N.A	N.A	-	-	-		

Table 2 Cross-border commuters, 2000 and 2006
(for a more schematic visualisation, see chapter 4.2 in Part B)

Sources: Luxembourg: IGSS, ADEM Eures, BA, INAMI. Basel: OFS, MOT and own estimations. Genève: OFS and own estimations. Nice-Monaco-Sanremo: Fusco 2009, Principauté de Monaco 2009. Lille: Groupe de travail parlementaire franco-belge, Insee. Saarbrücken: BA, Insee, IGSS, Observatoire 2001. Aachen-Liège-Maastricht: EU 2007, Euregio Meuse-Rhin. København-Malmö: Öresundstatistik. Strasbourg: CCI Strasbourg et Bas Rhin, Eurodistrict 2008 and own estimations. Wien-Bratislava: Arbeitsmarkservice Austria, OECD and own estimations; Katowice-Ostrava: no data available.
Spatial units: Luxembourg: Greater Region. Basel: Canton of Basel-Stadt and Basel-Land, France, Germany. Genève: Canton of Genève, France. Nice-Monaco-Sanremo: France, Italy.

Lille: metropolitan regions. Saarbrücken: Saare, Lorraine. Aachen-Liège-Maastricht: Euregio. København-Malmö: Öresund Region DK, Scane County. Strasbourg: Eurodistrict. Wien-Bratislava: Centrope; Katowice-Ostrava: no spatial units.

The different CBPMRs show very different commuting intensities depending on the different size, average annual growth and distribution by country of origin considered. From a demographic perspective, Table 2 shows clearly that several patterns can be observed as far as the number of cross-border work is concerned, depending on the intensity of the phenomenon. With more than 127,000 cross-border workers in 2006, the Luxembourg metropolitan area is undoubtedly the border area where this phenomenon is the most developed, followed at some distance by Basel (49,000), Genève (47,500), Nice-Monaco-Sanremo (34,000) and Lille (27,500). Saarbrücken (21,500), Aachen-Liège-Maastricht (17,500) and København-Malmö (13,500) have a lower number of cross-border workers, while Strasbourg (6,000) and Wien-Bratislava (1,000) are numerically much less affected by the phenomenon. No information is available on Katowice-Ostrava.

As Table 2 indicates, most of the cross-border metropolitan areas concerned by this study experienced a positive annual growth of cross-border employees between 2000 and 2006, with the exception of Saarbrücken (-0.8%) and Strasbourg (-1.2%). The highest average annual growth can be observed in København-Malmö (+26.5%), which can be explained by the opening of the Öresund Bridge in 2000. In Genève (+9.0%), Luxembourg (+6.4%) and Lille (+5.9%) also, the number of cross-border workers is growing rapidly and is at least twice as high as in the other metropolitan areas. As a consequence, the ranking of metropolitan areas conducted on the basis of the absolute number of cross-border workers has experienced some changes from 2000 to 2006. These changes have mostly benefited Genève, Lille and København-Malmö.

In most cases, the distribution of cross-border workers by country of origin is extremely asymmetric. This is particularly true for the metropolitan areas of Luxembourg, Basel, Genève, Nice, Saarbrücken, København-Malmö and Strasbourg, where over 90% of the flows are moving from one country to the other. Two exceptions are worth being noted: in Lille and Aachen-Liège-Maastricht, the distribution among countries is more balanced, reflecting the Flemish dynamic growth of urban centres in the first case and a polycentric urban structure in the second case.

This must be seen against the backdrop, that between 1999/2000 and 2006/2007, the number of cross-border workers has experienced strong growth from 490,000 to 660,000 in the EU15/EFTA which is home to 95% of the cross-border employees. Flows to Switzerland, Luxembourg, Austria and the Netherlands are increasing (fuelled primarily by France, Germany and Belgium), while flows to Germany

declined. In the 1990s, Switzerland, Germany, and Luxembourg were the first cross-border destinations for commuters. In 2006, though, Luxembourg (127,533) has clearly distanced Germany (86,334) in terms of daily cross-border workers. The European Union (2009) now mentions that around 664,000 cross-border workers could be identified in the EU15/EFTA and 114,000 in the EU10+2, which means a total of 778,500 cross-border workers in the EU27/EFTA (2006-2007). Our results suggest that at least 345,000 of them (44%) are located in one of our 11 cross-border metropolitan regions.

Table 3 provides a ranking of border regions from a purely bilateral perspective, according to the number of cross-border commuters in 2000 and 2006. In 2006, the border between Luxembourg and France was by far the busiest border region among the 11 cases and can be considered as the busiest border in Europe with 64,540 daily cross-border commuters. Among the top five borders, three are characterised by flows going to Luxembourg. Figures related to the borders between France and Switzerland in Genève and Basel, and between France and Monaco in Nice-Sanremo-Monaco are also extremely high. The results confirm previous regional studies indicating that, in Europe, France is mostly emitting cross-border workers whereas Luxembourg, Switzerland and Monaco are mostly receiving these workers in Europe (EU 2009). Interestingly, these results also suggest that the presence of a knowledge-intensive economy driven by an international financial centre (Luxembourg, Genève, Monaco) and/or high-tech activities (Basel) is a crucial factor explaining the intensity of cross-border employment in Europe.

		From	To	2000	2006
1	Luxembourg	France	Luxembourg	46,500	64,540
2	Genève	France	Switzerland	28,198	47,349
3	Luxembourg	Belgium	Luxembourg	24,300	33,021
4	Nice-Sanremo-Monaco	France	Monaco	24,958	30,060
5	Luxembourg	Germany	Luxembourg	16,500	28,982
6	Basel	France	Switzerland	28,329	28,450
7	Lille	France	Belgium	14,500	22,500
8	Saarbrücken	France	Germany	21,700	20,623
9	Basel	Germany	Switzerland	14,236	19,822
10	København-Malmö	Sweden	Denmark	3,016	12,744

Table 3 The 10 busiest borders in Europe, 2000 and 2006
Sources and Spatial Units: see Table 2. NB: Only borders with more than 10,000

daily cross-border commuters in 2006 are represented.

9.2 Indicator 2 - Cross-border transportation lines

All the existing connections and their frequencies of public transport between major cities of the CBPMRs have been taken into account in order to implement this indicator – either by rail, by bus, or even by boat (for Wien-Bratislava, along the Danube). The total number of connections in both directions of traffic has been counted, during a working day over a 24 hours period.

Fig. 16 and Fig. 17 illustrate the organisational structure of public transport networks between major urban centres of the different metropolitan areas. Cross-border connections within morphological urban areas are not represented. The links between the centres which are considered appear to be proportional to the number of daily connections.

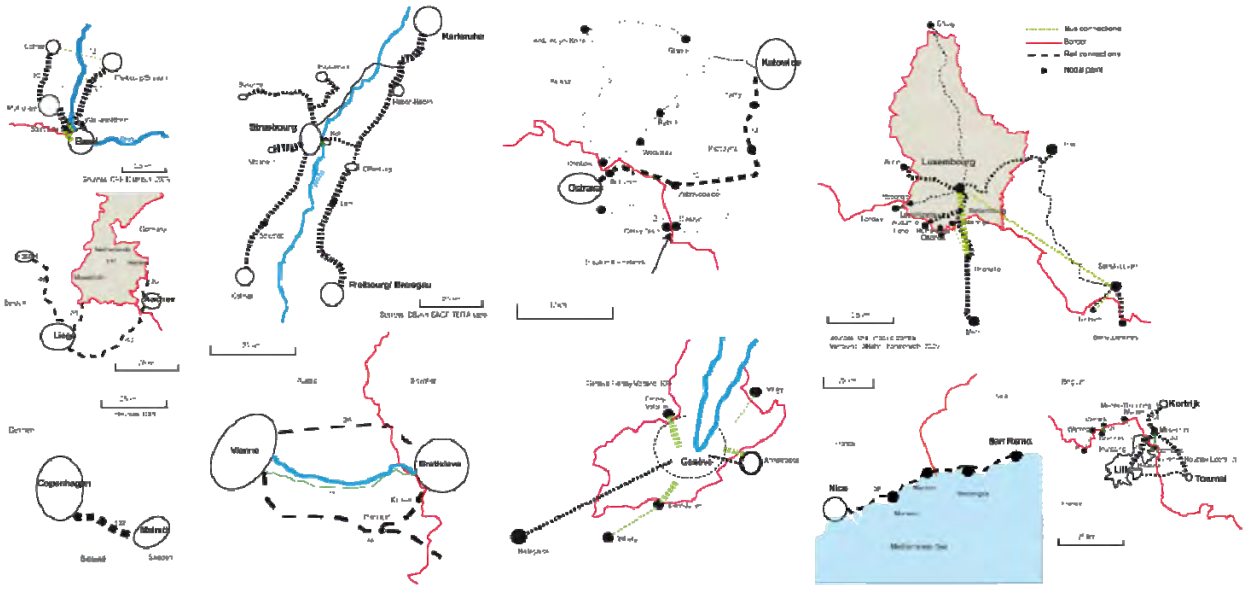


Fig. 15 Structure of cross-border public transport networks - geographical context (sources: s. Fig. 16)

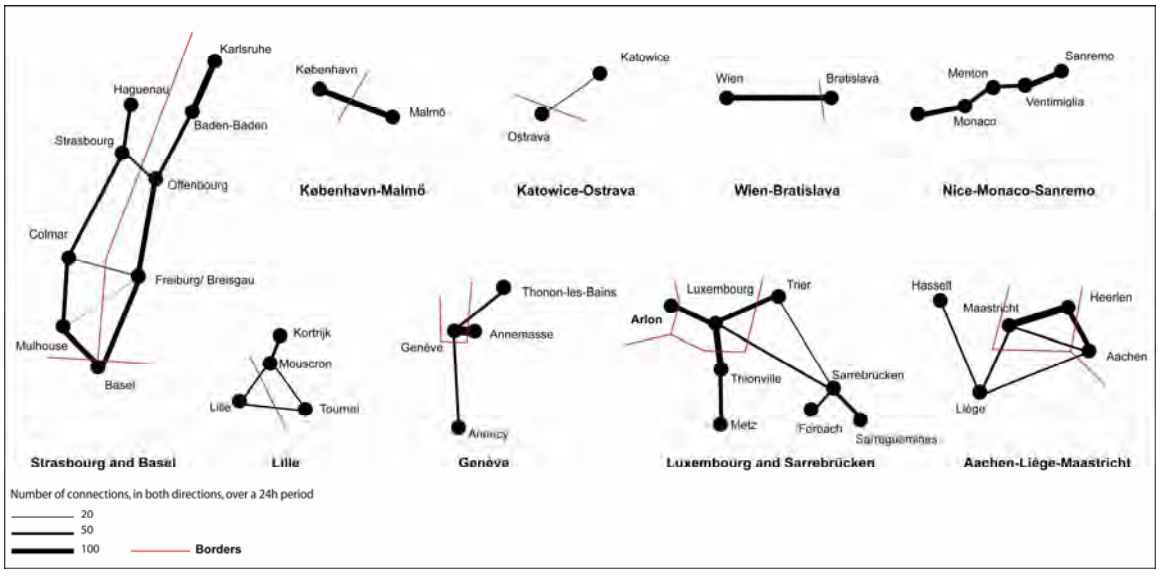


Fig. 16 Structure of cross-border public transport networks – number of connections and geographical context

Sources: Strasbourg: SNCF, Deutsche-Bahn. Basel: SNCF, Deutsche-Bahn, CFF, København-Malmö: DSB, SJ Katowice-Ostrava: Polrail, České dráhy. Lille: SNCF, SNCB, Transpole, TEC Hainaut, De Lijn. Genève: SNCF, CFF, Frossard, TPG. Wien-Bratislava: ÖBB, ŽSR, PostBus, slovaklines, Twin city liner. Luxembourg: CFL, SNCF, SNCB, Deutsche-Bahn, Weber, TEC, mobiliteit. Aachen-Liège-Maastricht: Nederlandse Spoorwegen, Deutsche-Bahn, SNCB, Veolia, De Lijn, ASEAG, TEC. Nice-Monaco-SanRemo: SNCF, Trenitalia. Saarbrücken: Deutsche-Bahn, SNCF, Transbus.

These graphs show clearly the hubs within the different cross-border metropolitan areas. In the example of the Upper Rhine, Basel plays a key role, because railway lines in Alsace and Baden-Wurttemberg are north-south oriented. From a public transportation perspective, Basel constitutes a node of interconnection between these networks. Further north, in the case of Strasbourg, the city of Offenburg also articulates the Alsatian railway lines with the Karlsruhe-Basel line.

The example of Luxembourg shows important frequencies, mainly oriented toward Luxembourg City, which is the main centre for the labour market. This important number of daily connections is an answer given to the huge flows of commuters coming from Lorraine, Wallonia, Rheinland-Pfalz and Saarland every day. In the example of Aachen-Liège-Maastricht, the figures show a relatively poor integration. Liège is the main hub between the Belgian cities and the Dutch and German cities within this area of cooperation.

It is important to note that the different situations cannot easily be compared, as far as each case-study is specific and embedded in a single context. Nevertheless,

some fundamental differences in the architectures of the public transport networks of the different case studies can be observed: Connections with foreign cities are very numerous in the regional employment centres of Luxembourg and Basel whereas there is still no direct linkage between the Polish and the Czech national railway systems in the example of Katowice-Ostrava.

Comparative analysis

The linkage frequency index is a composite index delivered for all studies regions, which takes into account all connections between the different cities, weighted by the number of cities that are considered. The estimated speed of the public transport lines between main urban centres is calculated by dividing the air-distance by the time that is required to link the different urban centres (Table 4).
Values for transport within the urban agglomeration are presented separately, in order to differentiate intra-urban and inter-urban speeds. Only the urban centres of more than 20,000 people have been taken into consideration in the analysis.
Again, given the diversity of the situations, we cannot simply compare between the different values. For example, the weak results that are obtained for the case of Genève can be explained by the fact that only the cities of Genève, Thonon-les-Bains and Annecy were considered, whereas most of the cross-border flows are contained in Genève's morphological agglomeration, in which Annemasse is included. The results show that the situation seems particularly favourable in the case studies of Luxembourg, Basel, Wien-Bratislava and København-Malmö. In these examples, connexions are numerous and efficient between the main urban centres. However, these results have to be cautiously interpreted, due to huge differences between the demographic weights of the cities that were taken into consideration for the production of this indicator. Needs are not the same, in terms of frequencies and seating capacities between for example Strasbourg and the small city of Offenburg in Baden-Wurttemberg on the one hand, and, on the other hand, both capital cities of Wien and Bratislava.

	Theoretical Average Speed	Speed Rank	Linkage frequency index	Frequency Rank	Cities considered	Ranking according to the intensity of CB links inside the MUA
København-Malmö	48.0	6	122	1	København-Malmö	N/A
Wien-Bratislava	63.7	3	117	2	Wien-Bratislava	N/A

Luxembourg	69.1	1	100	3	Luxembourg, Metz, Thionville, Trier, Arlon	N/A
Basel	67.5	2	81	4	Basel, Fribourg, Mulhouse, Colmar	2
Nice-Monaco-Sanremo	39.7	9	73	5	Nice, Monaco, Sanremo, Vintimiglia, Menton	N/A
Aachen-Liège-Maastricht	38.7	10	61	6	Hasselt, Aachen, Maastricht, Liège, Heerlen	N/A
Saarbrücken	53.9	5	61	7	Saarbrücken, Forbach, Sarreguemines	N/A
Genève	34.4	11	55	8	Genève, Thonon-les-Bains, Annecy	1
Strasbourg	44.2	8	49	9	Strasbourg, Offenburg, Baden-Baden, Freiburg/Breisgau	3
Lille	57.8	4	31	10	Lille, Kortrijk, Tournai, Mouscron	4
Katowice-Ostrava	45.0	7	18	11	Katowice, Ostrava	N/A

Table 4 Speed and number of public transport connections between the major centres in the different case-studies, 2009
Sources: see Fig. 16

9.3 Indicator 3 - Population density and growth

Before we actually focus on the functional integration by means of population data, we have a closer look at the demographic positioning of the cross-border MUAs and FUAs. The positioning of the central MUAs and FUAs involved shows the diversity of the regions.

The morphological urban areas within the 11 CBPMRs are quite diverse in terms of demographic size (see Fig. 17), ranging from 130,000 (Luxembourg) to 2.5 million (Katowice-Ostrava) inhabitants in 2006. As to the morphological areas, functional areas are very diverse in terms of population size, ranging from 800,000 (Genève) to 4 million inhabitants (Katowice-Ostrava) in 2006. Comparing the demographic size of morphological and functional urban areas in 2001 and 2006 already shows

different profiles (cp. Fig. 18).

In the case of Genève, Lille, Nice-Monaco-Sanremo or Strasbourg, the difference between the population of the two spatial units is small (less than 400,000 inhabitants in 2006) whereas in Wien-Bratislava, Katowice-Ostrava, København-Malmö and Luxembourg, the difference between the two appears to be extremely large (more than 800,000 inhabitants in 2006). From this point of view, Luxembourg has an exceptional situation: its functional area is more than 7 times bigger than the morphological area.

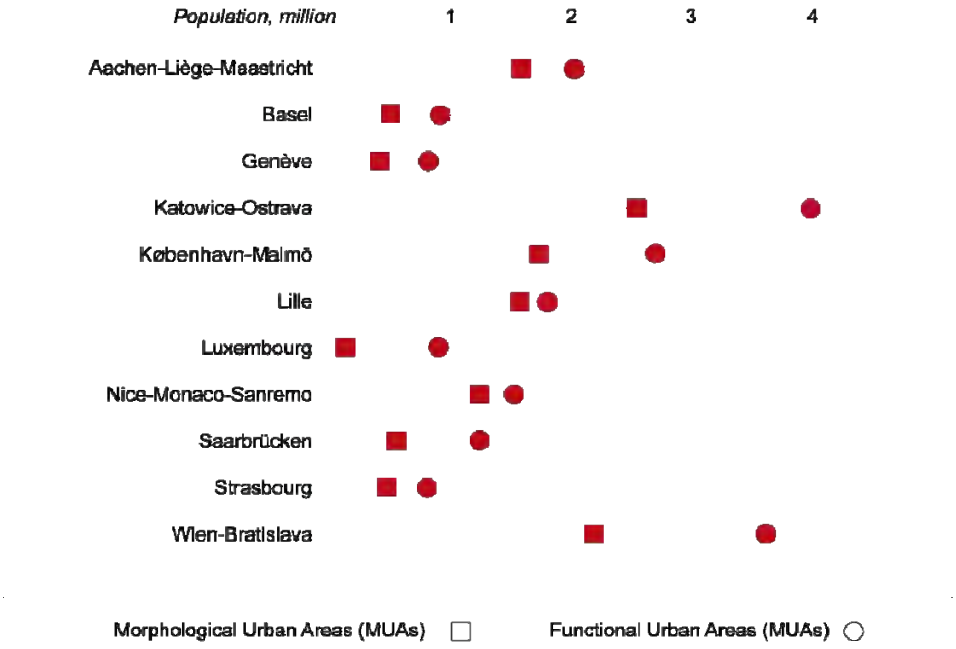


Fig. 17 Comparing the population of Morphological and Functional Urban Areas

As Fig. 17 indicates, the evolution of the average annual population growth of Morphological and Functional Urban Areas is usually converging: Basel, Saarbrücken and Katowice-Ostrava are declining in demographic terms whereas Genève, Luxembourg, and Nice-Monaco-Sanremo have been growing very fast between 2001 and 2006.

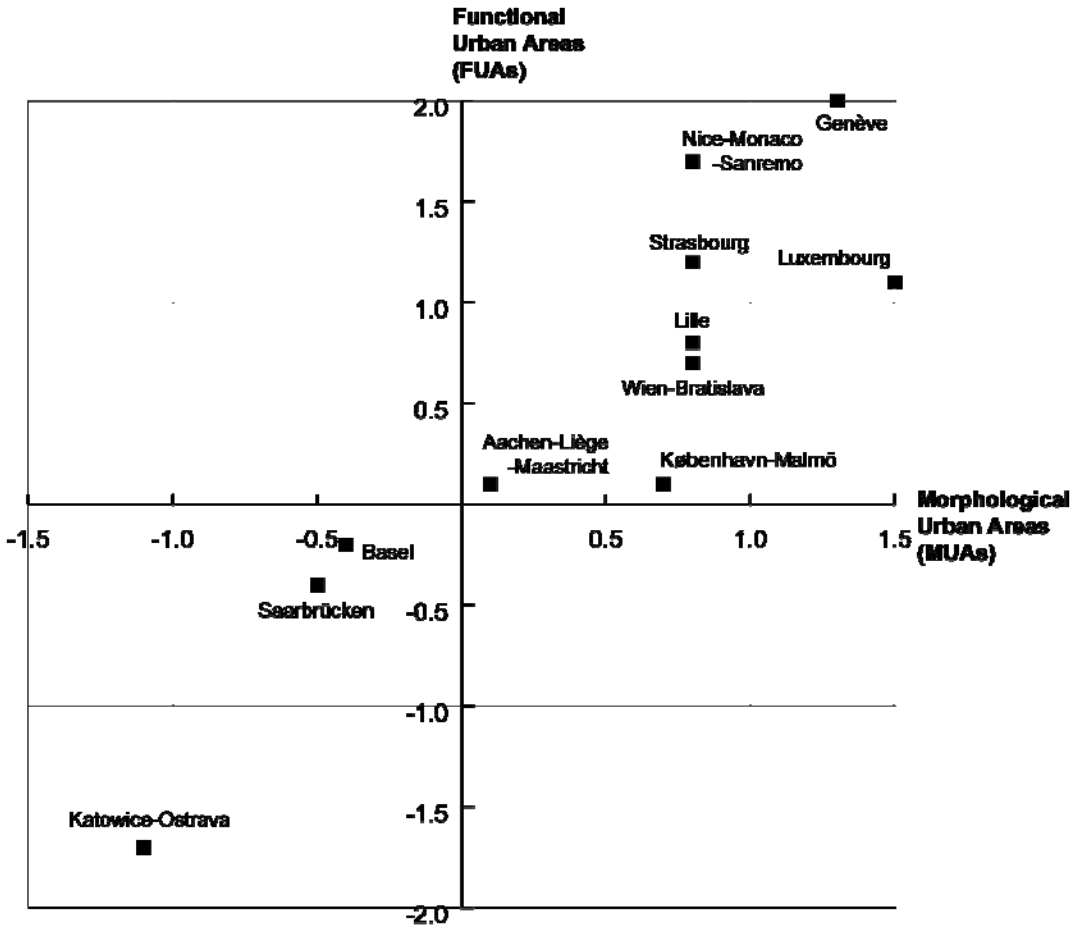


Fig. 18 Comparing the average annual growth of Morphological and Functional Urban Areas (between 2001 and 2006, in %)

Focusing on population density and growth explores the effect that may have national boundaries on population dynamics in a metropolitan context. The indicator measures a) the density of population in 2006 and b) the average annual demographic growth between 1980 and 2006 of all municipalities located in the 11 cross-border metropolitan regions.

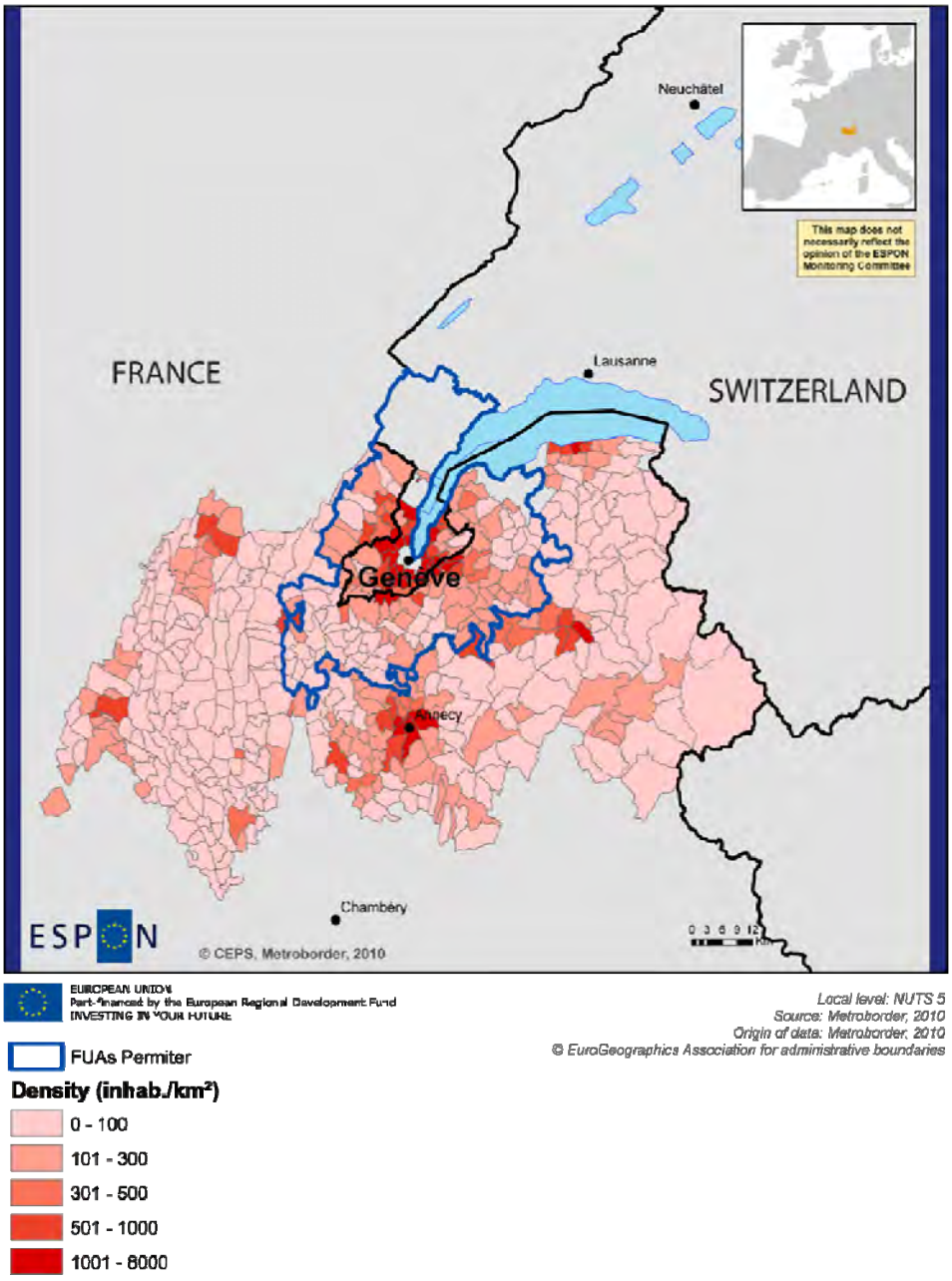
The findings demonstrate that border regions show very heterogeneous demographic profiles in Europe. Like any other European metropolitan regions, cross-border metropolitan regions are characterised by an intense spatial dynamic of employment and population. The spatial pattern, however, shows specific forms in borders contexts. Even if European integration has significantly promoted the opening of borders and fostered trade between nations, certain demographic differentials can still be observed within the metropolitan areas considered by this study.

Density of population

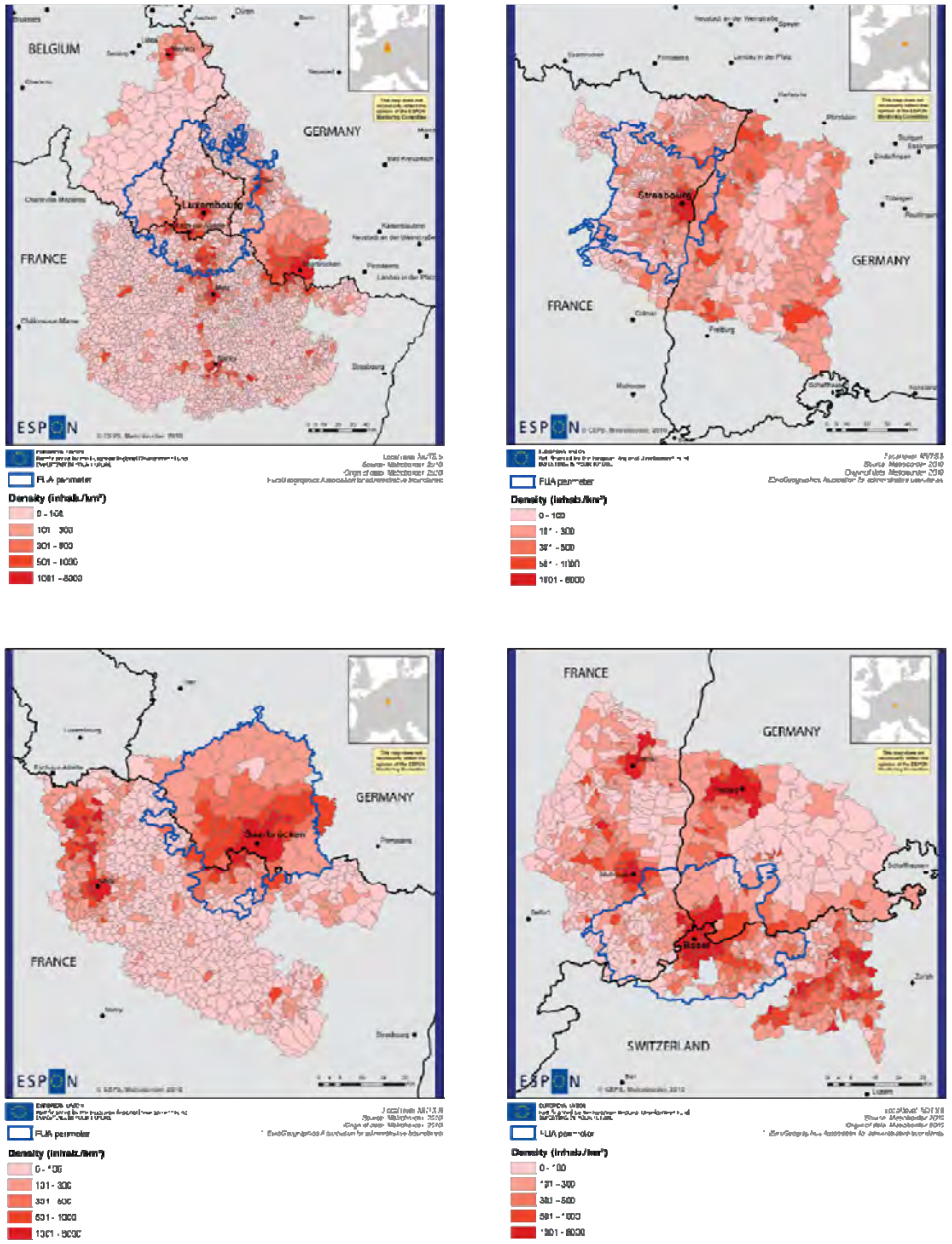
The calculation of population density (number of inhabitants per square kilometer in 2006) shows the population patterns within border areas. Map 21shows the example of Genève.

Like Genève, several border cities (Lille, Nice-Monaco-Sanremo, and Katowice-Ostrava) show similarities in demographic terms: the conurbation of Genève was extended towards the border and now encompasses the urban area of Annemasse; the metropolitan area of Lille is a very dense cross-border polycentric conurbation because of its industrial history; similarly the urban and industrial Silesian region which is one of the most important industrial areas in Europe; while in the case of Nice, the coast is urbanised and forms a urban cross-border continuum (from Cannes to Sanremo). Given these results, the boundaries in these cross-border regions do not introduce significant demographic variations between the municipalities of the countries; there is no strong differentiation of density of population on both sides of the border.

On the other hand, in some cases (Wien-Bratislava, Aachen-Liège-Maastricht), differences in densities appear on both sides of the borders. In the case of Aachen-Liege-Maastricht, “The rates and regulation of taxation vary strongly. Many cross-border workers pay income taxes in both countries. They have to fill in forms in both countries and require help which is difficult to obtain.” This is the reason why people prefer to move to the country where they work (MKW Wirtschaftsforschung 2009). In this case, the border creates a break. For Wien-Bratislava, there are also strong differences in demographic terms between the two sides of the border. This is linked to the presence of the Iron Curtain for 40 years, but also to the fact that on the Austrian side, there is now a reservation area along the Danube River that prevents urban development in the area. København-Malmö is a special case because of the presence of the sea that physically separates the two main cities. In these circumstances it is difficult to assess differences in densities.



Map 21 Population density in the Genève region



Map 22 Population density Basel, Luxembourg, Saarbrücken and Strasbourg

Note: only municipalities from a selection of NUTS 3 are represented

In the case of the Greater Region, the main centers of population are cross-border: the sector of Esch-sur-Alzette-Differdange-Longwy-Villerupt, the sector of Saarbrücken-Sarregeumines-Forbach-Saint-Avold, and the sector of Metz-Thionville, areas in structural change now benefiting from the economic dynamic of Luxembourg. In the case of the Upper Rhine, the two main cities (Strasbourg and Basel) form urban border areas, since the neighbouring municipalities also have population densities similar to these two centres. There is a spreading effect of high

density from urban centres, which subsequently diffuse over space. Between these two population centres, several sub-centres are spread across the Rhine area (Mulhouse, Colmar, Freiburg im Breisgau).

Average annual growth rates

The indicator of average annual growth (AAGR) measures the demographic evolution from 1981 to 2006. This indicator allows a comparison of the population growth dynamics in the different regions although demographic data are not available for the same date for all cases.

Fig. 19 shows that in many cases the demographic evolution has followed a similar growth on both sides of the border (particularly in Basel, Genève, København-Malmö and Strasbourg).

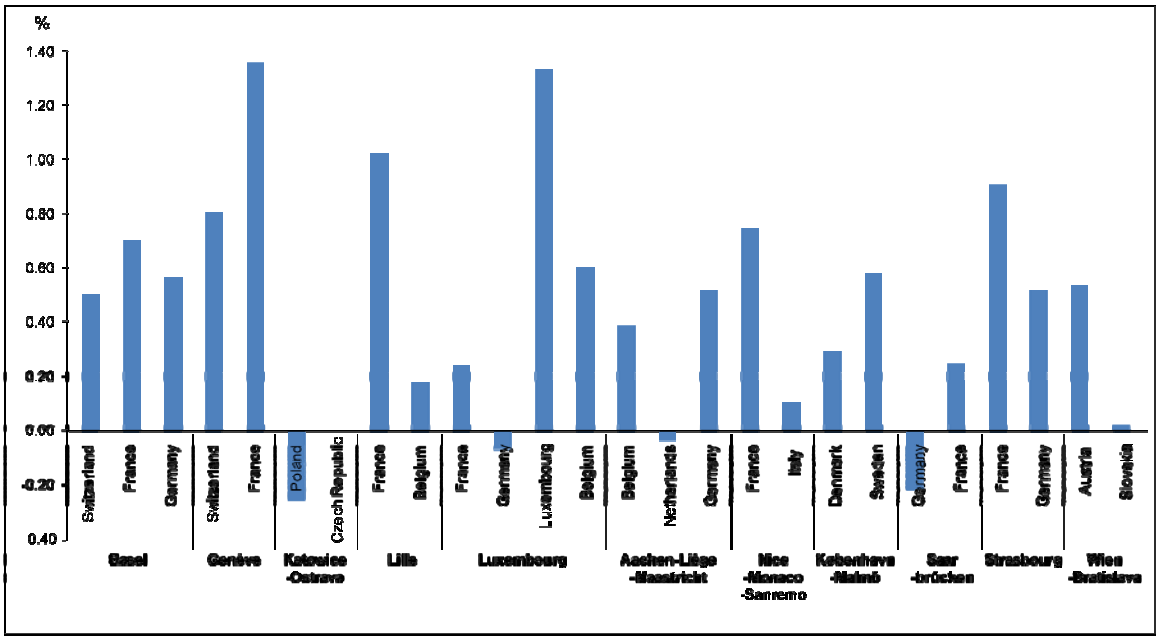


Fig. 19 Average annual growth rate over the last 15 years
Sources: National Statistics Offices

In the others cases, like Nice-Monaco-Sanremo, Katowice-Ostrava, and Saarbrücken, the demographic trends are not the same of both sides of borders. There are strong differences: the average annual growth rates are antagonist. For the cases of Wien-Bratislava and Aachen-Liège-Maastricht, trends vary according to the time scale considered. Over a period of 25 years, the annual growth rates are quite similar, while over a period of 15 years, the growth of the population is radically different, even opposite (for example, Dutch municipalities lost population).

Morphological Urban Areas (MUAs)	Population 2001	Population 2006	Average annual growth (%)
Katowice-Ostrava Total	2,644,319	2,507,825	-1.1
Wien-Bratislava Total	2,084,715	2,174,365	0.8
København-Malmö Total	1,714,305	1,778,928	0.7
Aachen-Liège-Maastricht Total	1,577,469	1,588,592	0.1
Lille Total	1,401,644	1,458,504	0.8
Nice-Monaco-Sanremo Total	1,193,202	1,239,836	0.8
Saarbrücken Total	628,267	611,638	-0.5
Strasbourg Total	556,537	579,799	0.8
Basel Total	566,331	555,635	-0.4
Genève Total	447,179	477,681	1.3
Luxembourg Total	120,331	129,517	1.5

Table 5 Morphological Urban Areas (MUAs): population in 2001 and 2006
Notes: København-Malmö: Malmö population 2005. Katowice-Ostrava: Katowice population 2008

Sources: Luxembourg: STATEC, Statistisches Landesamt Rheinland-Pfalz, Statistisches Landesamt Saarland, IGEAT, Insee. Basel: OFS, Statistisches Amt des Kantons Basel-Landschaft, Basel-Stadt Statistik, Statistisches Landesamt Baden-Württemberg, Insee. Genève: OFS, Office cantonal de la statistique du canton de Genève, Statistiques Vaud, Insee. Nice-Monaco-Sanremo: Insee, Istat. Lille: Insee, IGEAT. Saarbrücken: Statistisches Landesamt Saarland, Insee. Aachen-Liège-Maastricht: Statistisches Landesamt Nordrhein-Westfalen, IGEAT, Statistics Netherlands. København-Malmö: Ørestat databank. Strasbourg: Insee, Statistisches Landesamt Baden-Württemberg. Wien-Bratislava: Statistik Austria, Statistical Office of the Slovak Republic. Katowice-Ostrava: Czech Statistical Office.

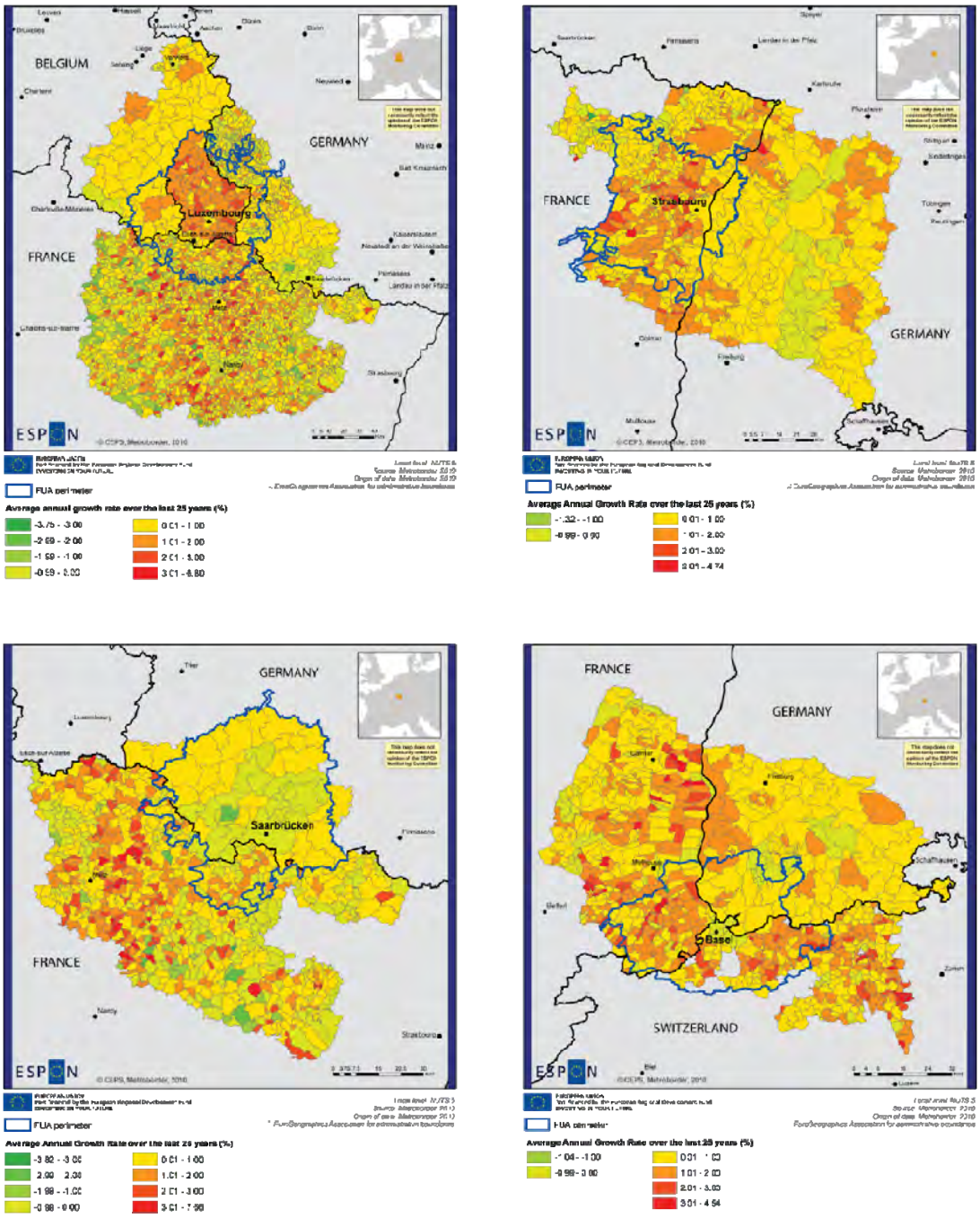
Between 2001 and 2006, most of the cross-border metropolitan cores experienced a positive average annual growth, with the exceptions of Basel, Saarbrücken and Katowice-Ostrava. Luxembourg and Genève went through a particularly strong annual demographic growth compared to the other MUAs. Previous studies suggest that this growth is primarily linked to the development of a knowledge-intensive economy, notably in finance and business services (Walther and Dautel, 2010).

Functional Urban Areas (FUAs)	Population 2001	Population 2006	Average annual growth (%)
Katowice-Ostrava	4,319,991	3,956,937	-1.7
Wien-Bratislava	3,496,574	3,628,679	0.7
København-Malmö	2,645,546	2,658,435	0.1
Aachen-Liège-Maastricht	1,990,946	2,005,498	0.1

Lille	1,773,063	1,846,699	0.8
Nice-Monaco-Sanremo	1,282,703	1,395,866	1.7
Saarbrücken	1,192,745	1,170,563	-0.4
Basel	960,538	952,139	-0.2
Luxembourg	882,285	931,771	1.1
Strasbourg	848,591	899,155	1.2
Genève	731,281	807,909	2.0

Table 6 Functional Urban Areas (FUAs): population in 2001 and 2006
Notes: København-Malmö: Malmö population 2005. Katowice-Ostrava: Katowice population 2008

Source: See Table 2.



Map 23 Average annual growth rate in the four selected cases studies: Basel, Luxembourg, Saarbrücken and Strasbourg

9.4 Indicator 4: GDP growth

The effects of a border on economic integration depend on several factors, notably the degree of openness of the border, language differences, political relations, but also the degree of economic disparity (Anderson and Wever 2003). Large differentials in factor costs are driving forces for cross-border production sharing, but also cross-border shopping and cross-border work (MKW Wirtschaftsforschung 2009).

The GDP growth indicator measures the differences between the wealth created in the territories located on both side of the border (Fig. 20 and Fig. 21). So this indicator highlights the economic dynamism of a territory and is calculated on data of GDP per capita in 2000 and 2006 at NUTS 3 level. Only the border regions are concerned by the calculation of the GDP per capita growth differentials. When more than two territories are concerned, it is the gap between the highest and the lowest GDP per capita that is taken into consideration.

One has to remain cautious about the interpretation of this indicator, especially due to two spatial mismatch effects. Firstly, data on GDP are produced at NUT3 scale that corresponds for some countries to much larger regions than the FUAs concerned by the cross-border integration phenomenon. Secondly, in cross-border metropolitan regions where there are many cross-border workers like Luxembourg, Geneva and Basel, the GDP per capita figures are overestimated as they do not take into account the cross-border workers as part of the population of the country where the wealth is created.

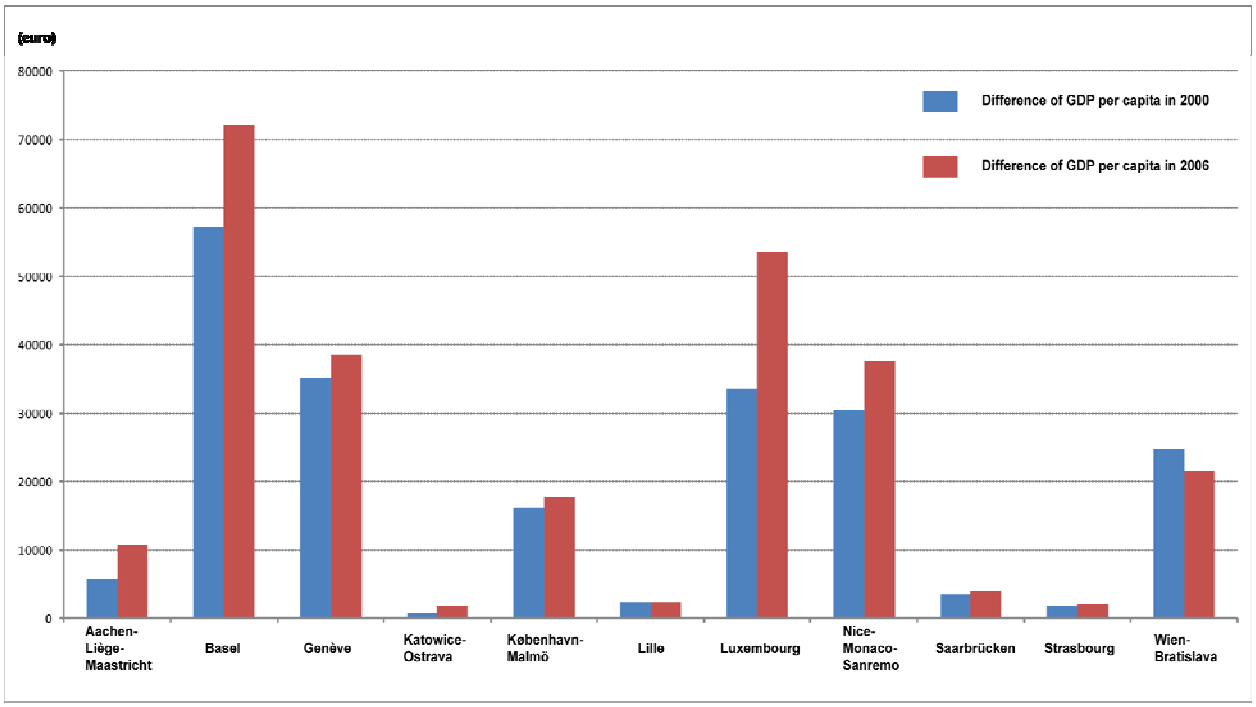


Fig. 20 Evolution of the differential of GDP per Capita
Sources: Eurostat, BAK Basel.

	Average GDP per Capita in 2006 (€)	Border territory
Aachen-Liege-Maastricht	19,724	Germany
	30,400	The Netherlands
	21,847	Belgium
Basel	23,360	Germany
	24,700	France
	95,417	Switzerland
Genève	64,849	Switzerland
	26,325	France
Katowice-Ostrava	13,485	Poland
	15,300	Czech republic
København-Malmö	48,713	Denmark
	31,000	Sweden
Lille	24,800	France
	27,149	Belgium
Luxembourg	21,193	Belgium
	18,218	Germany

	23,711	France
	71,800	Luxembourg
Nice-Monaco-Sanremo	60,595	Monaco
	23,000	Italia
	29,100	France
Saarbrücken	23,300	France
	27,313	Germany
Strasbourg	29,963	Germany
	27,800	France
Wien-Bratislava	36,360	Austria
	14,847	Slovakia

Fig. 21 Average GDP per capita (2006)
Sources: Eurostat, BAK Basel.

Without expanding on the results of this indicator, we can identify two main observations:

Firstly, the gap of GDP per capita between the border territories is very different in those cases studied. We can clearly distinguish three groups of cross-border metropolitan areas. The first group is composed by metropolitan areas where the differences of GDP are low: Strasbourg, Saarbrücken, Lille and Katowice-Ostrava. The second group includes the metropolitan areas where the gap between the average GDP per capita is medium (between 5,000 and 30,000 €): Aachen-Liège-Maastricht, Wien-Bratislava, København-Malmö. The latter group is formed by the case studies where differences in wealth between the border areas are strong: Basel, Genève, Luxembourg and Monaco-Nice-Sanremo. All four cases are in fact small metropolitan centres, very dynamic from an economic point of view and that attract a skilled labour force located in the surrounding territories.

Second point, in most cases, the differences of GDP are more and more important between 2000 and 2006, mainly in areas where there is a relatively large difference of GDP (like in Basel or Luxembourg). The exception is the case of Wien-Bratislava, where the border context is different as they were formerly separated by the iron curtain. The opening of national border in 1989 and the accession of Slovakia to the EU in 2004 are too recent events to bridge the gap between these two countries. Nevertheless, the trend is to a homogenisation of these territories, although the gap between GDP remains high. The results of this indicator show that the degree of homogeneity between regions tends to decrease. Indeed, the increase of

economic differences does not reflect the European idea of greater cohesion between the territories. Some metropolitan poles not only benefit from these differentials but have a strong interest in maintaining them as a crucial comparative advantage.

9.5 Synthesis: Evaluation of the functional cross-border integration of the indicators

As already pointed out in the framework of the Main Report, the synthesis of these indicators make up the following picture:

To enable and facilitate the comparison of indicators, we preferred to highlight the major trends, realising classifications of ordinal type to bring together case studies in different sub-set statistics.

	Interactions		Convergence	
Cross-border metropolitan areas	**Cross-border commuters**	**Cross-border public transport**	**Similarity of GDP PPS per capita**	**Residents' citizenship**
Luxembourg	5	5	1	4
Saarbrucken	3	3	4	2
Basel	4	4	1	3
Strasbourg	1	1	5	1
Genève	5	4	1	5
Basel	4	4	1	3
Aachen-Liege-Maastricht	2	2	4	2
Lille	3	1	5	2
Nice-Monaco-San Remo	3	2	1	4
København-Malmo	2	4	4	2
Vienna-Bratislava	1	5	4	1
Katowice-Ostrava	No Data	1	5	No Data

1= very weak, 2 = weak, 3 = moderate, 4 = strong, 5 = very strong.

Table 7 Synthesis indicator for cross-border interactions and convergence (source: CEPS/Instead)

These ordinal scales show values ranging from 1 to 5. A low value (1) illustrates a

phenomenon of low intensity, while a high value (5) shows an important phenomenon. Thus, a value of 5 indicates that the economic differential between border regions is considerable, or the number of cross-border workers is important.

Classification of dependent and independent variables (based on absolute values)

Discretisation of the number cross-border commuters per capita (number of in-commuters compared to the population of the metropolitan center):

- Class 5 (number of cross-border commuters > 20 %)
- Class 4 (number of cross-border commuters between 5 to 20 %)
- Class 3 (number of cross-border commuters between 1 to 5 %)
- Class 2 (number of cross-border commuters between 0.5 to 1 %)
- Class 1 (number of cross-border commuters < 0.5 %)

Discretisation of the similarity of GDP per capita:

- Class 5 (difference of GDP < 10,000 €)
- Class 4 (difference of GDP between 10,000 to 20,000 €)
- Class 3 (difference of GDP between 20,000 to 30,000 €)
- Class 2 (difference of GDP between 30,000 to 40,000 €)
- Class 1 (difference of GDP > 50,000 €)

Discretisation of the number of foreign residents within the cross-border metropolitan areas:

- Class 5 (number of foreign residents > 40,000 persons)
- Class 4 (number of foreign residents between 30,000 to 40,000 persons)
- Class 3 (number of foreign residents between 20,000 to 30,000 persons)
- Class 2 (number of foreign residents between 10,000 to 20,000 persons)
- Class 1 (number of foreign residents < 10,000 persons)

Discretisation of the cross-border transit (combination of data taking into account the number of connections, the average speed of public transport lines and the linkage frequency)

10 Methodology: knowledge intensive services Greater Region

Developed within the framework of the theory of knowledge and on a European level, the work initiated by the OECD in the mid-1980s is not subject to the above criticisms (OECD, 2006). Based on the intensity of research and development (R&D) and the technological level of activities, these analyses initially concerned the manufacturing sector (Hatzichronoglou, 1997). Subsequently, they were extended by Eurostat (2006) to cover service activities, and finally provided a European classification of high-technology and knowledge-intensive sectors. The resultant classification distinguishes between four categories of manufacturing industry as a function of their technological level, as well as six categories of services of which four are highly knowledge-intensive and two are less knowledge-intensive. Table 1 shows these different sectors on the basis of the NACE classification of activities adopted by the European Union (EU) and shows in grey the high-technology and knowledge-intensive services (KIS) which are discussed in the subsequent analysis.

The main drawback of this sectoral classification is associated with the heterogeneity of the activities considered as highly or less highly knowledge-intensive. The financial sector, for example, consists of several very diverse specialisations (asset managers, IT workers, secretaries, security staff). There is also the fact that enterprises are increasingly inclined to specialise in terms of type (function) of job and no longer only in terms of economic sector. The management and production functions thus tend to occupy different places within the same economic sector, as shown by Duranton and Puga (2005), who describe this as the passage from sectoral specialisation to functional specialisation.

Economic sectors	**NACE version 1.1 codes**
Manufacturing industry	
High technology	24.4, 30, 32, 33, 35.3
Medium-high technology	24 (-24.4), 29, 31, 34, 35 (-35.1 and 35.3)
Medium-low technology	23, 25 to 28, 35.1
Low technology	15 to 22, 36, 37
Services	
High-technology Knowledge Intensive Services (KIS)	64, 72, 73
Market Knowledge Intensive Services (KIS)	61, 62, 70, 71, 74
Financial Knowledge Intensive Services (KIS)	65 to 67
Other Knowledge Intensive Services (KIS)	80, 85, 92

Market Less Knowledge-Intensive Services (LKIS)	50 to 52, 55, 60, 63
Other Less Knowledge-Intensive Services (LKIS)	75, 90, 91, 93, 95, 99

Table 8 Manufacturing and services sectors
Note: high-tech industries and knowledge-intensive services are indicated in gray.
Sources: OCDE (2006) and Eurostat (2006).

Adaptation for the case of Luxembourg and identification of high-technology and highly knowledge-intensive sectors

The methodological process includes two stages. Firstly, the OECD-Eurostat classification is adapted to the specifics of Luxembourg, to the extent to which this is mandated by the nature of the data used. Then, a procedure selecting the jobs corresponding to highly knowledge-intensive sectors is carried out.

The classification of highly knowledge-intensive activities produced by the OECD and Eurostat is based on the classification of economic activities within the EU (NACE version 1.1). Taking into account the data available at the European level, the identification of high-technology manufacturing industries has been made using the NACE codes to three figures, while the highly knowledge-intensive services are aggregated on the basis of the NACE codes taken to two figures. The use of figures from the IGSS's administrative files allows the classification to be refined and to better take into account the specific features of the Luxembourg economy by using the NACE code to five positions for all those in active employment and registered for social security. This statistical opportunity allows two types of modification to be made to the OECD-Eurostat classification. Firstly, certain sectors which are aggregated when the NACE codes are taken to two positions are disaggregated to select the most relevant activities (in purple in Table 9). This operation was carried out for the following activities: post and telecommunications (64), other business activities (74), education (80) and health and social work (85). In each of these activities, only the sectors with the highest level of knowledge intensity as identified by Krätke (2007) in his analysis of the knowledge economy at the level of the European metropolises have been retained, viz. telecommunications (64.2), certain other business activities (75.1-5), higher education (80.3) and the human health activities (85.1).

Secondly, the classification has been completed by sectors of activity linked to the other supporting transport activities (63.2) and the organisation of freight transport (63.4), which are particularly highly developed thanks in particular to the Luxembourg airport facilities, as well as certain activities within the general (overall) public service activities, foreign affairs, justice and judicial activities (75.111, 75.210, 75.230) and the extra-territorial organisations and bodies (99).

This modified classification has been used as the basis for the identification of high-

technology and highly knowledge-intensive jobs. Socio-professional status has been taken into account in order to exclude the analysis of blue-collar workers, as this category of employees generally corresponds to less qualified positions which are thus not representative of high-technology and knowledge-intensive employment. Although the IGSS data provides neither the NACE code nor the location of the head office of self-employed intellectual workers, this category has been taken into account in calculating high-technology and knowledge-intensive jobs because of the specific profile of the professions in question (doctors, lawyers, insurance agents etc.). The international civil servants included by STATEC and absent from the IGSS data have also been included in the calculation of these jobs. These two additions, however, concern only the statistics aggregated at the national level, as no information relating to the location of these jobs is available for the dates studied.

OECD classification	**NACE**	**adapted classification for Luxembourg**	**NACE**
Manufacturing industry		**Manufacturing industry**	
High-technology		**High-technology**	
Aerospace	35.3	Aerospace	35.3
Computers, office machinery	30	Computers, office machinery	30
Electronics-communication	32	Electronics-communication	32
Pharmaceuticals	24.4	Pharmaceuticals	24.4
Scientific instruments	33	Scientific instruments	33
Knowledge-intensive services		**Knowledge-intensive services**	
Knowledge-intensive high-tech services		**Knowledge-intensive high-tech services**	
Post and telecommunications	64	Telecommunications	64.2
Computer and related activities	72	Computer and related activities	72
Research and development	73	Research and development	73
Knowledge-intensive market services		**Knowledge-intensive market services**	
Water transport	61	Water transport	61
Air transport	62	Air transport	62
		Other supporting transport activities	63.2
		Activities of other transport agencies	63.4
Real estate activities	70	Real estate activities	70
Renting of machinery and equipment without operator and of personal and household goods	71	Renting of machinery and equipment without operator and of personal and household goods	71
Other business activities	74	Other business activities	74.1-74.5

Knowledge-intensive financial services		**Knowledge-intensive financial services**	
Financial intermediation	65	Financial intermediation	65
Insurance and pension funding	66	Insurance and pension funding	66
Activities auxiliary to financial intermediation	67	Activities auxiliary to financial intermediation	67
Other knowledge-intensive services		**Other knowledge-intensive services**	
Education	80	Higher education	80.3
Health and social work	85	Human health activities	85.1
Recreational, cultural and sporting activities	92	Recreational, cultural and sporting activities	92
		Other less-knowledge-intensive services	
		General (overall) public service activities, Foreign affairs, Justice and judicial activities (selection)	75.111, 75.210, 75.230
		Extra-territorial organisations and bodies	99

Table 9 High-technology manufacturing and knowledge-intensive services sectors. Sources: OCDE (2006) and Eurostat (2006).

11 Zoom in automotive industry in the Greater Region

11.1 Methodological Framework

Within the Greater Region, the cross-border functional integration is studied more in depth using the example of a particular economic sector. The aim is in particular to better understand the cross-border dimension of the economy. The envisaged selection of the automotive industry has been reflected, taking into account several concerns. Nevertheless, the automotive sector has proved to be the best fitting example for the following reasons:

All Greater Region countries acknowledge the relevance of the automotive industry and try to foster it by means of cluster initiatives etc. Moreover, this *Leit-Industrie* has been an important pillar in all involved countries supporting the structural change in the last decades which can be characterised as a uniting, transboundary development (cp. Dörrenbächer & Schulz 2002, 2005, 2006). As a consequence, the automotive industry consists nowadays of various types of enterprises: Besides the actual vehicle producers usually referred to as original equipment manufacturers (OEM), an ever growing number of – especially 1st tier – supporting industries has an increasing relevance (cp. VDA 2004). These suppliers belong to the fields of R&D, electro-technology and high quality service providers which are all characterised as metropolitan functions.

As the automotive industry consists of diverse branches and both small and medium sized enterprises as well as large entities, it dominates the industrial sector within the Greater Region (see tab. and map below, cp. Ministère d'Etat du Grand-Duché Luxembourg 2009: 20f.). This relevance is stressed by the figures of employment.
The politically induced cluster initiatives in all parts of the Greater Region serve as a source of information. No other economic sector provides such a comprehensive open-access database. Given the limited resources for this zoom-in study, a comprehensive data collection is unfeasible.

Two types of data can be used: Firstly - as the ESPON database does not provide any data for the given case study - existing data are compiled (from cluster initiatives etc.), giving information on original equipment manufacturers as well as 1st, 2nd and 3rd tier suppliers.

Secondly, from November 2009 to January 2010 a questionnaire has been developed and sent to all companies to inventory the structure of the automotive industry and the cross-border relations of the companies. The questionnaire covers the following aspects:
the fields of cooperation (production, R&D, networking etc.) and location of partners,
the intensity, the character and the challenges of a cross-border cooperation within the Greater Region (communication patterns, linguistic barriers etc.),
the employment structure (number of persons employed, geographical origin of the employees) and
the organisational structure of the companies (headquarters vs. branch plant, degree of independence etc.).

11.2 The situation in the Greater Region

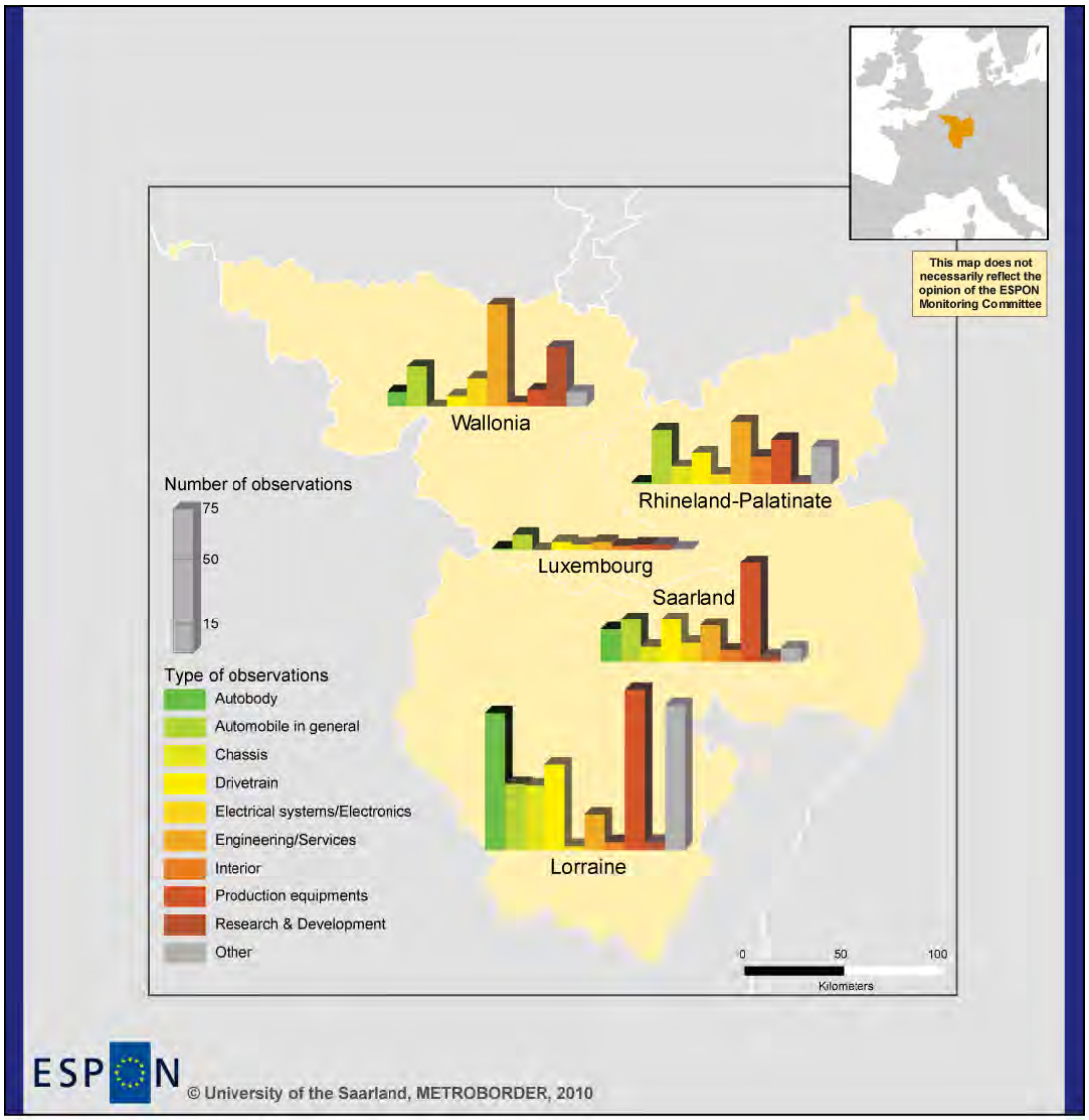
The inventory of the automotive industry by analysing the open-access databases first of all provides higher numbers of employees within the automotive sector than frequently found in official statistics: More than 650 companies with about 160,000 persons employed belong to one of the cluster initiatives (Table 10). These figures are far more diverse and larger than usually communicated.

Region	Persons employed
Lorraine	35,000
Luxembourg	10,000
Rhineland-Pal.	50,000
Saarland	49,000
Wallonia	15,500

Table 10 Persons employed in the automotive industry (OEMs and supplying industry, without truck production).
Sources: autoessor, ILEA, Zulieferinitiative Rheinland-Pfalz, automotive.saarland, Cluster Auto-Mobilité de Wallonie

The available data allow differentiating business activities within the supply industry and their spatial patterns (see Map 24).
Recent developments of the automotive technology and the market dynamics have obviously led to a significant shift in the structure of the automotive industry, as about one third of the companies are working in the fields of high quality services, electro-technology or R&D. First indications of the ongoing survey show that cross-border cooperation is taking place in these “new” domains as well as in the

"traditional" fields as drive train technology, chassis etc.



Map 24 Fields of business activities of suppliers in the automotive industry (number of firms without OEMs, without truck production).

Sources: Autoessor (2010), Automobil-Netzwerk des Saarlandes (2010), Automobil Zulieferinitiative Rheinland-Pfalz (2010), Cluster Auto-Mobilité de Wallonie (2010), ILEA - Industrie Luxembourgoise des équipementiers de l'automobile (2010), Ministère d'Etat du Grand-Duché Luxembourg (ed.) (2009)

12 The accessibility to emergency services. Methodological choices

12.1 Principles

At the occurrence of a CVA, or a stroke, the time is vital. If the patient is not cured within three hours, he may suffer from important sequelae. This three hours time is short as it encompasses:

- calling an emergency service. The patient or his neighbourhood understands the gravity of the illness and calls the emergency service. Description of the symptoms to the emergency platform call.
- Arrival of the emergency unit, i.e transport time from the emergency service to the place of the stroke occurrence.
- Diagnosis from the medical team. Detection of the probability that it is a stroke, and decision to transport the patient to a stroke unit.
- Transport from the place occurrence to the stroke unit.
- Arrival at the stroke unit; new diagnosis, with the help of a scanner and/or an IRM
- Operation.

These different steps are indicative; sometimes the patient can be directly driven by his relatives to an emergency service, or to a general practitioner. Besides, the time for the diagnosis may be more or less important according to the kind of stroke.

In this modelisation exercise we had to measure on a common basis the inequalities between the place of living of the inhabitants as regards the time to join a stroke unit. Some simplification had to be done regarding the way to estimate the time for the diagnosis and the exams; we assessed this time as 90 minutes. As the vital term is three hours, it remains only 90 minutes for transportation (transport from the emergency service to the place of stroke occurrence + transport from the place of stroke occurrence to the stroke unit).

Two different scenarios were tested:

- the national borders are not permeable. The arriving emergency unit belongs to the same country, and the patient is driven to a stroke unit from the same country.
- The national borders are permeable. The arriving emergency unit is the nearest, whatever the country, and the stroke unit also.

12.2 Methodology

A harmonised network of LAU1/2 was set (cf. Interim Report of METROBORDER). The place of occurrence of strokes has been arbitrarily localised at the centroid of

each LAU.

An inventory of the emergency services and stroke units was elaborated in Lorrain and Saarland (two stroke units were identified in Lorraine and five in Saarland; they are certified and have the capacity to take care totally of a patient suffering from a stroke).

The time distance from the emergency services to the LAU was calculated, as well as the time distance from the LAU to the stroke units (at an ambulance speed, using the main roads). The closest emergency services and stroke units were considered in this step, but alternative ways could have been selected (cf. analysis in the framework of ESPON3.2 as regards the accessibility to maternity hospitals in the Greater Region).

Preliminary computations display the accessibility time for each LAU (time from the emergency service to the LAU + time from the LAU to the stroke unit) in the scenario of national borders permeability and in the scenario of impermeability. The map in the report provides the differential between both scenarios, allowing a measure of the time gains and thus the additional chances of survival of the patient, in case of cross-border cooperation and health harmonisation.

13 Cross-border institutional mapping

13.1 Methodology of cross-border institutional mapping

In the framework of the Metroborder project different approaches of institutional mapping have been applied. These tools of cross-border institutional mapping (c-bim) refer to different approaches towards territoriality (in detail Chilla et al. forthcoming).

In general, the questions behind are:

- Territorial scope: On what territory does the cross-border cooperation work? How do we define the 'external borders' of the cross-border cooperation?
- Territorial mandate: What does the cross-border cooperation intend to do on the given perimeter, based on what kind of political legitimation? Is it more a single-issue cooperation (e.g. transport project) or is it a more general perspective?
- Territorial organisation: Which territorial authorities from which sides of the

borders and from which level are included and play which role?

Traditionally, the concept of territoriality means that political control and legitimacy is linked to the clearly defined physical areas of nation states; these spatial entities are reciprocally exclusive and separated by borders (e.g. Knippenberg & Mamadouh 2001; critical Elden 2010). From a juridical and more technical perspective, national borders are the most important "legal lines separating different jurisdictions" (Anderson & O'Dowd 1999: 594), a more normative-critical perspective sees territoriality as a political "strategy" that controls a given space and its inhabitants in a somewhat authoritarian way (Anderson & O'Dowd 1999: 598). However, the understanding of territoriality as central point of national authority has been questioned during the last years: The experience of a globalised economy, of increasing international migration, and of environmental threats has questioned the dominance of *national* 'containers': The national containers became 'leaking' in economic, social, cultural etc. dimensions (e.g. Taylor 1994, 1995; Paasi 2004), and relevant changes and challenges cannot always be addressed in an effective way by purely national politics.

Moreover, the seemingly *fix link* between the physical territory as 'container' of the politically sovereignty is questioned (Ruggie 1993; Mamadouh 2001). This has been much discussed with regard to the European Union that has for example different territorial foci for the monetary union and for the common market. In this context, the notion of variable geography (Goldsmith 2003) has been coined; with regard to the spatial planning policy, this perspective has mostly recently further developed with regard to 'soft spaces' (see Faludi 2010, Haughton et al. 2010). From a formal juridical point of view, the organisation of sovereignty might still be a non-ambiguous aspect. From a political and practical point of view, sovereignty can be considered – in practice – as "de facto negotiated, and hence dispersed, multiplied, and shared among several actors, including states, subnational governments and supranation institutions" (Jerneck 2000: 39). This aspect is one of the most sensitive aspects of democratic legitimation in the framework of Europeanisation processes.

Moreover, territorial regulations do not have to be exclusive. Again, the European Union is an instructive example, as its territory can be regarded as a "secondary territory, an extrapolation of the pooling together of the state territories" that are attached to a certain national sovereignty (Mamadouh 2001: 425; Jerneck 2000). The processes of 'pooling together' territorial as well as political power from different nations states and political levels has inspired much of the research on multi-level governance: In general words, multi-level governance studies "nested governments at several territorial tiers" (Hooghe/Marks 2003: 234) and pays particular attention to the power relations, the formation of coalitions, bypassing strategies etc. From the beginning, research on multi-level governance has had a

clear territorial focus: The founding works have empirically focused on European regional policy. Moreover, this strand of debate argues – as the citation above illustrates – with *territorial* tiers, that are conceived more or less synonym to political levels, or scales. This is why this perspective has been criticised as being essentialist (Gualini 2006: 885): Though the predominance of national territoriality is questioned, the coverage of political mandates for a given territory is assumed, even if in a multi-layered context.

Over the last decades, regional cross-border cooperation in Europe has led to the emergence of manifold forms of interregional and intermunicipal institutional frameworks and operational bodies (e.g. Euregios, Eurodistricts; see MOT 2006, Comte&Levrat 2006). The scholarly work accompanying this dynamic is vast, but rarely addressing questions of territoriality. Cross-border studies have focused on the liberalisation of borders and the increasing interaction due to globalisation. The changing character of borders has been intensively described, scrutinising the function of being selective filters (with regard to particular categories of goods, persons, finance, services). Conceptually, political geography as well as political science analyses have almost exclusively focused on organisational and governance issues including barriers to cooperation by mostly using actor-centred perspectives (e.g. institutional approaches, regime theory, network and policy analyses; cp. Perkman 2003/2007a, Blatter 2004, Newman 2006, Paasi 2005). Even when applying an explicit multi-level perspective and despite the so called spatial turn in political science, territorial aspects have to be rarely addressed.
This might be also due to the fact that the existing cross-border cooperations do not show a territoriality in the classical understanding that is much inspired by the nation state perspective:
The territorial dimension of cross-border cooperations often has an almost arbitrary background – it is the secondary, pooled territory of the respective domestic institutions, as introduced above with regard to the European Union.
At the same time, cross-border cooperations rarely have a clearly defined 'hard' political mandate: Often, the control of a project or programme budget is part of the field of responsibility, but mostly limited in time. Formally, all policies remain the responsibility of domestic institutions on both sides of the borders. It would be exaggerated to consider cross-border cooperations as having unclear political mandates with an arbitrary territorial focus. But it is true that political mandates are not organised in a clear territorial way as it is the case for the classical nation states.

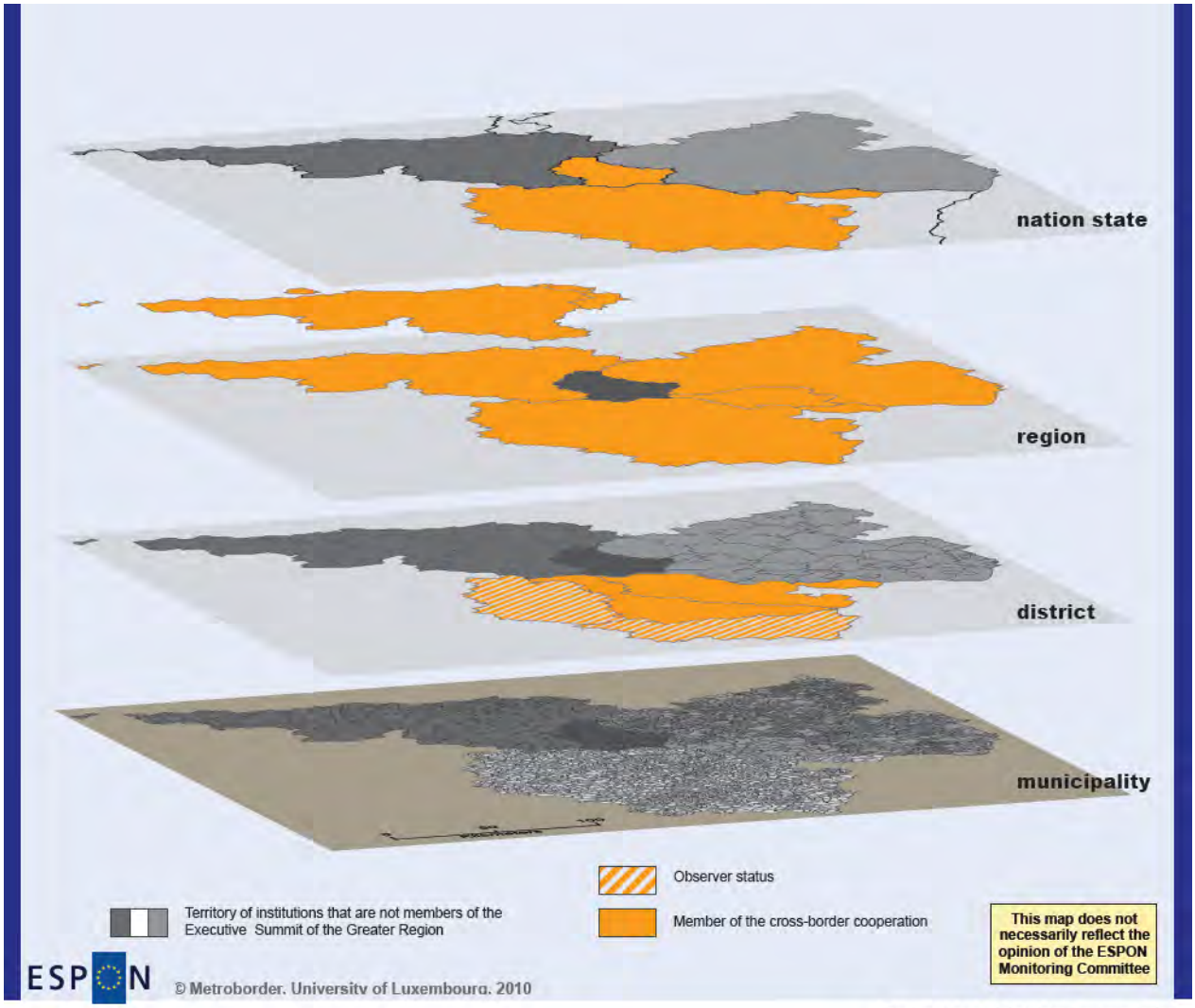
If one agrees that sovereignty in the context of Europeanisation is increasingly subject to political negotiations, territoriality should not only be operationalised as a two-dimensional geometry that considers changes in territoriality as a zero-sum-game – in a sense that if one institutions gains territoriality the other institution

looses to the same extent (cp. Anderson & O'Dowd 1999: 598). Instead, territoriality in a European multi-level governance system is more complex and cannot reduce territoriality to one level. This perspective does not intend to neglect the problems with regard to democratic legitimacy and efficiency when sovereignty is seen as subject to political multi-level bargaining.

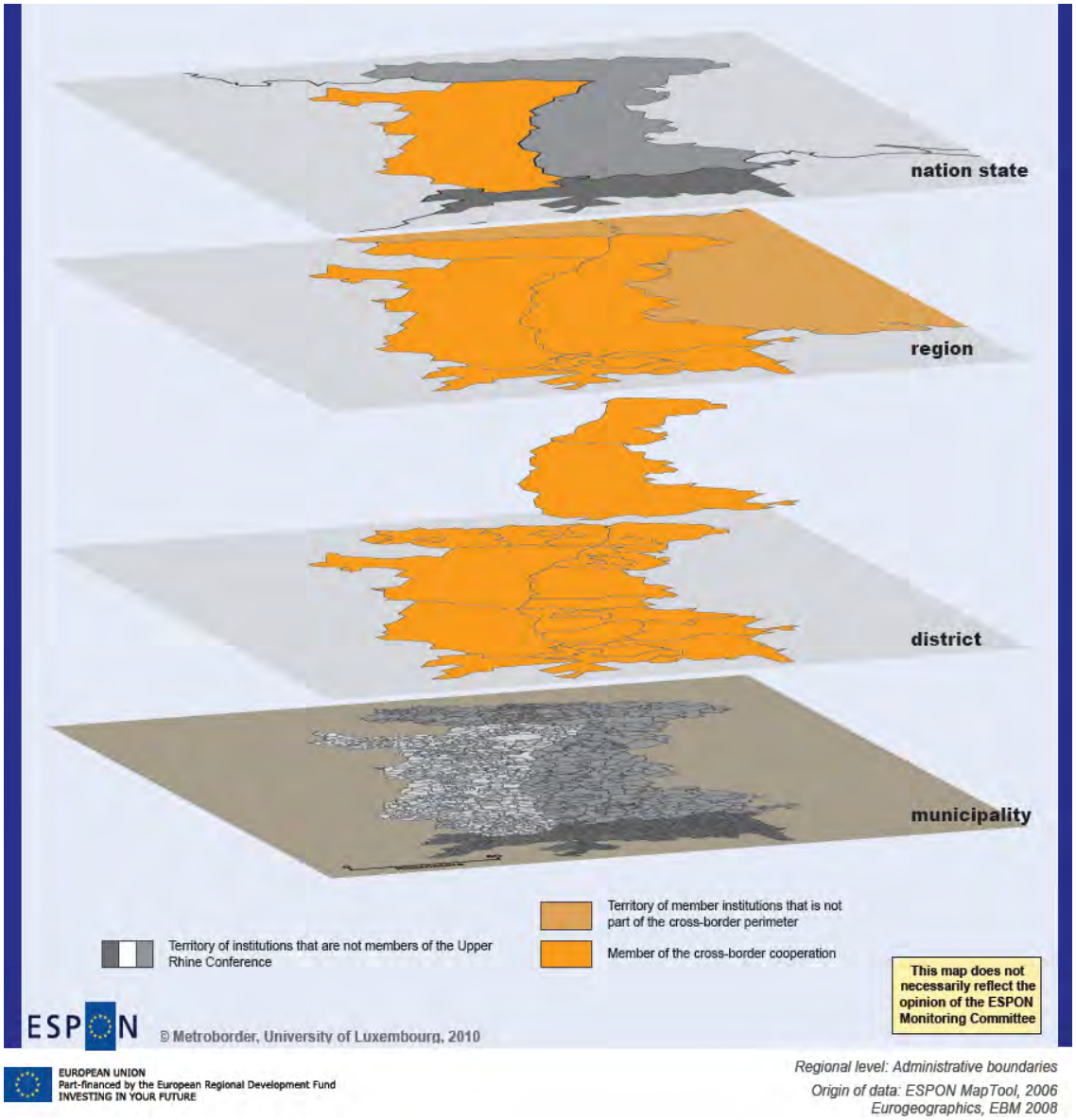
In simple words, the objective of institutional mapping is a "visual representation of the different groups and organisations within a community and their relationships and importance for decision-making" (Rietbergen-McCracken/Narayan-Parker 1998: 273).
This instrument is used in various disciplines (political sciences, sociology, marketing etc.). The essential aim of 'mapping' is to visualize and – in that – to reduce complexity and to simplify to a certain extent, in institutional and geographical terms (cp. Aligica 2006). Political scientists frequently *map* the institutional architecture of political contexts; and at the time, geographers – whilst *mapping* a territory - often include the visualisation of its institutional dimension. However, both disciplinary perspectives tend to underestimate the challenges of the institutional mapping since the political perspective seldom considers the spatial dimension while mapping institutions. At the same time, the territorial perspective on institutional settings risks to stick to formal boundaries, to codified issues and overlooks the governance context in a larger sense.

As preparatory work, the perimeters of the different cross-border institutions are mapped (13.2). After this, the following steps have been developed as overall methodological framework for cross-border institutional mapping that has also been applied on the Metroborder questions:

Step 1: Multilevel mapping of the cross-border institution(s)
Our approach starts with a systematic inventory of scale levels concerned and the formal territorial mandate of partaking local, regional, national and supranational authorities or other relevant institutions. This step reveals the formal institutional framework and provides a first understanding of the institutional and territorial complexity of cross-border cooperation. The territorial dimension is reflected only in the visualisation of the physical territories formally involved – the so called 'pooled' territory in three-dimensional cartography.



Map 25 Multi-level mapping of the Summit of the Greater Region



Map 26 Multi-level mapping of the Upper Rhine conference

These maps played an important role when preparing the Delphi study. In particular, the difference of *Vertragsraum* and *Mandatsraum*, i.e. between pooled institutional territory and particular cross-border perimeter becomes obvious: the Upper Rhine has defined its conference perimeter by excluding parts of the perimeter of the partaking German Bundesländer; the Greater Region comprises the whole pooled territory of all institutions involved and is, thus, much larger. This finding is a key to understand the relevance of the *core space* that was mapped in the framework of the Delphi study.

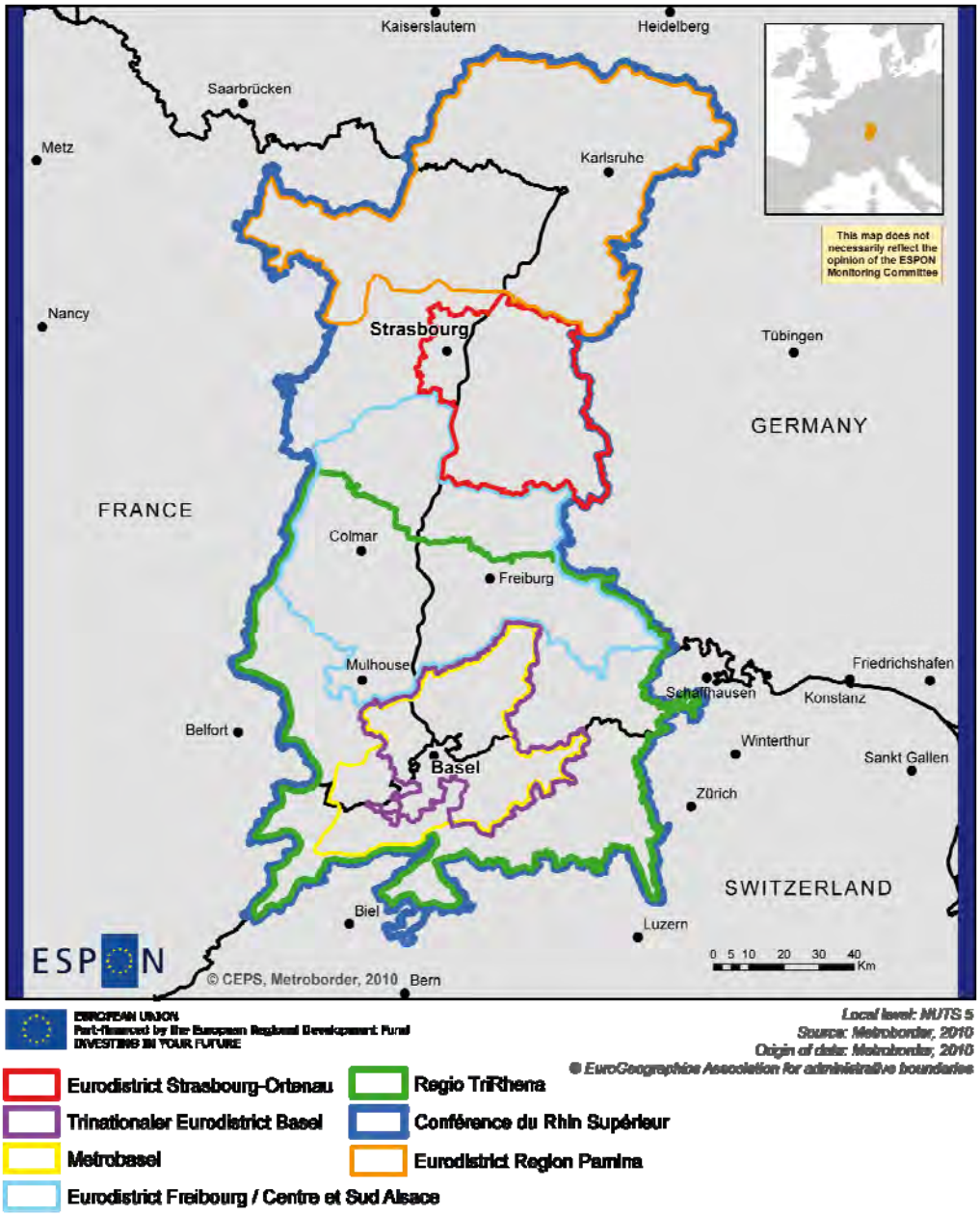
Step 2: Multi-level policy mapping

The second step goes further by mapping the relevant domestic actors no matter if they are formally involved or not in the cross-border cooperation. This step has to apply to concrete policies, action arenas, political projects etc. The resulting map might require adding scale levels hitherto absent. It provides with a more concrete picture of the potential governance patterns. With regard to the territory, the territorial dimension is addressed as in step 1, as pooled territory.
Part B of the Metroborder report shows the example of the spatial planning in the Greater Region (cp. Fig. 11).

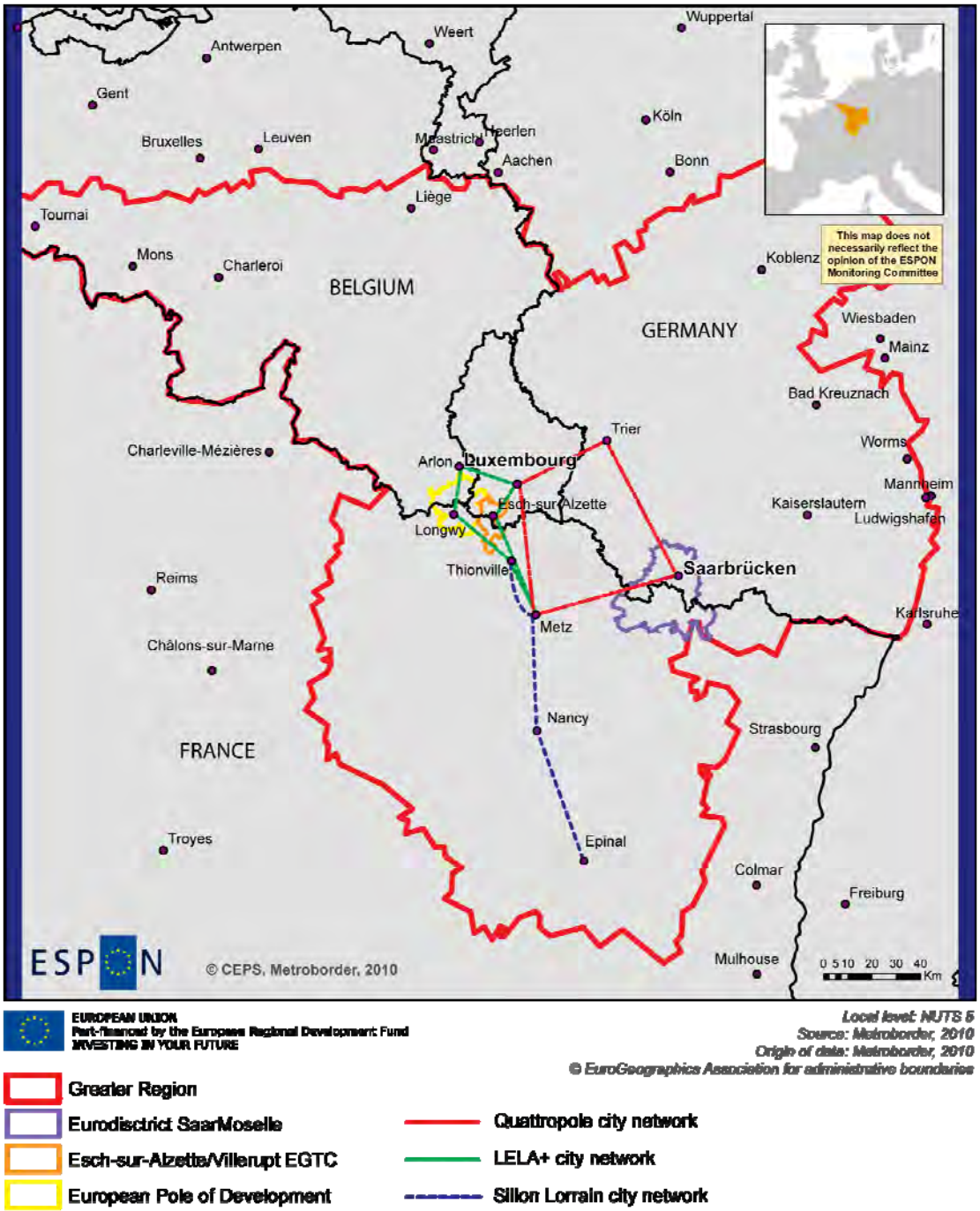
Step 3: Political topography mapping
The third step goes beyond the formally institutionalised setting and is the most ambitious step. It aims – still via the perspective of institutional mapping – at conducting a more thorough analysis of the actual governance mechanisms in a concrete context and its territorial implications. It thus adds to the territorial and merely formal institutional dimension a third governance dimension. Depending on the exact research question, a large variety of objectives can be addressed, amongst them to evaluate the actual power relations of the enrolled actors ('power-topographies'), to uncover hidden (territorial) agendas etc. In our case, we have explored the focus of the Upper Rhine and the Greater Region's experts in order to conceptualise implicitly and informally their territorial mandate (see below, Chapter 14).

13.2 Map overview: perimeters of cross-border cooperation

The following maps show the perimeters of the cross-border cooperation has they have been reflected in chapter 5. In that, they also represent a preparatory step for the cross-border institutional mapping introduced in the previous chapter.



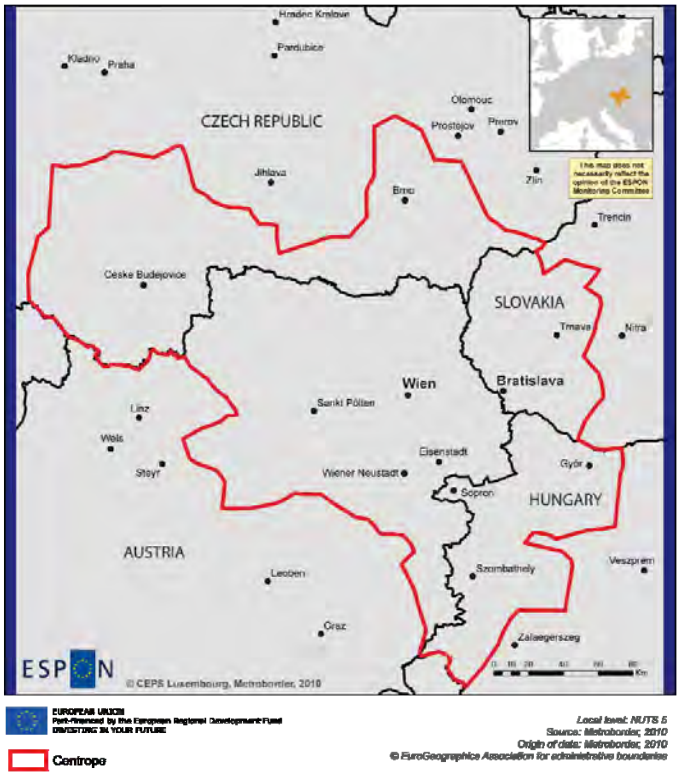
Map 27 Upper Rhine: Institutional perimeters of cooperation



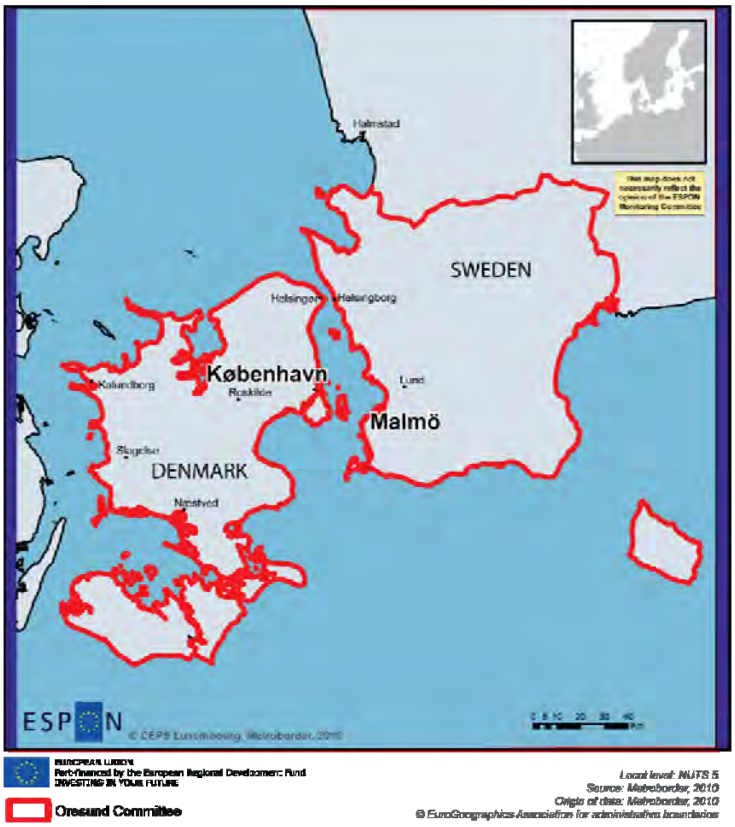
Map 28 Greater Region: Institutional perimeters of cooperation

Map 29 Lille: Institutional perimeters of cooperation

Map 30 Genève: Institutional perimeters of cooperation



Map 31 Wien-Bratislava: Institutional perimeters of cooperation



Map 32 København-Malmö: Institutional perimeters of cooperation

14 CBPMR Governance

14.1 Comparing the different institutionalisations: Legal status

A comparison of cross-border cooperation shows a variety of configurations related to the nature of institutional structures put in place, the thematic of the cross-border cooperation, the scalar arrangements of these governance initiatives, their geographic structure and the type of actors and organisations involved (see Table 11).

	Name of the cross-border cooperation structure	**Status of the CBC structure**	**Organisation of Technical Staff**	**Area of cooperation (km²)**	**Date of establishment of the actual cooperation structure**	**Date of the first institutional cooperation on cross-border area**
Aachen-Liège-Maastricht	Euregio Meuse-Rhin	Charter	Coordination between regional teams	12882	1976	1976 (Euregio Meuse-Rhin)
	MAHHL	Association	Working Groups	-	1991	
Basel	Trinationaler Eurodistrict Basel	Association	Integrated Team	1989	1994 (ATB), 2007 (ETB)	1963 (Regio Basiliensis)
	metrobasel	Association	Working Groups	2606	2008	
	Regio TriRhena	Association	-	8700	1995	
	Commission Intergouvernementale franco-germano-suisse	-	Working Groups	21518	1975	
	Conseil Rhénan	-	Working Groups	21518	1997	
	Oberrheinkonferenz	Intergovernmental	Working Groups	21518	1991	

		Commission				
	Regio Basiliensis	Association & Swiss intercantonal coordination office	Integrated Team	-	1963 (Association), 1970 (Inter-cantonal coordination office)	
Genève	Projet d'Agglomération franco-valdo-genevois	Charter	Integrated Team	1900	1997 (Charter), 2004 (Projet d'agglomération)	1974 (Comité régional franco-genevois)
	Conseil du Léman	Consultative Institution	Commissions	18868	1987	
	Comité Régional Franco-Genevois	Consultative Institution	Working Groups	47192	1974	
Katowice-Ostrava	No Structure	-	-	-	-	-
København-Malmö	Oresund Committee	Association	Integrated Team	20869	1993	1964 (Öresunds-kommiten)
Lille	Eurométropole Lille-Kortrijk-Tournai	EGTC	Integrated Team	3533	1991 (Copit), 2008 (EGCT)	1960 (Regional Economic Liaison Committee), 1970 (Franco-Belgian Commission for the development of border regions)
Luxembourg	QuattroPole	Consultative Institution	Working Groups	-	2000	1971 (Regional Commission Saar-Lor-
	LELA +	Charter	Working Groups	-	2007	

	Euregio SarLorLux +	Association	Working Groups	36700	1988	Lux-Trier)
	Greater Region	Charter (Creation EGCT in discussion)	Working Groups	65401	1995 (1st Summit of the Greater Region)	
Nice-Monaco-Sanremo	No Structure	-	-	-	-	-
Saarbrücken	Eurodistrict Saarmoselle	Association (Creation EGCT in discussion)	Integrated Team	1460	1991 (Association Zukunft SaarMoselle Avenir)	1971 (Regional Commission Saar-Lor-Lux-Trier/West Palatinat)
	QuattroPole	Consultative Institution	Working Groups	-	2000	
	Greater Region	Charter (Creation EGCT in discussion)	Working Groups	65401	1995 (1st Summit of the Greater Region)	
Strasbourg	Eurodistrict Strasbourg-Ortenau	Association (Creation EGTC in 02/2010)	Integrated Team (forthcoming)	2176	2005	2003 (Joint Declaration Franco-German), but institutionalised relationships at the municipal level since 1975
	Conférence du Rhin supérieur	Intergovernmental Commission	Working Groups	21518	1991	
Wien-Bratislava	Centrope	Charter	Subcontracting	48000	2004	2000 (Jordes)

Table 11 General characteristics of institutional cross-border cooperations
Sources: Bundesamt für Bauwesen und Raumordnung (2009) and METROBORDER.

Note: city networks are not represented

The cooperation structures show a wide variety of legal status, reflecting strong differences in the type of organisation and the level of institutionalisation. Cross-border cooperation groupings can simply rely on an informal structure like a charter or a convention between partners. This is notably the case for the Projet d'Agglomération franco-valdo-genevois or Centrope. The cooperation can also be based on a non-profit association of national (or regional) right like the Eurodistricts in Basel, Saarbrücken and Strasbourg or the Öresund Committee. In recent years, the convention of Karlsruhe (1996) was of particular importance for the contracting countries France, Switzerland, Germany, and Luxembourg, as it allowed the creation of local groupings of territorial authorities. Finally, cross-border institutions can become European Groupings of Territorial Cooperation (EGTC), which is an entity with legal personality. In different cross-border metropolitan regions like Luxembourg and Saarbrücken, the creation of an EGTC is in preparation. Amongst others, Lille and Strasbourg have implemented this legal tool (for more details on the ECTC tool, see chapter 15).

The legal status of the organisations determines, to some extent, the form and role of cross-border governance structures. It can sometimes be advantageous for local and regional actors to cooperate on a low level of institutionalisation. Territorial observation, strategic territorial vision, project coordination or communication and lobbying can be undertaken within an informal structure; large projects, however, often need a more formalised organisation (MOT 2006).

14.2 Thematic of cooperation

On a broad perspective, town and regional planning, economic development, tourism, culture, training and employment constitute the most common domains covered. Although some CBPMRs suffer from shortage of affordable housing or residential land, these issues are seldom integrated in the cross-border cooperation (only the Eurodistrict Trinational of Basel and the Projet d'Agglomération franco-valdo-genevois are considering this thematic). Last but not least, the organisation of big events that are able to foster the international attractiveness of the metropolitan region has been undertaken or supported by a few cross-border groupings. The most relevant examples are Luxembourg and the Greater Region, European Capital of Culture in 2007, and IBA Basel 2020, an international architecture exhibition supported by ETB. Of course, within each domain, the level of involvement by the cooperation structure may differ considerably. As far as town and regional planning is concerned, the most advanced territorial diagnosis and strategic planning have been conducted at the level of cross-border agglomerations, some of them like Basel, Genève, and Strasbourg being in the process of implementing urban development or public transportation projects. The

existence of an integrated technical team constitutes an advantage for such activities. For other territorial groupings, forward thinking in urban and regional development is conducted but implementation of concrete projects on the ground has not yet occurred.

14.3 Geographic scope

Within the structures of cooperation, three spatial scales can be distinguished:
(1) Firstly, there are cooperation groupings that are calibrated on cross-border conurbations and their nearby economic space. This is notably the case for Eurodistricts (Basel, Lille, Saarbrücken, and Strasbourg) and agglomeration projects (Genève). The size of these cooperation groupings varies between 1,500 and 3,500 km^2. In most cases, these initiatives were launched during the 1990s.
(2) The second category of structures of cooperation typically comprises "Euroregions" defined in a broad sense (Perkmann 2003). Their geographical size ranges between 10,000 and 20,000 km^2. This scale of cooperation is notably at play in the region of Aachen-Liège-Maastricht, in the Oresund region, the Leman region and in the Upper Rhine region. Either these structures represent regional cross-border cooperation groupings that come in to support other initiatives implemented at a more limited spatial scale or they form the main structure of cooperation (like the Öresund Committee or the Euregio Maas-Rhine). Generally, these structures of cooperation are older than the first ones, most of them having been formed in the years 1960-1970.
(3) The last category of cooperation groupings is much wider as it includes institutional structures that put together several regions, thus forming large areas that extend over 40,000 km^2. Among our case studies, only Centrope, the Comité regional franco-genevois (CRFG) and the Greater Region fit this category. It is worthwhile to note that this difference in scale does not involve different institutional settings or other cooperation thematic.

14.4 Type of actors

Finally, cross-border cooperation initiatives vary also depending on the type of actors involved (public, private, from civil society...) and, for public organisations, their institutional level. Among the cooperation groupings driven by public actors, one can distinguish two kinds of institutions. Firstly, some structures bring together local actors (municipalities and districts) and/or regional actors (regions, provinces, cantons, and *Länder*). In principle, these cooperation groupings benefit from a certain degree of autonomy vis-à-vis central states. Secondly, some structures involve representatives of central or federal governments. In some cases as in

Genève, Lille and København-Malmö, the main structure of cooperation includes actors from the three institutional levels (although for the Öresund Committee the states are only involved as observers). The presence of national players in the cross-border cooperation groupings is linked to the institutional settings at place in the different countries, especially the structure of the state (central or federal) and the level of decentralisation. In any case, the participation of central states seems twofold: It can mean be advantageous for the implementation of cross-border cooperation, particularly with regard to the legal competence of central governments or the political leadership of a national actor (e.g. Lille with Pierre Mauroy) and, on the other hand, it may inhibit cooperation between local and regional authorities who sometimes distrust the central government.
As far as non public actors are concerned, their role varies from being the initiators of alternative private organisations (like metrobasel in Basel or the network Twin City Wien-Bratislava) to being associated with some instances of institutional cross-border cooperation (e.g. the Economic and Social Council of the Greater Region).
As the ESPON Project on Governance (2006/2.3.2) has already shown, there is quite a bias on public actors; the participation of civil society and stakeholders is less developed.

15 The "European Grouping of Territorial Cooperation" – state of the art

15.1 Background

In several of the CBPMRs, the EGTC governance tool is currently being implemented and established; in most of the other regions, it is at least object to reflections. This section aims to give an overview on what the EGTC is about and what are its potentials (cp. Clement 2008 ; European Parliament and Council 2006; Levrat 2005, Metis 2010, MOT 2007, Spinaci/Vara-Arribas 2009).

Before the establishment of the EGTC in 2006, no legal instrument had been established in the framework of the EU in order to facilitate the cooperation between European regions. Instead, European regional policy predominantly supported (cross-border) regions by means of funding opportunities (ERDF, ESF etc.).
However, beyond the EU, the Council of Europe, comprising 47 Member states, had to offer legal support. The most relevant one in this respect is the "European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities" (1980) and especially its "additional protocol" (1995). The latter one

gives a specific right to cooperate on their own initiative to local authorities (in the limit of their domestic competences). However, this kind of cooperation can only involve local or regional authorities (but not states like, e.g., the Grand Duchy of Luxembourg).
That is why the European nation states concluded specific treaties dedicated to their "own" borders. One of the most important and relevant for our case studies is the Convention of Karlsruhe (1996) between Germany, Luxembourg, Switzerland and France. It allows local authorities to delegate their own domestic competences to a cross-border cooperation body – Groupement local de cooperation transfrontalière (GLCT) - with legal personality under the public law of one of the contracting authority.

The EGTC was established following a general discussion on the territorial agenda and the meaning of "territorial cohesion", which is now one of the aims of the European Union as it is included in the Lisbon Treaty.

15.2 Main features of an EGTC

The EGTCs:

- are applicable in the same way in all European member states
- are open to public bodies (local and regional authorities as well as member states)
- can have strong competences if the EGTC members delegate parts of their competence to the EGTC (in respect to their national law).
- have a legal personality (i.e. can employ its own staff, can lead a European programme, launch public procurement procedure or conclude conventions with private actors). The details are ruled according to one of its members domestic regulative background
- is composed by at least a director who represents the EGTC and an assembly (made up by representatives of its members). On this basis, an equal representation of all members can be ensured.

At the moment of writing, it is quite challenging to summarise how this new tool has been used EU wide. First, the underlying European regulation 1082/2006 has to be enacted by the nation states (art. 16/17). This process delayed the practical possibility to set-up an EGTC. Second, public authorities willing to set-up an EGTC have to agree upon and to sign a common convention. Most of them are currently at this point or already recruit staff. This step is a crucial one as the staff will "embody" the common structure and will be in charge of the daily work.

In practice, the EGTCs are very different with regard to the following aspects.

Territorial focus

The territorial focus can define its own 'original' perimeter or it can refer to a territory that has already be defined within another context. An example for the latter case is the EGTC Greater Region, which is becoming is responsible for implementing the Interreg IV Grande Région under the supervision of the Préfecture de Lorraine. It will be in charge of selecting, assessing and following-up the implementation of Interreg projects. The perimeter had been defined in collaboration with the European Commission.

Involved levels of governance

The EGTC is free in putting together different levels of governance:

- one level of governance (e.g: Duero Douro EGTC involving local stakeholders)
- multiple levels demand a complex internal EGTC governance (e.g: the EGTC Cerdanya at the French and Spanish borders gathers actors from municipal to the nation state level). It has to find efficient ways to involve all levels without slowing down or diminishing the implementation of projects.

According to different EGTC status, one can state that the different levels are interlinked via different organs:

- Assembly of members (meets once or twice a year to decide the annual work programme, approve the budget, elects the responsible persons for the executive organ). All levels of governance are involved.
- Executive board: meets more regularly, appoints the director, and validates the projects (often equal representation between nationalities). It can gather representatives from different levels of governance.
- Director and staff employed by the EGTC execute the work programme.

Scope of activities (single vs. multiple issue focus)

Some EGTCs have a wide scope of activities (Lille Kortrijk Tournai EGTC is responsible for promoting and supporting cross-border cooperation in general). Others carry out a specific one (Cerdanya EGTC which will be in charge of managing a cross-border hospital).

Degree of independence

Currently, we can state for most conventions at hand, that EGTCs act as a platform of exchange between their members. They help to implement and follow-up cross-

border projects (often supported by EU funds), or they are responsible for territorial marketing and lobbying towards national or European institutions.
Despite giving the legal opportunity to delegate considerable political competence for cross-border projects in the name of all members, this is hardly to be found at the current stage.

16 Delphi study

16.1 Methodology

The aim of the Delphi study is to develop strategic options in each case study region with regard to foster the potentials of being a CBPMR. A Delphi study consists of at least two survey rounds, while the later questionnaire uses the results of the first one (cp. Pütz 2004, Helmer 1967, 1983, Stratmann 2000: 129, Evalsed 2008; ESPON 2006/1.3.1). The addressees of the survey are experts for the political cross-border cooperation for each case study region. This so called 'policy' or 'strategic' Delphi allows detecting, developing, aggregating and assessing future development paths of the CBPMR.
The survey has been prepared by a series of expert interviews. The basic methodology can be summarised as follows.

Status and selection of experts

In preparation of the Delphi study, several expert interviews were conducted in order to broaden and deepen the information already retrieved from literature, documents etc. The selection of the experts followed the same principles as the selection of the Delphi addressees without aiming to reach the same quantity: For the Metroborder policy Delphi, an expert is defined by the personal expertise, not primarily by his/her institutional background. The expert is considered to have a profound idea about the future of the political development and, thus, the expertise is not restricted to pure technical matters (cp. Häder 2000).

The geographical focus is on the largest cooperation space in both case study regions (Summit of the Greater Region, Upper Rhine Conference). Experts on purely bilateral cooperations have not been considered. As well, experts on the highest political level have not been addressed either (prime minister from national level etc.). In the Upper Rhine, the smaller cooperation space of the *Trinational Eurodistrict Basel* is however also taken into consideration in order to allow a zoom in on the local cooperation level.

The aim is to address a high quantity of experts within both case study regions.

Also, the idea was to keep a certain balance: This applies in particular to the different levels of governance (communes, districts, regions, nation state level and to some extend the European level) and to the regional balance (for the Greater Region 4 countries/5 regions involved - see cp. Fig. 22). In this context, a statistical representativeness is not the relevant criteria: A homogenous quantitative 'density of experts' cannot be assumed on all regions or on all levels. However, the aim is to have all potential types of perspectives included.

In each case study regions, ca. 300 addressees have been identified and contacted individually in the first Delphi round (280 in the Greater Region, 315 in the Upper Rhine). Fig. 22 also indicates the response rate.

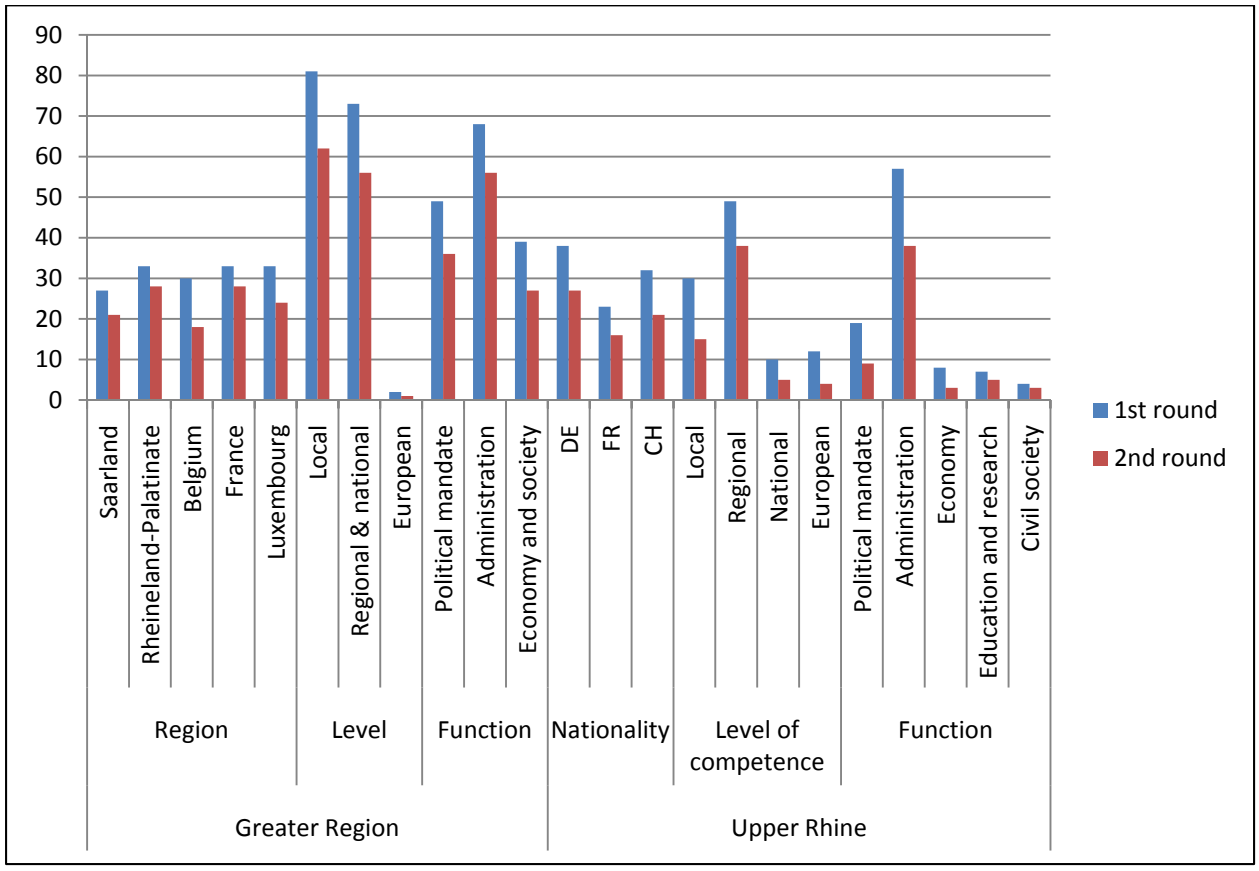


Fig. 22 Territorial and institutional background of responding experts to the Delphi study

Preparation and design of Delphi questionnaire

In both case study regions about 30 interviews have been conducted. The results of the interviews have been the basis for the design of the Delphi study. The interviews followed a guideline that addressed the three 'classical' domains of the

political arena:

- Questions of *polity* concern the institutional questions – who is involved in which processes (or should be), what are the relations to exterior actors, what is the territory of a political cross-border mandate etc. Which trends can be identified for the future of these cooperation institutions?
- Questions of *policies* mainly concern the content side – on which subjects should cooperation be intensified etc.
- Questions of *politics* address the procedural side, especially differences in administrative, cultural and language contexts. What are the main barriers for the cooperation, how to overcome them?

The Delphi questionnaire has been developed in German and French in both case study regions in order to allow the experts to reflect on the complex issues in their mother tongue. Sending the questionnaire as pdf-annex to emails proofed to be the appropriate way: Online-Surveys had turned out to be not flexible enough with regard to the map element and coming along with several technical problems.

The questionnaire form comprises four parts: Thematic questions (policy), geographical aspects, institutional setting (polity and politics) and the personal background. The Delphi design had to respect restrictions with regard to quantity and complexity in order to have a good response rate.

The second Delphi survey served different purposes as it a) deepened and detailed the results from round one, b) filtered and combined the results at hand and c) controlled several findings.

16.2 Main results – comparing the two case study regions

The material of the two Delphi rounds in both case study regions is rich, and its potential is still exploited in the framework of the strategy building processes. The following charts give an overview of the main findings, combining both regions.

Barriers for cooperation

Firstly, cross-border cooperation meets important barriers that play a crucial role also in processes of the CBPMR establishment. For both case study regions, the multi-level mismatch plays a very important role, coming along with serious differences in administrative and legal systems (cp. the chapter on institutional mapping, chapter 13). The case study regions – bringing together three respectively four countries – mention this aspect as (second) most important problem. For the Greater Region, one should mention the lacking strategy that is regarded as barrier. Considering the high rate of support towards the CBPMR concept, the window of opportunity to overcome this aspect, becomes very clear. For the Upper Rhine region, the problems to set the cross-border concerns on the – in particular national – agenda are very prominent.

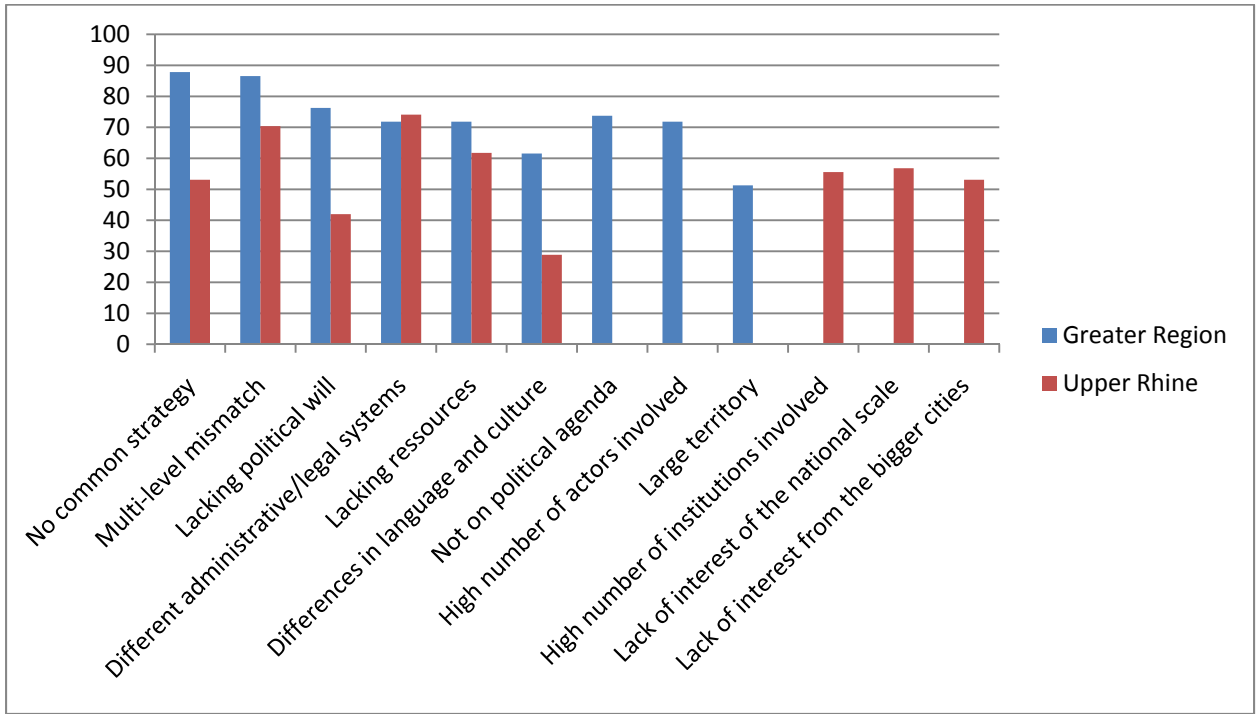


Fig. 23 Most important barriers for the cross-border cooperation (Delphi Study, n=156 in the GR; n=81 in the UR)

Concretising the metropolitan ambitions

As the will to establish a CBPMR is currently seen as very strong, the challenge of concretising these ambitions has to be taken. For both regions one can state that the experts do not have very concrete visions of how to implement a CBPMR (cp. Fig. 24). The metropolitan projects are primarily seen as a tool in order to improve cross-border cooperation in general, beyond CBPMR specific concerns. Further concretisation meets fewer consensuses amongst the experts, and few results help to concretise visions on either metropolitisation or polycentricity. Comparing the two case study regions shows a very obvious difference: The Upper Rhine region is more concerned about the *outward* positioning in terms of visibility and European or national lobbying. The Greater Region's experts care more about the strengthening of its *internal* governance.

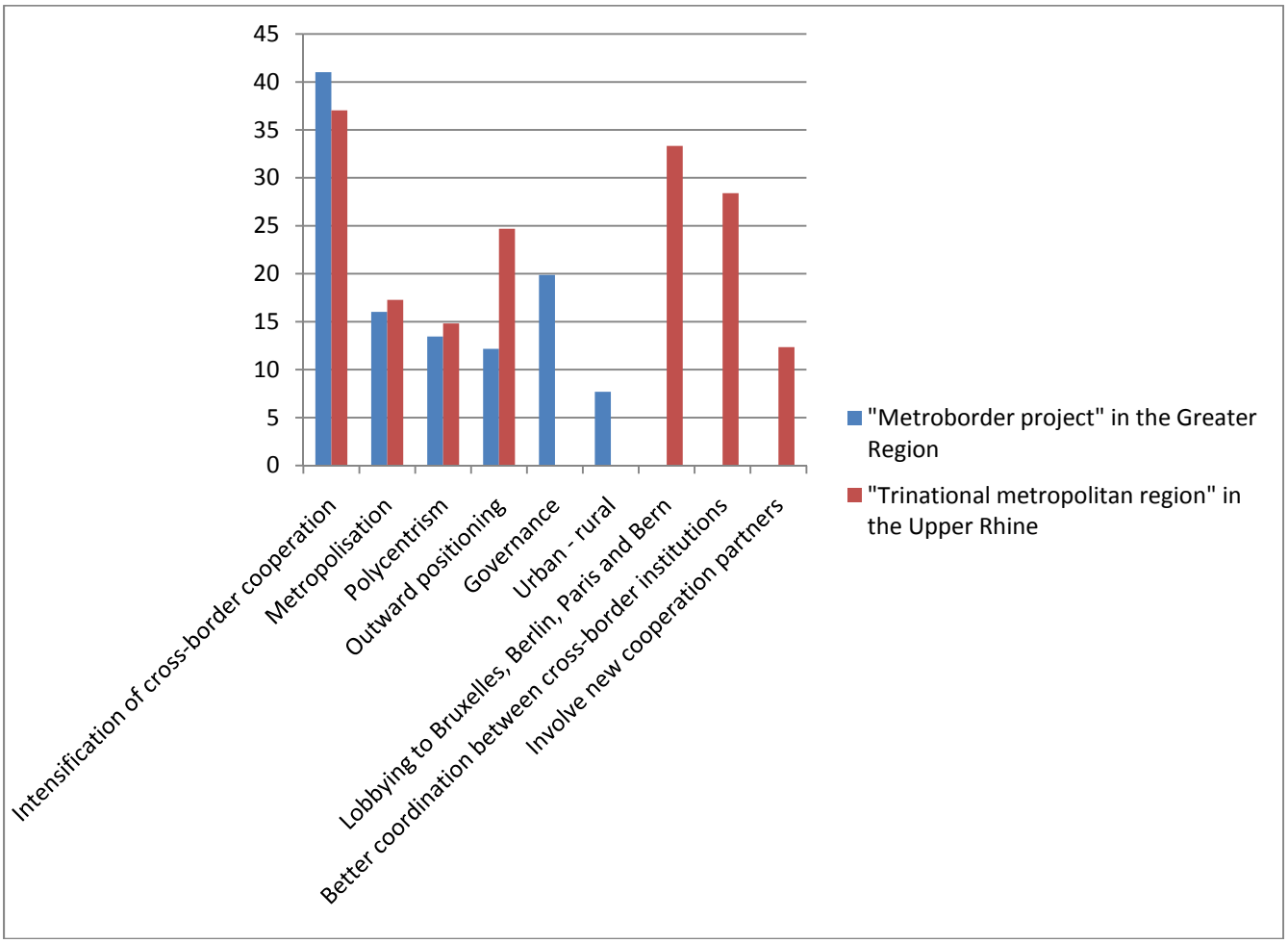


Fig. 24 Most important aspects for the implementation of the metropolitan ambitions in both case study regions (Delphi Study, n=156 in the GR; n=81 in the UR)

Policy priorities

Overview

When it comes to concrete policy concerns, the overall picture shows interesting similarities between both case study regions (Fig. 25).

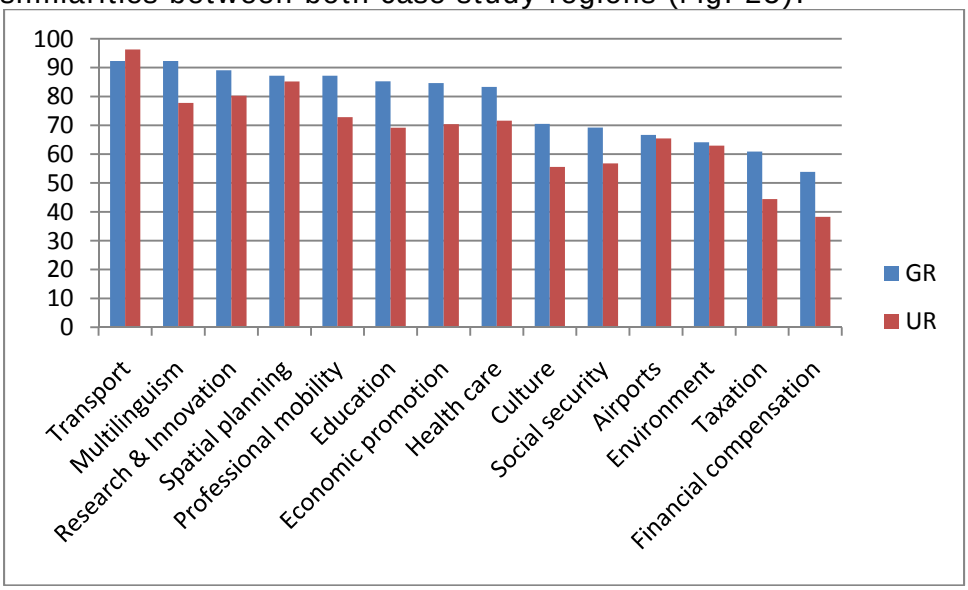


Fig. 25 Most important policies for increased cross-border cooperation (Delphi Study, n=156 in the GR; n=81 in the UR)

Policy priority 1: the transport sector

Within the second Delphi tour, these policy priorities have been further detailed: The experts in both regions have been asked to detail, which mode of transport focus should be increased, and for which spatial (cp. Fig. 26): Though the transport situation differs between both regions largely, the picture is astonishingly similar – the main focus is on public transport within the perimeter of both case study regions, in particular with regard to the 'core spaces', i.e. the spaces near the borders. European rail connectivity for goods is an exception, as it is considered as more important in the Upper Rhine.

With regard to the general concretsation, the Upper Rhine was directed more towards the outward positioning and the Greater Region more on internal governance (see above, Fig. 24). Interestingly, this picture cannot be found for transport issues. The 'gateway functions' of the metropolitan status is at least not seen as most pressing bottleneck for the future development. This pattern can

partly be explained by the fact that transport on interregional and European scale is by definition organised in a cross-border manner whereas intraregional transport patterns are much younger and less established. The dynamic development of the cross-border commuting numbers increases this tension.

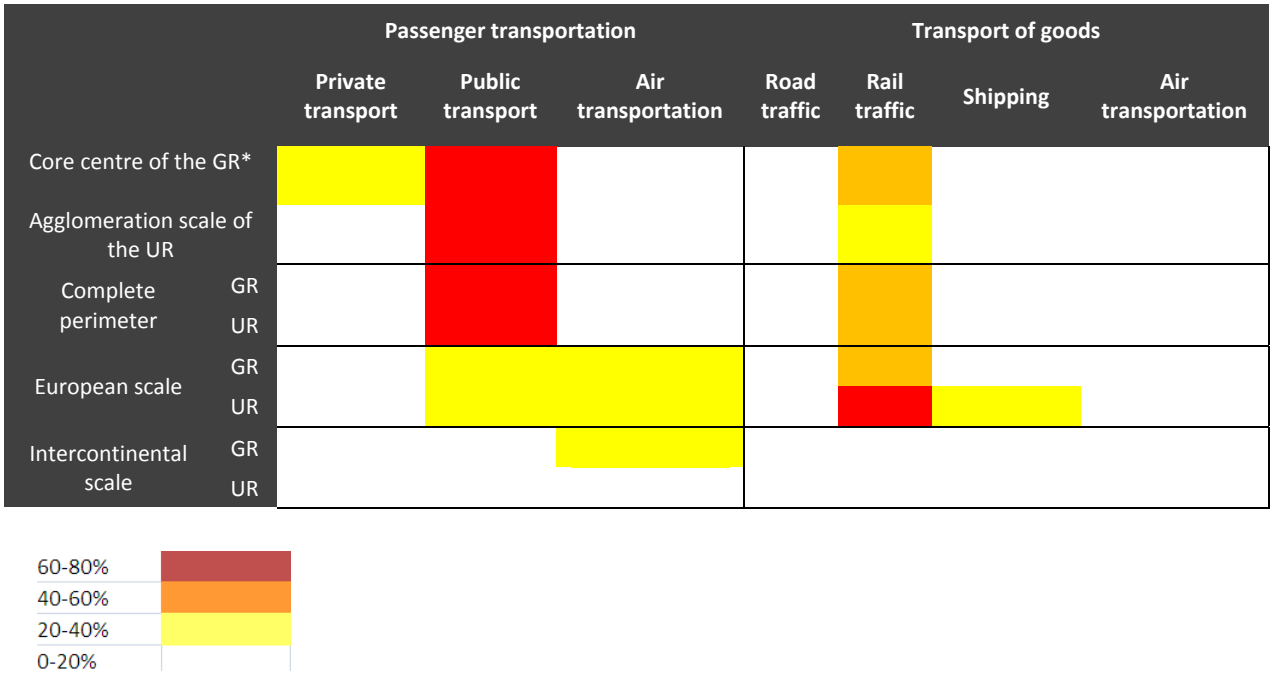


Fig. 26 At which scale in for which mode of transport should the cross-border cooperation be intensified? (Delphi Study, n=119 in the GR; n=53 in the UR)

* Refers to the space in need for a "particular attention with regard to cross-border cooperation" the experts identified (see Map 15)

Policy priority 2: R&D

Research and development is generally seen as a key field with regard to metropolitan development as the innovative capacity is seen as a major characteristic of metropolitan regions. Consequently, in both case study regions R&D is regarded as a key policy. Within the second Delphi round, this priority was detailed in two ways: Firstly, the institutional character was explored in more detail. In both regions, in particular the cross-border cooperation between the public and the private sector is seen as more important than the increased cooperation between purely public or purely private R&D facilities. Secondly, the sources in order to ensure the funding have been concretised (Fig. 27): In both case study regions, European funding is considered as being most important; the Greater region sees a new interregional research fund as another important opportunity, whereas the Upper Rhine stresses the potential of public-private-partnerships.

Consequently, the development of cross-border research clusters has to bring public and private research capacities. The Delphi method tests the experts' willingness to effectively concretise policy priorities into projects. However it does not address the added value by cross-border cooperation in supply chains as the specific data are hardly available and difficult to analyse. However, with regard to the automotive sector, we have explored one promising sector with regard to the added value of cross-border cooperation (see above, Map 24).

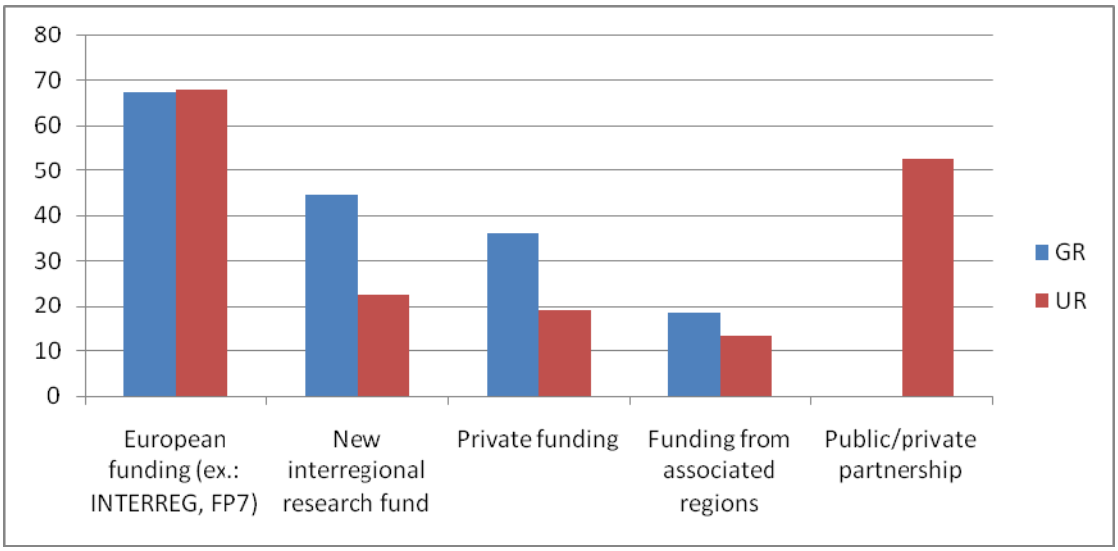


Fig. 27 Which funding do you consider to be most relevant for supporting cross-border Research and Innovation (Delphi Study, n=119 in the GR; n=53 in the UR)

Policy priority 3: professional mobility

Professional mobility is regarded as one of the main potentials of CBPMRs: Exploiting their potential as multilingual and multicultural conglomerates that uses its complementary potentials always means to facilitate and increase cross-border professional mobility. Still, the barriers to overcome are considered to be serious, as Fig. 28 shows. Again, the differences between both regions are not very large. Interestingly, insufficient language skills are seen as main barrier, clearly more important than legal problems. This appraisal gives reason to think of public action, as the education system as well as training offers are largely in public responsibility.

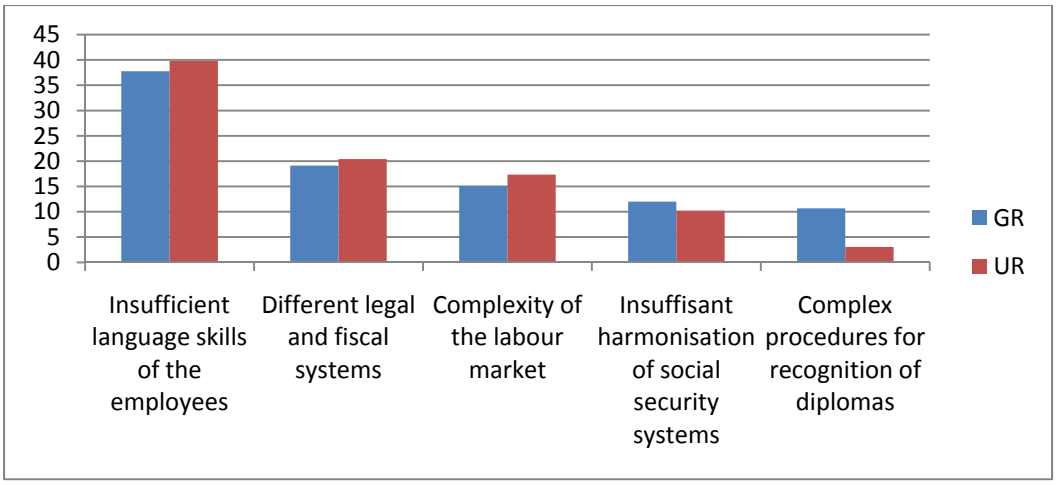


Fig. 28 The two most important barriers for professional mobility (Delphi Study, n=225 in the GR; n=98 in the UR)

Policy priority 4: spatial planning

The fact that spatial planning is considered as a major policy priority in CBPMR development has to be seen against the following backdrop: Firstly, the bottlenecks in cross-border transport will hardly be overcome by pure sector specific cooperation of the transport policy; a more embedded and cross-cutting strategy is necessary.

Secondly, the overall importance of spatial planning in cross-border development has to be stressed: In many cases of cross-border cooperation throughout Europe, spatial planning has been the driving force. Its character as cross-cutting discipline is highly useful when exploring the cross-border potentials. Spatial planning is used to live with complex settings and uncertainties – typical features, too, of cross-border cooperation.

Against this background, the 2nd Delphi questionnaire aimed to concretise the vision of the spatial planning sector (cp. Fig. 29). Cross-border cooperation is currently organised in form of a systematic exchange of information, consultation and concertation in the GR, while in the UR an exchange of information is organised. Therefore, one can consider that the ambitions in both regions are very high: almost 40% of the responses favour a common strategy for territorial development. In the Greater Region, this can be explained by the currently high political dynamic and importance of the respective working groups, but also by some current projects, in particular the Interreg project 'GIS for the Greater Region' that is currently launched.

Political competence with regard to spatial planning is – classically – a sensitive issue as it touches territoriality, a main characteristic of sovereignty of the different political levels. The more surprising it is that not only a common strategy is seen as

dominant priority. Even a common institution for spatial planning is considered as an option for future development. Apart from all political, democratic, and organisational challenges that come along with such a vision, one has to stress the enormous will to deepen the cooperation on this policy field. Considering the political window of opportunity in general terms, cross-border spatial planning must be seen as a potential way of using this energy in order to concretise the political options.

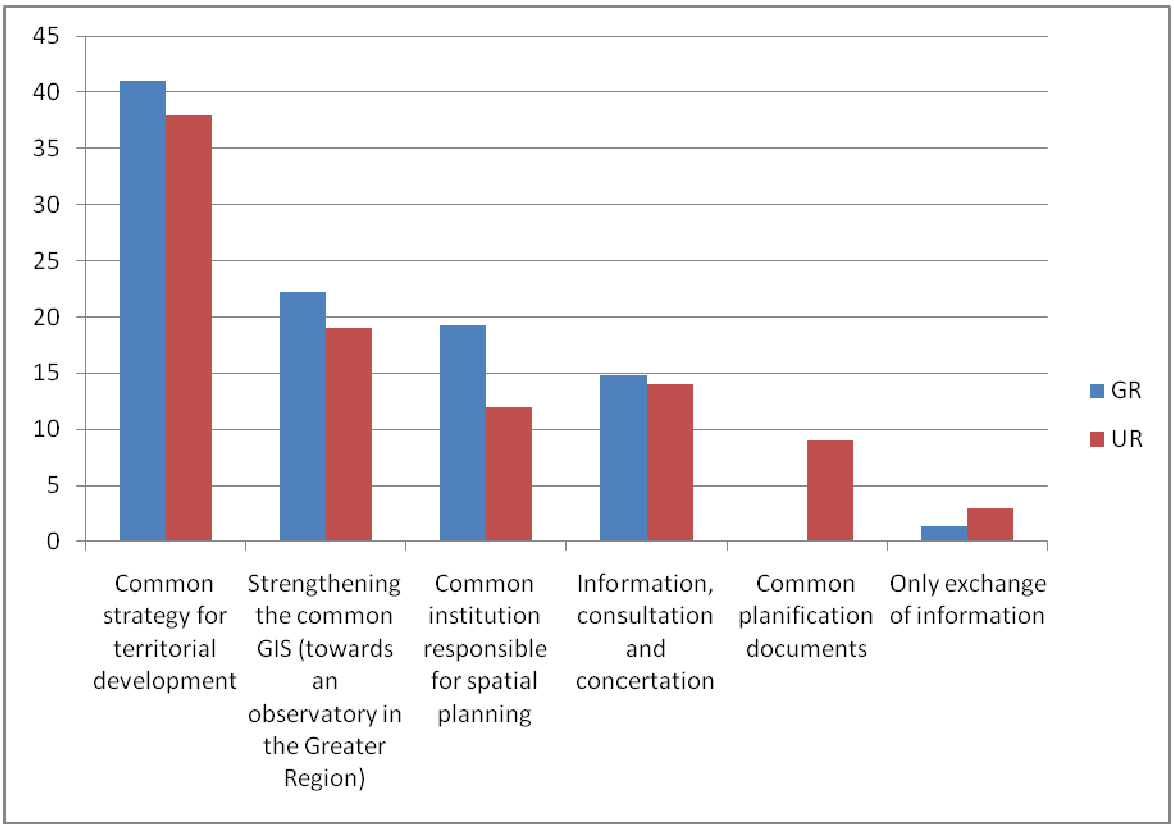


Fig. 29 Which type of cooperation should be established in the coming ten years in order to improve cross-border spatial planning (two priorities could be ticked; Delphi Study, n=229 in the GR; n=100 in the UR; number of responses

Policy option 5: multilingualism

With regard to the multilingualism, the focus – in both case study regions – is more on the civil society than on the cross-border professionals (Fig. 30). The slight difference between both case study regions is that the Upper Rhine is stressing more the language issues for the overall society than for the professionals. In the Greater Region larger potentials are seen with regard to in particular cross-border commuters and for administrative and political professionals.

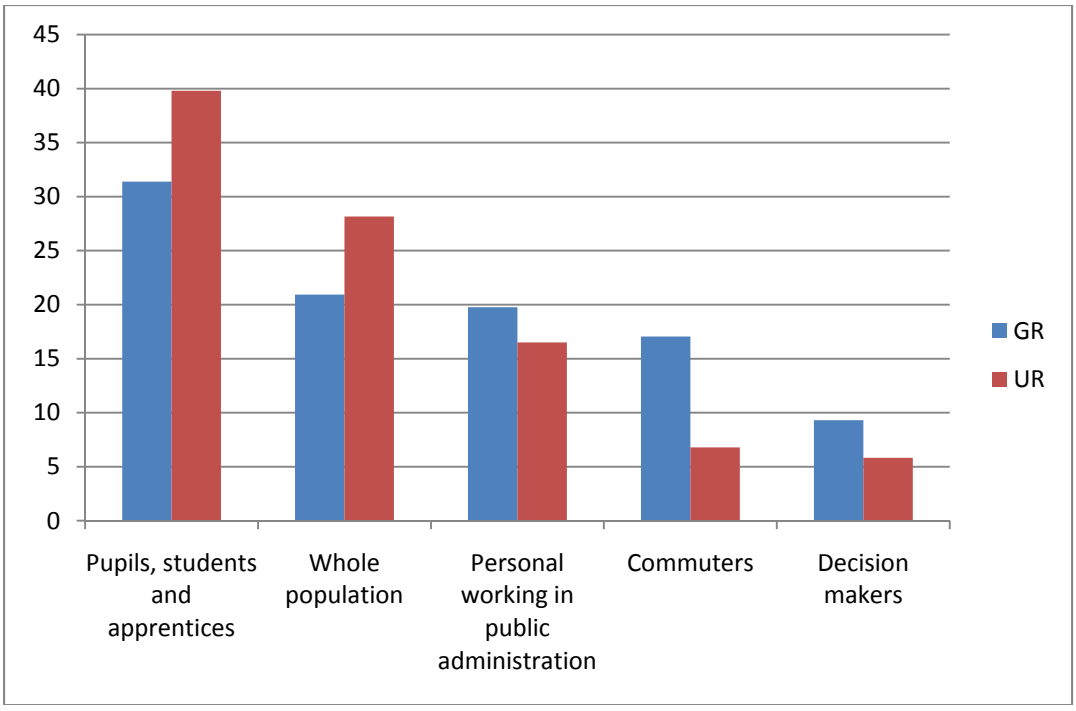


Fig. 30 The target groups of multilingualism (Delphi study, n=258 in the GR, n=103 in the UR)

Institutional consequences

Overview

The institutional consequences of the metropolitan ambitions are manifold and not always easy to concretise. However, some general trends can be stated:

- The basic feeling in both case study regions is that the longstanding and intense cooperation experience in the respective cross-border institutions is seen as the important basis, but that the 'output' is not yet sufficient, mainly due to institutional shortcomings.
- The Upper Rhine regions' experts see a clear need of a simplified structure, whereas the Greater Region goes towards an institutional strengthening.
- The better implication of the economic sector is seen as important in both case study regions. The Upper Rhine is a step ahead in this respect as a 'pillar economy' has been established within the so called Trinational Metropolitan Region of the Upper Rhine.
- The cross-border cooperation in both case study regions is a multi-level process. At the same time, the regional cooperation in form of the Upper Rhine Conference as the Greater Region Summit of the Executives is the driving force with regard to the metropolitan projects. They already do

include the municipal level in different forms. Still the experts consider the current situation is not optimal. In particular, the metropolises and the cross-border city networks have to be mentioned in this context.

- The European Union remains a major actor with regard to any cross-border ambitions, with regard mainly to governance support as to financial funds.
- The (better) involvement of the civil society is seen as an important aspect of the CBPMR option with regard to democratic legitimation and acceptance. However, this ambition is regarded as difficult as many abstract and even technical questions have to be addressed in long term processes. In particular, the cultural cross-border activities in both regions have proved as quite successful with that regard; however, the systematic involvement remains a challenge.

Involvement of economic actors

There is an overall consensus in both case study regions that the joint economic success is a key political goal. In order to better exploit the cross-border potentials, a stronger involvement of the economy is seen as a major priority. It is true that private economic actors have played a key role in different phases of the cross-border cooperation – e.g. the heavy industry was an initiator of the Greater Region; today, the local cross-border initiative Metrobasel is carried largely by the local chemical industry etc. However, on the regional level, the public sector remains the key player. Fig. 31 shows the major options of how to better involve the actors. The graphic also shows that there is no easy way to act, but that different strategies are considered to complement each other, from enforcing bilateral cooperation towards the creation of a multilateral platform.

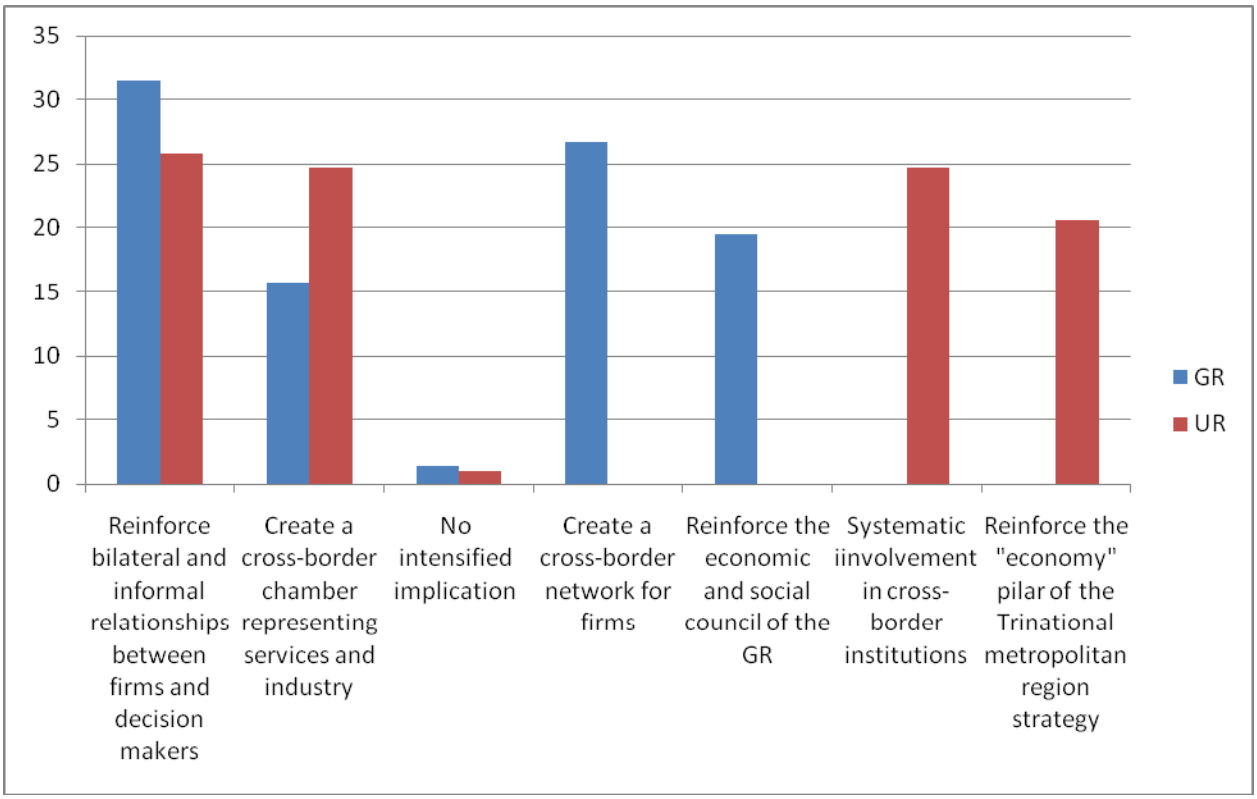


Fig. 31 How the economic actors should be better involved in the cross-border cooperation? Two options to be ticked (Delphi Study, n=210 in the GR; n=97 in the UR; number of responses)

Involvement of municipal actors

When debating a strategy for CBPMRs, the role of the municipalities – in particular the more metropolitan ones – is an important issue. As they are the places with the highest economic activity and important political decision makers, their involvement is indispensible. At the same time, the governance setting has already to cope with several multi-level challenges and with a large number of actors. Fig. 32 shows – at the example of the Greater Region – which cities already involved in cross-border networks, should, according to the experts, be even more involved in the cooperation.

With regard to policy fields, 20% of the experts quote mobility and culture as priorities for the municipal actors, 8% of the experts quote economy, tourism, education and research and citizenship.

Both in the Greater Region and in the Upper Rhine, a more intensified implication might be organised in form of an increased institutionalisation of the existing platforms of municipal cooperation; that is to say the city network Quattropole in the Greater region and the Eurodistricts in the Upper Rhine. Experts also consider

that the more intensified linkages to the inter-regional cooperation forms like the Summit of the Executives in the Greater Region or the Upper Rhine conference could be relevant.

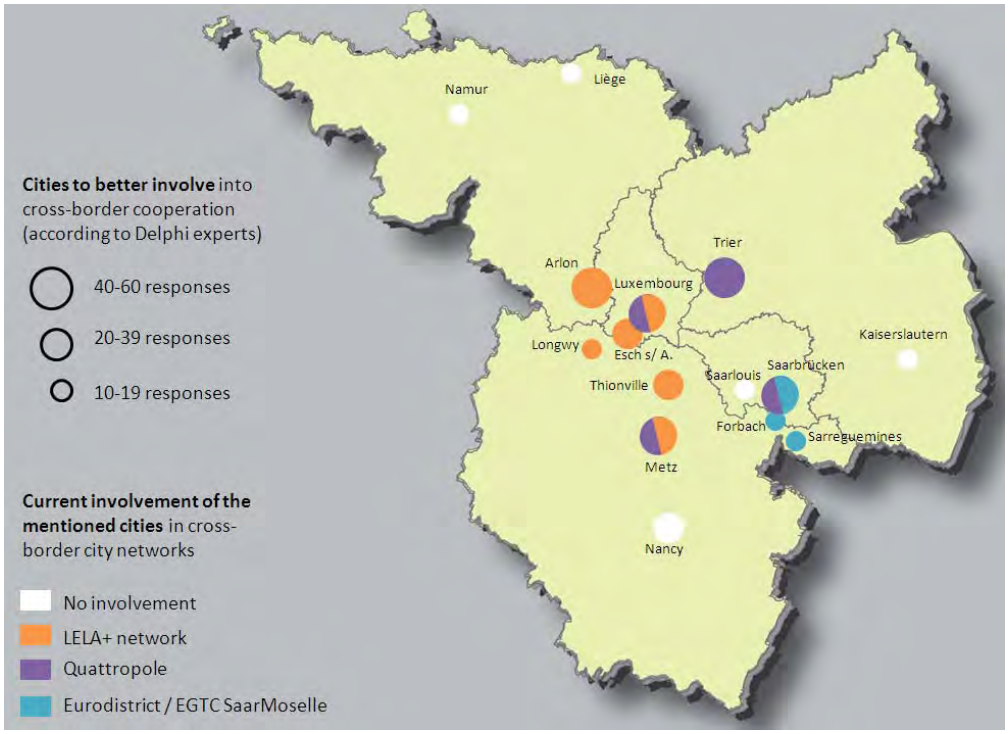


Fig. 32 Which cities should be more involved into the cross-border cooperation? – Results for the Greater Region.

Which role for the EU

Though cross-border cooperation is in any case a multi-level setting, the European Union is not directly involved in any of the cases. At the same time, the EU has always been one of the most important driving forces for cross-border development. The Delphi study shows that this role is to be continued (Fig. 33). The overall message from these results is that the governance dimension has become at least that important as the funding dimension. Moreover, the harmonisation objectives are at least *also* seen in the responsibility of the nation states. The increasing liberalisation of borders and the growing experience of cross-border cooperation have not replaced high expectations from the European level.

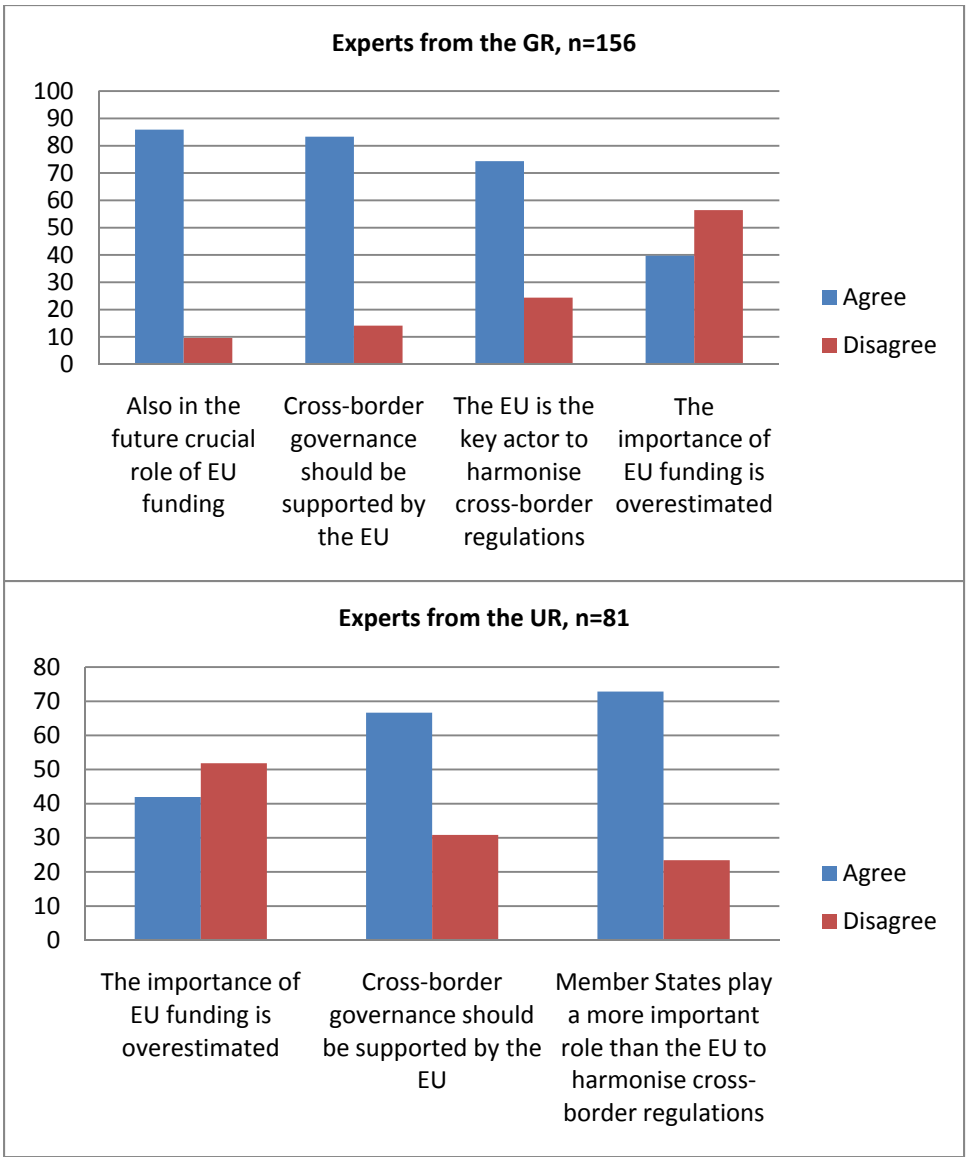


Fig. 33 Future role of EU – percentage of consent to different statements

17 Secondary centres: background and methodology of secondary centres

Addressing secondary centres aims to analyse the institutional integration in a cross-border polycentric metropolitan region. More precisely, we will try to answer to several questions. How do the public actors consider polycentricity in the cross-border region? Does the proximity help to build intense relations between the cities of the area? Does the devaluation of the border help to increase the institutional

relations at all levels or do some barriers remain? Do some actors play a leadership? How is the metropolisation process perceived by the actors? Do they build a strategy including this metropolitan dimension? Can the Upper Rhine valley (URV) be considered as a metropolis?
Therefore, we try to understand the strategies of partnerships and cooperation of the public powers at several levels from the regional level to the local level. The analysis focuses on the role of the public actors, even if the other actors are not ignored. In order to answer these questions, the examples of the Delphi study as well as a series of interviews were taken into account. The interviews were led with specialists in selected territorial authorities. In total, 26 interviews have been conducted.
The questions of the interview were divided in 6 thematics:

- Cross-border space : identification of the reference spaces and territories
- polycentricity: representation of the concept and identification of the main urban centres of the region
- Identification of the key-actors of the region
- Main issues perceived
- Partnerships developed at different levels
- Positioning relative to a metropolitan dimension and to metropolitan projects.

The interviews answers were then analysed by means of a thematic grid. For each theme, we selected the main facts exposed by the actors, the stakes and the main issues and some element of strategies. After this first analysis, we will cross the different themes with the same organisation: facts, issues, strategies.

The analysis of the interviews is still going on, in particular the linkages with the Delphi results are not fully explored, yet. Moreover, many of the aspects addressed in the interviews are also object to the strategy building, so we adjourn the reporting of the results to the final report.

	Polycentricity	**Transborder**	**Metropolis**
Facts			
Issues			
Strategies			
…	…	…	…

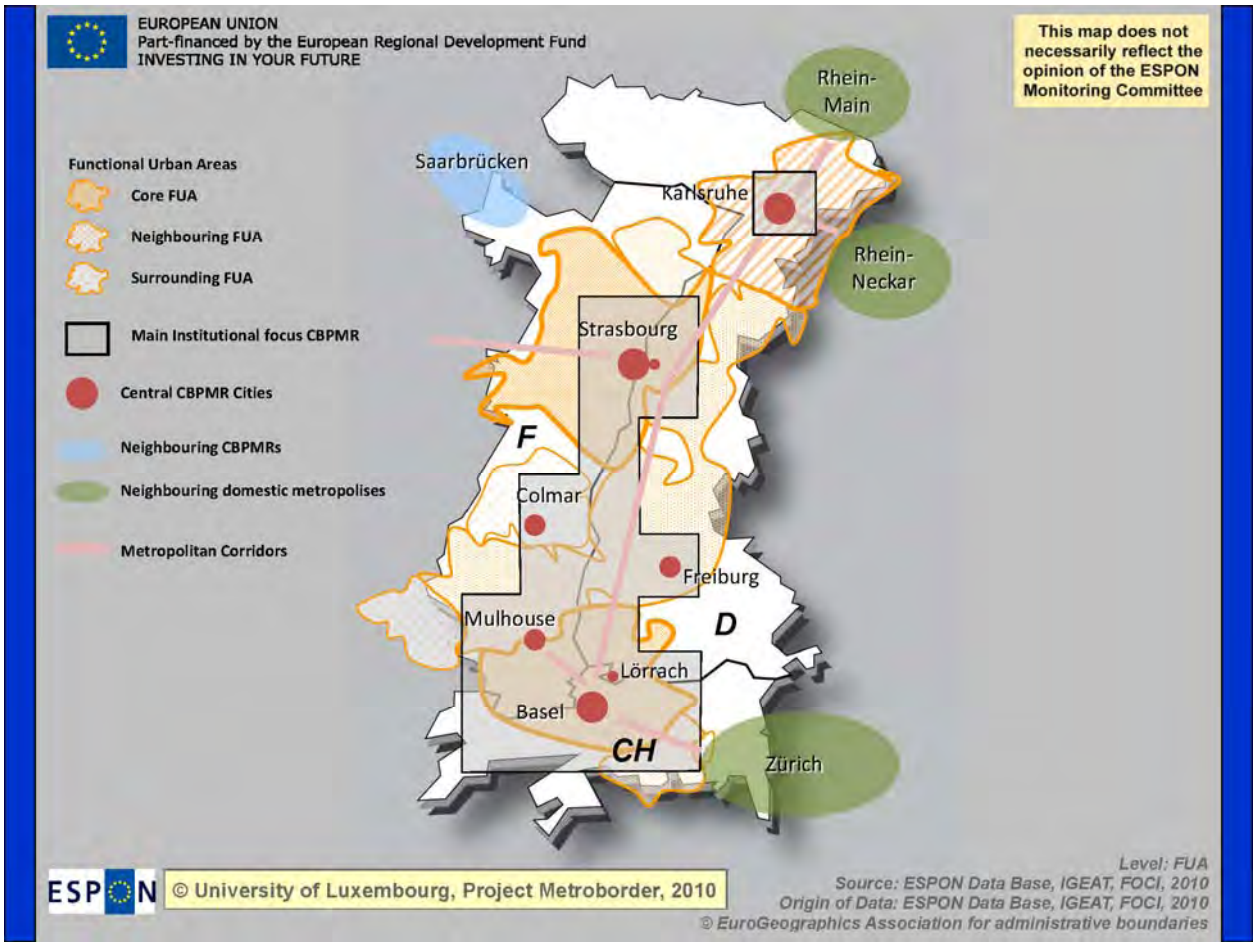
Table 12 Analytic grid for the interviews

18 Summary of the Upper Rhine situation

18.1 The territorial setting

The Upper Rhine region is a particular CBPMR because of its tri-national character. Compared to the other European CPMRSs, its polycentricity is quite balanced (having two truly cross-border cores with the Basel and Strasbourg FUAs and an important third player with Karlsruhe). The functional cross-border integration is particularly intense in the Basel FUA, being amongst the three most important cross-border commuting regions in Europe.

The status of the Upper Rhine as a CBMPR is clear: the synthesis map brings together the crucial results from the METROBORDER research.



Map 33 'CBPMR Upper Rhine': schematic synthesis map of METROBORDER results

The different information layers of the map are explained below:

- **Functional Urban Areas**: The Upper Rhine perimeter comprises two core

cross-border FUAs (Basel and Strasbourg), with Karlsruhe as a third player with a cross-border character and with a high demographic and economic weight. The neighbouring and surrounding FUAs match almost exactly the perimeter of the Upper Rhine conference.

- **Central CBPMR cities**: The strongest metropolitan dimension within the Upper Rhine perimeter can be found in and around Basel, mainly due to economic factors. Strasbourg, too, has a clear metropolitan dimension, amongst others due to political indicators. Karlsruhe has a strong economic dimension, but Freiburg, Colmar and Mulhouse are also important centres, in particular in terms of demographic figures.
- **Institutional focus**: Political will was measured by the Delphi study – in the map, the perimeter represents the area that more than 45% of the experts consider as particularly important. This picture reflects the overall acceptance of the Upper Rhine perimeter. At the same time, the northern part (around Karlsruhe) is seen as part of this setting, but in a more 'careful' way – this is, in a way, going very much parallel to the functional analysis.
- **Metropolitan corridors**: The metropolitan corridors of the Upper Rhine are dominantly oriented along the Rhine valley. The problem in this region is – differently to the Greater Region – not so much the linkages to external metropolitan regions but more the internal bottlenecks.
- **Neighbouring CBPMRs and domestic metropolises:** The Upper Rhine is positioned 'in the shadow' of the 'Pentagon' metropolises, namely Zurich, Rhine-Neckar (Stuttgart), Rhine-Main (Frankfurt). At the same time, the Upper Rhine is part of corridor of CBPMRs in Western Europe, not very far to the Greater Region and Genève.

18.2 Governance and the "Trinationale Metropolregion"

The METROBORDER project has shown that the Upper Rhine region is characterised by strong cross-border flows, such as cross-border commuting, as well as a well-developed cooperative structure. In this regard, the Upper Rhine is often considered as an exemplary cross-border region.

The actors involved in cross-border cooperation in the Upper Rhine have decided to go a step further and better position the region as a model for cross-border cooperation and development by establishing the so called "Tri-national Metropolitan Region of the Upper Rhine".
The objectives of the project are multiple. According to the results of the Delphi study, the two main goals are the intensification of cross-border cooperation on the one hand, and lobbying in Brussels, Berlin, Paris and Berne on the other (see

appendix, chapter 15). In order to achieve these objectives, the actors have established a new cooperative structure:

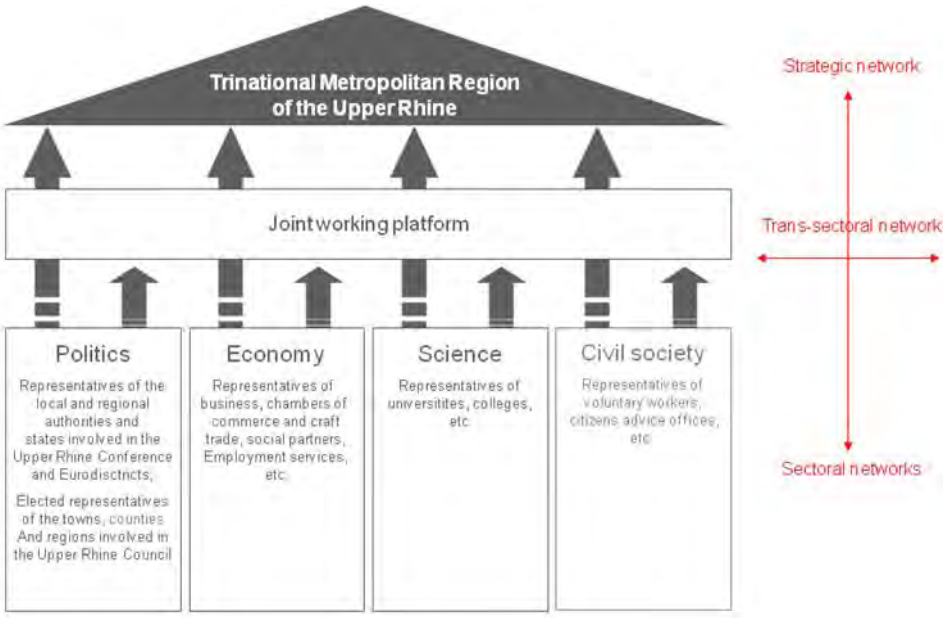


Fig. 34 The "Trinational Metropolitan Region of the Upper Rhine" – current overview

One should mention the institutionalised involvement of the business and science sectors, as well as of civil society, in the cross-border cooperation. We must stress here that the four pillars of the "Tri-national Metropolitan Region of the Upper Rhine" do not show the same degree of institutionalisation. While the "politics" pillar can be considered as being over-institutionalised, there is a need to consolidate the organisational structures within the "economy" and "science" pillars. Finally, the "civil society" pillar represents a real challenge in terms of institutionalisation. This pillar is characterised by a lack of structure.

At the same time, the actors in the Upper Rhine are working on the definition of tri-national strategies within each pillar, as well as of a common strategy for the whole "Tri-national Metropolitan Region of the Upper Rhine". The overall strategy focuses on the following action areas: multi-level governance, competitive and sustainable development, knowledge economy, and civil society.

18.3 Selected findings of the Delphi study

The starting point for the strategy building in the Upper Rhine was the Delphi study (cp. chapter 16): About 84% of the experts see a need for a rapprochement of various cooperation bodies within the pillar “politics”. Even if a majority of the actors involved in cross-border cooperation in the Upper Rhine considers the simplification of the cooperation structures on the political and administrative level necessary, the question does not seem to be addressed in a coordinated manner. Indeed, the project “Trinational Metropolitan Region of the Upper Rhine” focuses way more on the question of institutionalisation and concretisation between the four pillars. Therefore, it was decided to dedicate the strategy building in the framework of the project METROBORDER to this complex question.

Based on a few striking results of the Delphi study (see chapter 16), three different scenarios for possible simplifications of the cooperation structures within the pillar “politics” were developed. The idea was not to present realistic future trends, but way more visions in order to boost the discussion. The three scenarios were presented to the regional stakeholders on the occasion of a workshop held on September 14th, 2010. The stakeholders were asked to criticize the scenarios and to further develop them.

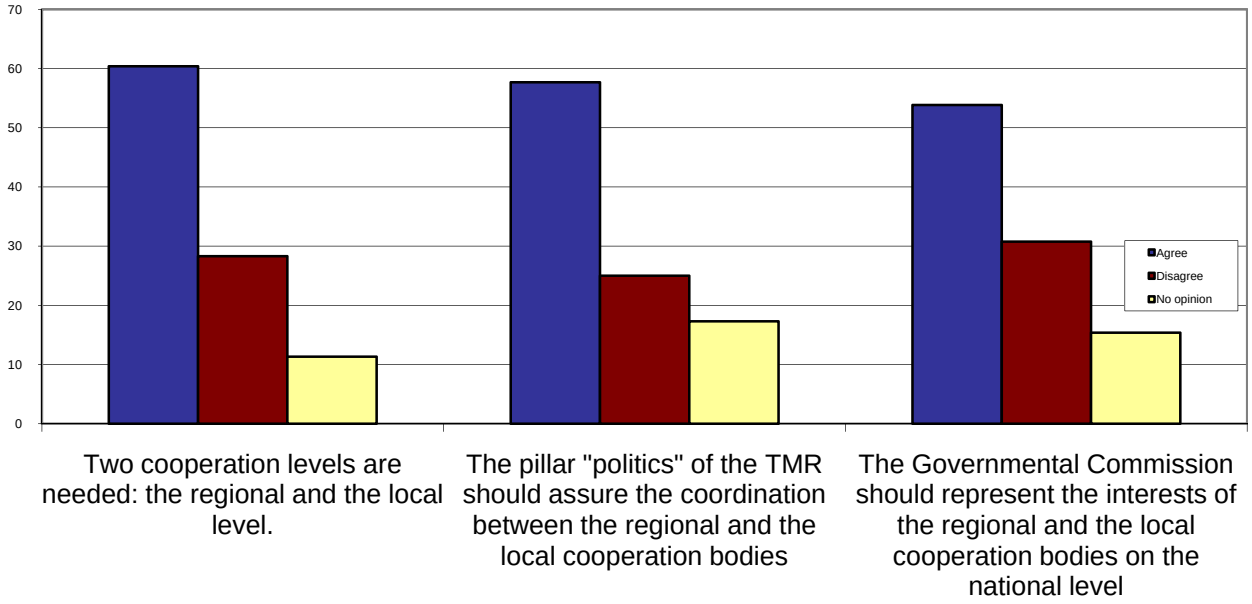


Fig. 35 Arguments for governance simplification in the Upper Rhine (I) - Results of the Delphi study

The actors involved in cross-border cooperation in the Upper Rhine consider that

the pillar “politics” should cooperate mainly on two levels: on the regional level with the Upper Rhine Conference and the Upper Rhine Council and on the local level with the Eurodistricts. While the pillar “politics” should contribute to improve the coordination between the regional and the local cooperation bodies, the Governmental Commission should better represent the interests of the cooperation bodies of both levels in Berlin, Paris and Bern. Subregional cooperation areas, such as the RegioTriRhena, seem to become less important. This can be understood as a need to concentrate the efforts only on the principal cooperation areas and to avoid a dispersal of the available resources.

Despite the creation of a new regional cooperation structure, the pillar “politics”, the Upper Rhine Conference as well as the Upper Rhine Council still play an important role. This shows that the pillar “politics” is considered more as a coordinating structure than as a real cooperation body. Despite their importance, the experts see a need to merge the Upper Rhine Conference and the Upper Rhine Council. This shows the will of many actors to increase the democratic legitimacy of the cross-border cooperation.

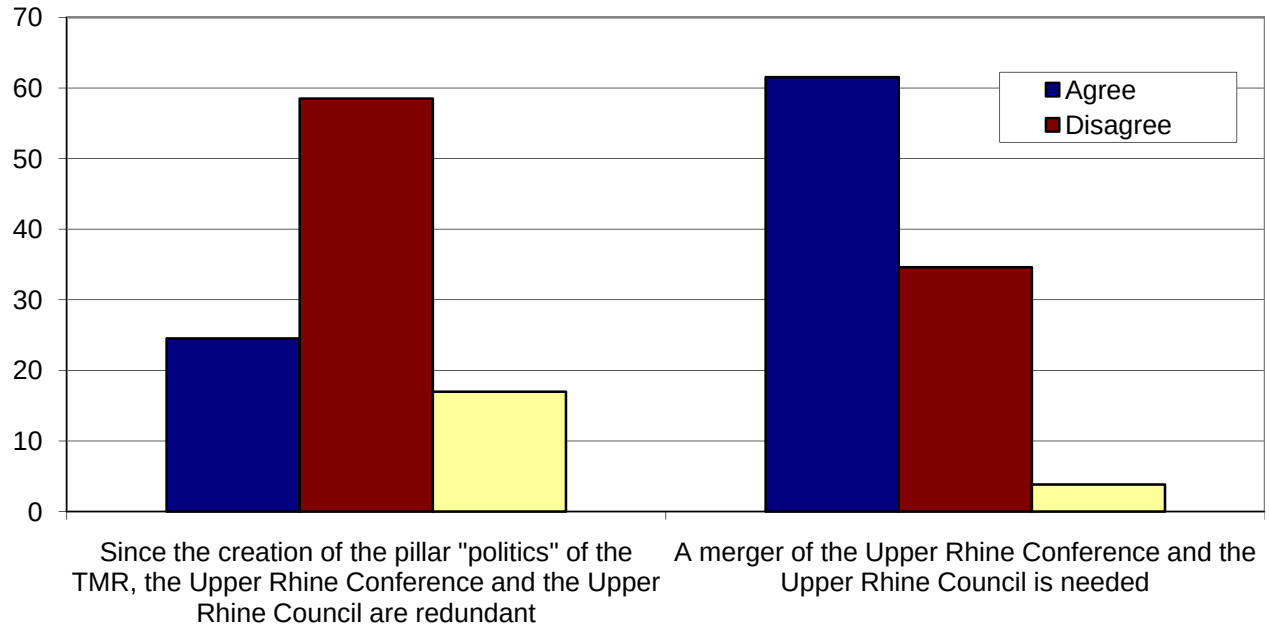


Fig. 36 Arguments for governance simplification in the Upper Rhine (II) - Results of the Delphi study

On the local level, it seems that the Eurodistricts would gain influence in the “Trinational Metropolitan Region of the Upper Rhine” if they would better work together. But the experts do not believe that the Eurodistricts can replace the City Network. Indeed, the Eurodistricts and the City Network do not fulfil the same

function: In opposition to the City Network, the Eurodistricts clearly represent territorial cooperation bodies.

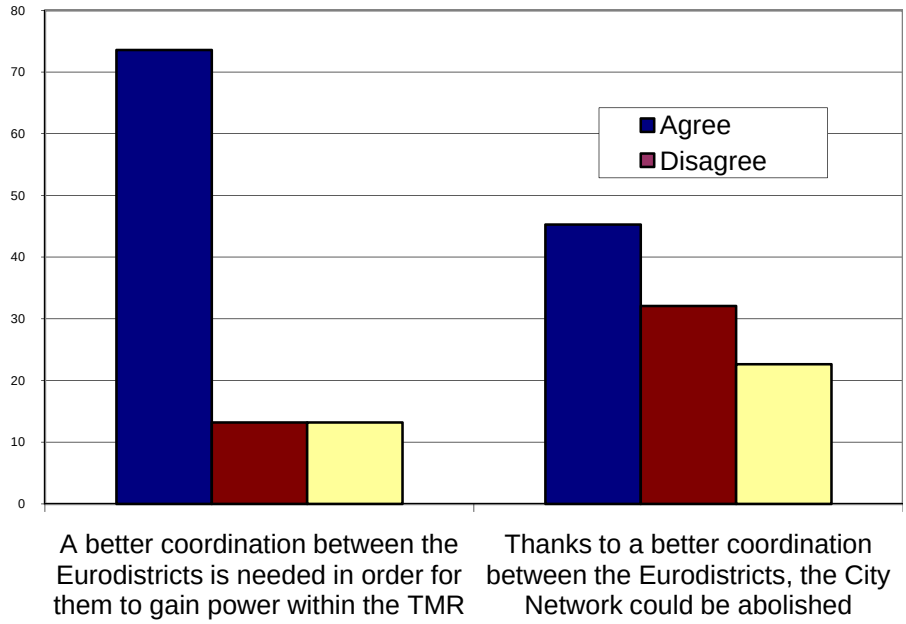


Fig. 37 Arguments for governance simplification in the Upper Rhine (II) - Results of the Delphi study

18.4 Scenarios

The findings of the Delphi study presented in the previous chapter built the basis for the three scenarios. They were further developed by the regional stakeholders on the occasion of a workshop held on September 14th, 2010. The scenarios we want to present here are the results of this common work.

The simplification of the cooperation structures is not a goal on itself. It would also contribute to:

- improve the efficiency of the cross-border cooperation,
- enhance the transparency of the cooperation system and the visibility of the cross-border region,
- increase the democratic legitimacy of the cross-border cooperation.

18.4.1 Scenario 1: Multi-level cooperation (status quo)

The scenario “Multi-level cooperation” reflects the actual situation. Its main characteristics are:

- Pillar “politics”: long tradition of cooperation and over institutionalised cooperation structure.

- Pillars “economy” and “science”: well functioning cooperation networks (e.g. BioValley, EUCOR and NEUREX) and low institutionalised cooperation structure.
- Pillars “civil society”: low involvement in cross-border matters and lack of cooperation structure.

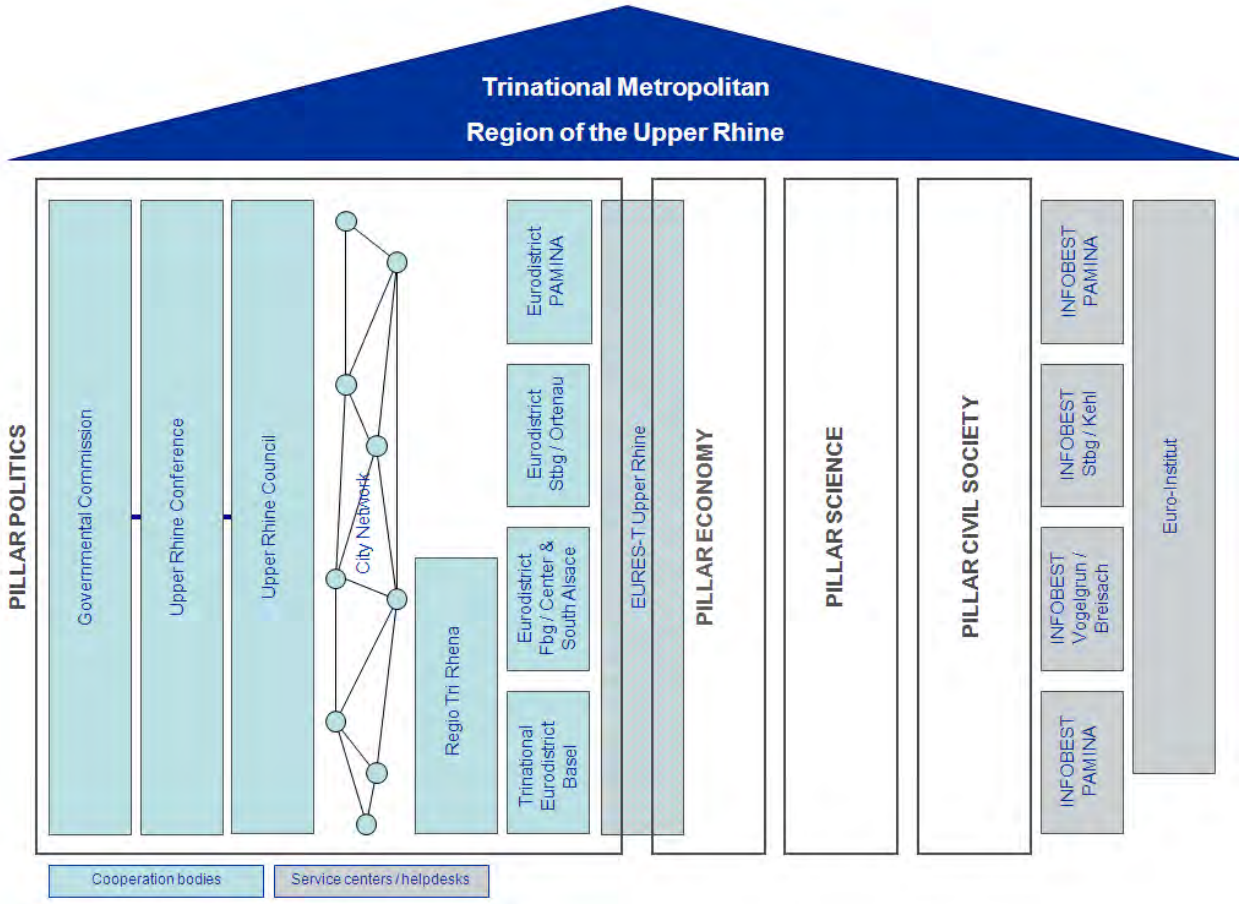


Fig. 38 Scenario 1 – “multi-level cooperation”

Strength	Weaknesses
Fully developed multi-level cooperation system with a national, regional and local governance-level; Involvement of all cooperation actors: politics and administration, economy and science, civil society; Cooperation in all relevant thematic areas: Economy and labour market, education and youth, research and innovation, spatial	No clear division of work between the different cooperation bodies; No binding common development strategy No coordinated inward and outward positioning; Lack of transparency and therefore lack of population acceptance.

development and environment etc.	

18.4.2 Scenario 2: Two-level cooperation

The scenario “two-level cooperation” presents a realistic development alternative. Its main characteristics are:

Pillar “politics”:

- Two cooperation levels: regional level with the Upper Rhine Conference together with the Upper Rhine Council and local level with the Eurodistricts together with so called District Councils.
- Integration of the Upper Rhine Council in the Upper Rhine Conference (as Upper Rhine Parliament)
- Creation of a District Council in each Eurodistrict (as District Parliament)
- Close cooperation between the Upper Rhine Conference and the Eurodistricts
- Representation of the interests of the Upper Rhine Conference and the Eurodistricts on the national level by the Governmental Commission
- Abolishment of the RegioTriRhena
- Abolishment of the City Network

Pillar “economy”:

- EURES-T Upper Rhine a center of excellence for cross-border mobility
- Integration of EURES-T Upper Rhine in the pillar “economy”

All pillars:

- One coordinator for each pillar, close cooperation between the coordinators and the pillars

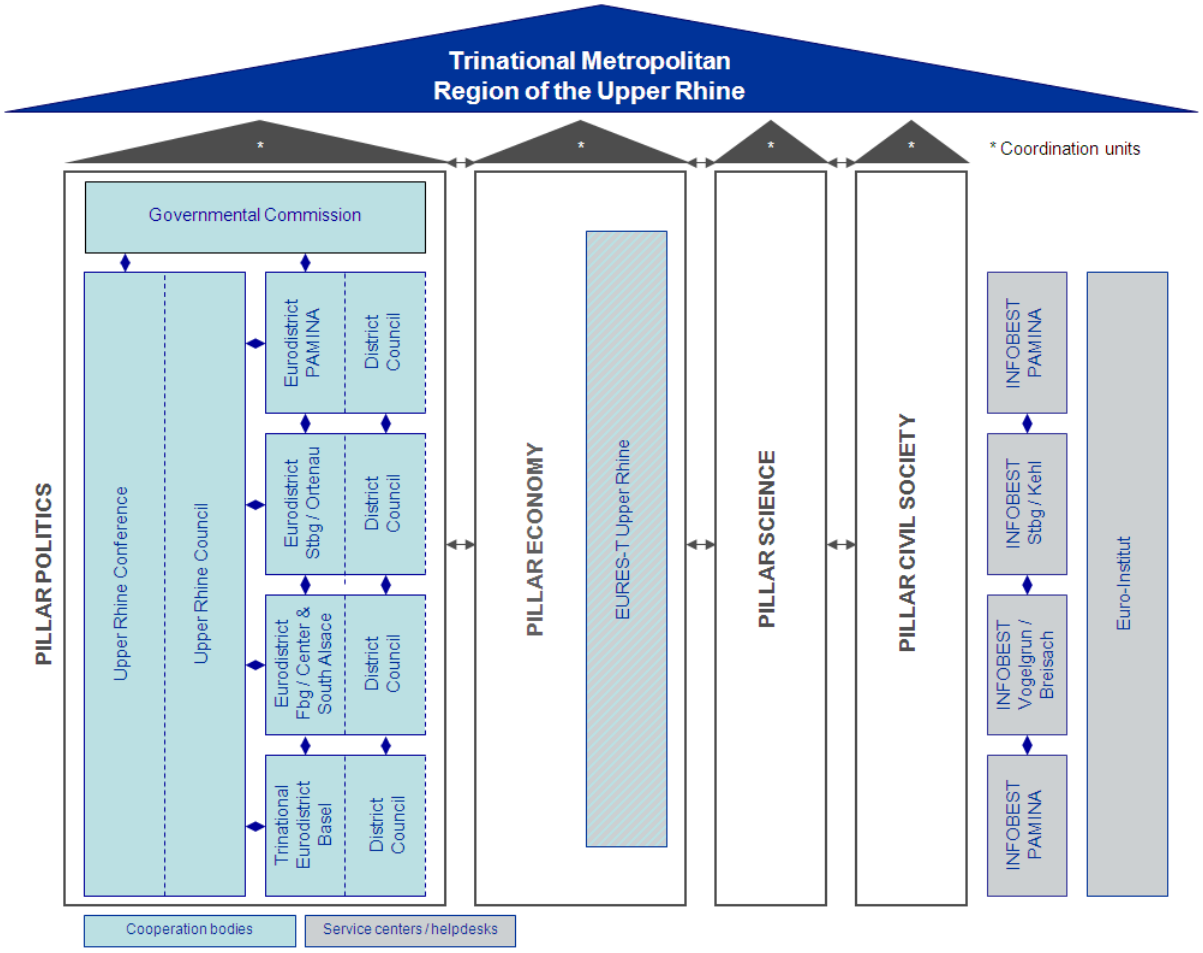


Fig. 39 Scenario 2: "Two-level cooperation"

Strength	Weaknesses
Close cooperation and clear division of work between the regional and the local cooperation bodies Better cooperation between the pillars Enhanced transparency and higher population acceptance High democratic legitimacy	No guarantee for clear organisation structures within the pillars "economy", "science" and "civil society" No binding common development strategy No coordinated inward and outward positioning

18.4.3 Scenario 3: Integration

The scenario "integration" represents way more a vision than a realistic development alternative. Its characteristics are:

- Creation of a single cooperation structure: Trinational Metropolitan Conference

- Creation of a Trinational Metropolitan Council as Upper Rhine Parliament
- Integration of the bigger cities with their agglomerations in the Trinational Metropolitan Conference as Agglomeration Committees
- Abolishment of the Eurodistricts and the City Network
- Integration of the pillars "economy", "science" and "civil society" in the Trinational Metropolitan Conference as Thematic Networks
- Representation of the interests of the Trinational Metropolitan Conference on the national level by the Governmental Commission
- Integration of the different helpdesks (e.g. INFOBESTs and Euro-Institut) in one information centre

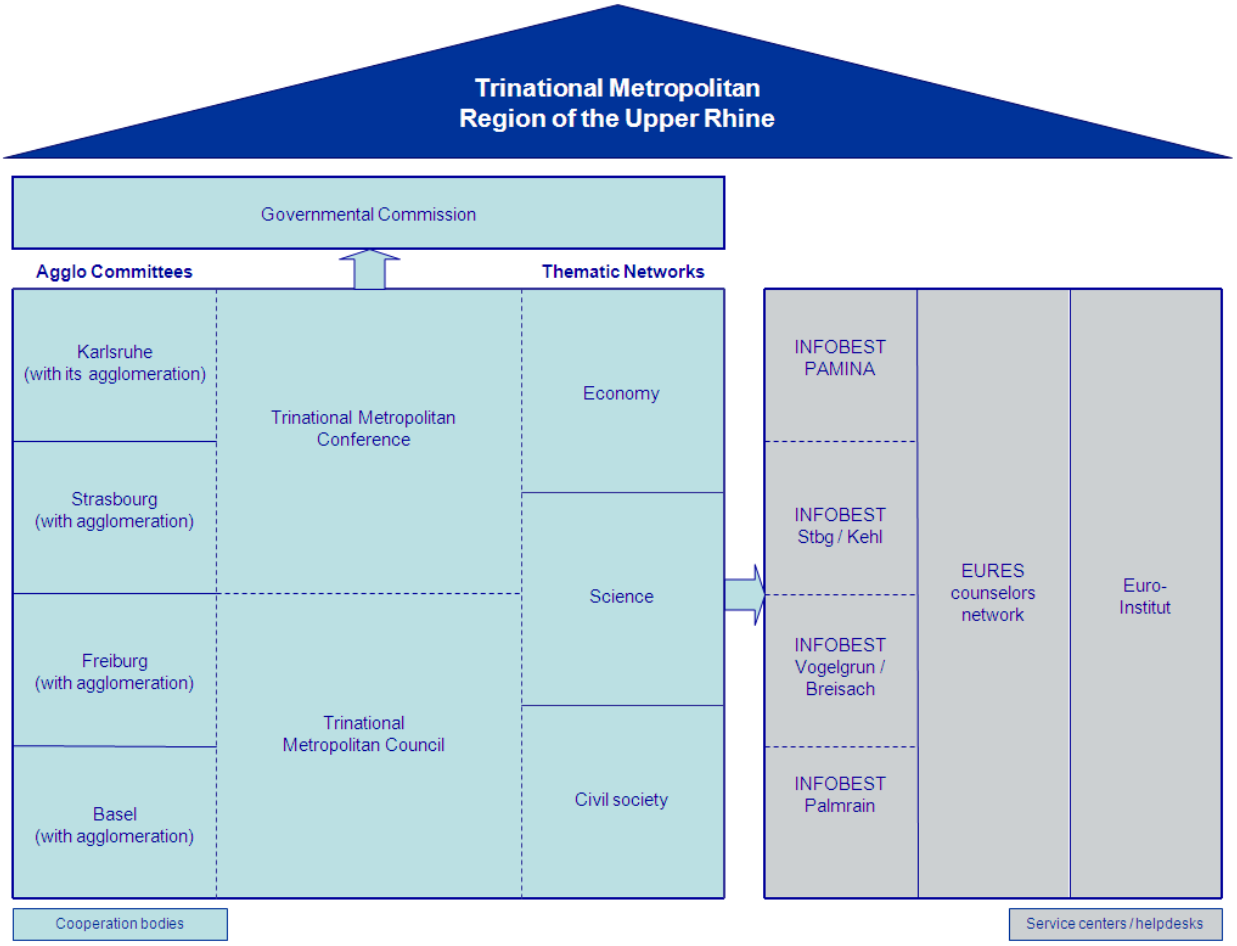


Fig. 40 Scenario 3: "Integration"

Strength	Weaknesses
One cooperation structure with a close cooperation as well as a clear division of work between the actors Institutionalised cooperation structure	Lost of autonomy of the different cooperation bodies and actors A single, but complex cooperation structure

within the Thematic Networks “economy”, “science” and “civil society” Possibility to define a common development strategy Coordinated inward and outward positioning Transparency and population acceptance Relatively high democratic legitimacy	

The discussion with the regional stakeholders showed how complex it is to want to change the established governance system. We want to point out two crucial questions which the regional stakeholders raised:

- What should be the starting point of this process? The cooperation bodies, the cooperation areas or the cooperation fields?
- Can such a process be successful without transferring competences to the cooperation bodies, without giving the cooperation bodies an own budget and without providing the cooperation bodies with manpower?

18.5 Next steps

As mentioned above, simplifying the cooperation structures in the Upper Rhine is a necessity as well as a challenge. It will take time and a great deal of convincing wil have to be do. Together with the other results of the project METROBORDER, the revised scenarios which were presented in the previous chapter will be once more presented and discussed with the regional stakeholders in the framework the Upper Rhine Conference and the Eurodistricts. But in order to lead to real results, the actors involved in cross-border cooperation will then have to pursue themselves this process.

19 Summary for the Greater Region

19.1.1 Why a CBPMR strategy for the Greater Region?

At the European level, the Greater Region is a special 'cross-border metropolitan polycentric region' (CBPMR): in no other place in Europe, or perhaps in the world, is there such a high density of national borders combined with such a high degree of cross-border integration.
Moreover, the Greater Region is not just a polycentric settlement system, but also comprises a metropolitan area of global significance, despite its relatively small size. Further exploiting the potentials of the CBPMR is a coherent strategy with few alternatives in the long run.

The development of the Greater Region has to take into account its overall strengths and weaknesses.
In greatly simplified terms, the most prominent strength of the Greater Region is its role as a metropolitan region of European relevance, despite its relatively small agglomerations. This visibility results primarily from the economic strength of the Luxembourg region and the Greater Region's complementary polycentric structure. Economic control functions, attractive retail and cultural centres, political sub-centres at all levels etc. can be found on all sides of the borders. This is combined with a remarkably high degree of cross-border integration that is both the precondition and the outcome of the clever exploitation of differentials by residents and economic and political actors.
The unique internationalism and the strong functional integration in the central part of the Greater Region highlight its potential to be the 'laboratory of Europe'. The long-standing experience in cross-border cooperation within the Greater Region can be seen as a solid starting point.
The CBPMR approach helps to further develop polycentric complementarities. Existing differentials - in terms of labour markets, real estate markets etc. – have been and remain are the driving forces of cross-border development. The CBPMR vision helps to further explore this path. At the same time, a certain balance and fairness among the sub-regions and the residents can be ensured.

For the Greater Region's potential as a CBPMR to be exploited, several constraints and weaknesses must be considered. The overall challenge for the Greater Region is to ensure that the 'critical mass' is attained in terms of urban agglomerations and metropolitan functions. The sheer territorial size of its cooperation perimeter does not compensate for the small size of the cities and the ultimately limited

metropolitan quality of the economy. This argument also plays a crucial role with regard to accessibility issues and the challenge of influencing political agendas. The cross-border cooperation helps to safeguard the 'critical mass' of the territorial features. Working together, and on the basis of the demographic and economic contributions of all partners, the Greater Region can maintain its current role. In this context, Luxembourg plays a particular role with regard to the metropolitan visibility. At the same time, Luxembourg can only perform thanks to the high degree of cross-border cooperation.
With regard to governance, the purely intergovernmental and hardly institutionalised character contains significant potential as – among other factors – the 'multi-level mismatch' must be better addressed.
In economic, political and demographic terms, we see both promising and problematic developments within the Greater Region. The greatest positive development can be seen in the core space of the Greater Region; other parts differ significantly. Territorial cohesion remains a challenge, and at the same time the Greater Region has to ensure it is not left behind by the competing metropolises on the fringes of its perimeter (e.g. Brussels, Rhine valley).

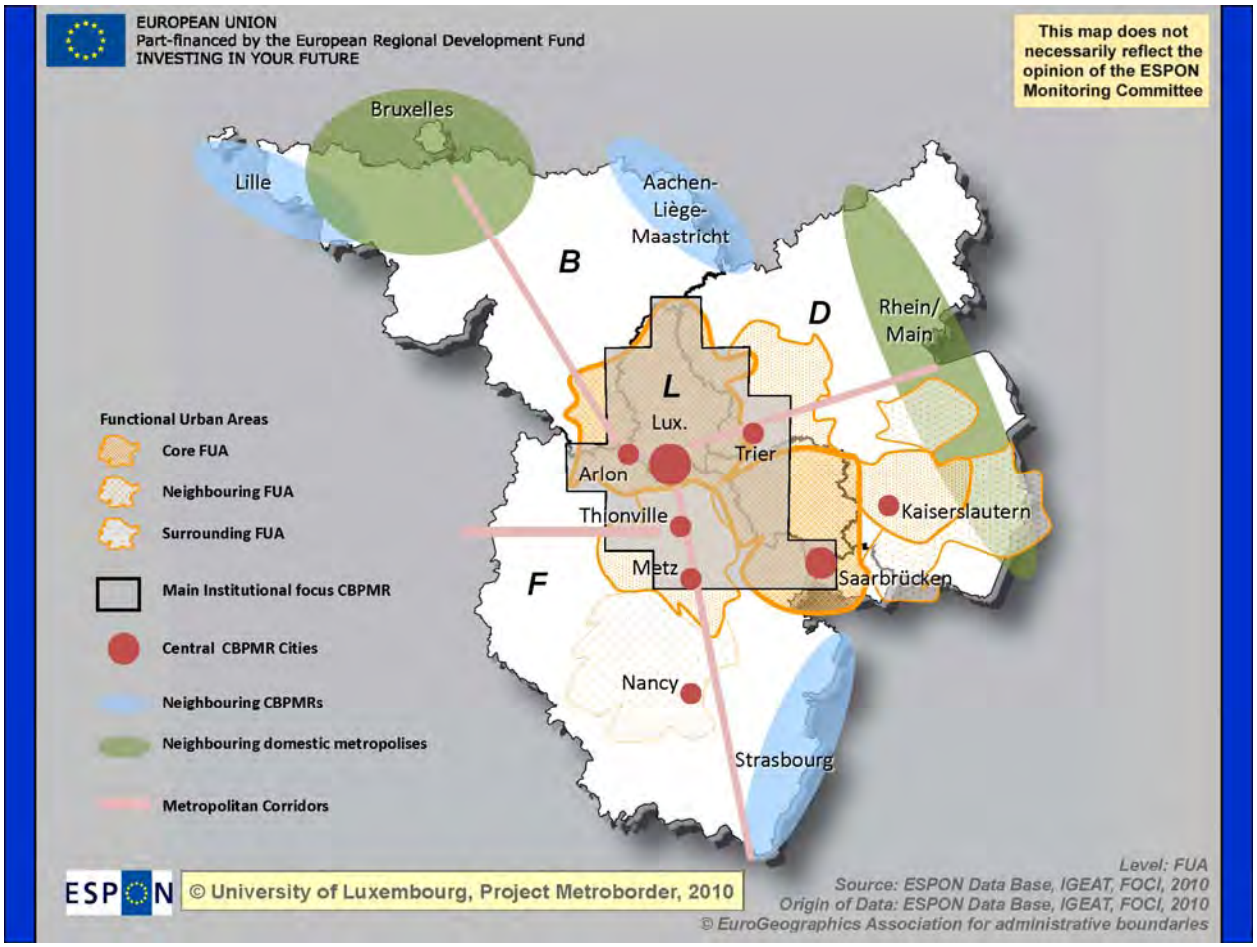
Without enhanced cross-border development, sustainable spatial development is difficult to attain. For example, only an intelligent transport infrastructure can reduce environmental problems, and only the efficient use of public budgets – avoiding double spending on either side of the border – can be regarded as economically and socially sustainable. Avoiding unsustainable development due to border effects can be seen as a major contribution towards cohesive territorial development, including from a European perspective.

19.1.2 Which perimeter for the CBPMR?

The spatial configuration is a particularly sensitive issue within the Greater Region, as it is known for being extremely large without having – apart from administrative and institutional constraints – any especially convincing reasons for this perimeter. The current territory is not an outcome of explicit political reflection. In a process that brought together the relevant institutions involved in regional cooperation, each institution brought with it its territory - resulting in a huge pooled territory. This is frequently criticised; however, the definition of a narrower perimeter carries with it numerous problems. The political energy which must be invested in order to define a smaller perimeter is enormous; a particular risk is that misunderstandings develop with certain partners being excluded. Moreover, no unique or absolute definition of the cooperation perimeter is possible; this depends largely on the policy ambitions. The perimeter of action differs for example, when addressing

supra-regional transport connections or debating a joint fare structure for public transport.

Bringing together the territorial evidence from the METROBORDER project gives some indication of the spatial configuration of the CBPMR project within the Greater Region. The schematic Map 34 gives a simplified overview of this setting.



Map 34 'CBPMR Greater Region': schematic synthesis map of METROBORDER results

The different information layers of the map are explained below:

- **Functional Urban Areas**: The Greater Region comprises two Functional Urban Areas (FUAs) with a cross-border dimension – the Luxembourg FUA and the Saarbrücken FUA. Having two cross-border FUAs touching each other is unique within Europe. These two cross-border FUAs can even be regarded as a bipolar cross-border corridor. Within this bi-polar structure, Luxembourg is the much more metropolitan area in economic terms; Saarbrücken has the larger urban centre in demographic terms. Jointly with the neighbouring and

– very much dependent on the political will – surrounding FUAs, we see important evidence for the CBPMR core space of the Greater Region.

- **Central CBPMR cities:** The overall polycentric structure of the Greater Region and its core space is represented by the settlement structure. Here, we see four levels of polycentricity within the core space, reflecting 1) the outstanding economic importance of Luxembourg, 2) the demographic size, political importance ('Landeshauptstadt') and status as a cross-border FUA, in the case of Saarbrücken, 3) the urban centres of the neighbouring FUAs and 4) the centres of the surrounding FUAs (e.g. Kaiserslautern) whose profiting from the CBPMR status depends largely on the respective political will to cooperate.
- **Institutional focus**: The political will has been analysed by the Delphi study; in the map, the perimeter shown represents the space considered by over 45% of experts to be particularly important. This core space covers all national frontiers and the cities near to the borders.
- **Metropolitan corridors**: The ambition of establishing the Greater Region as a CBPMR is linked to the situation regarding infrastructure. The most important links to the surrounding metropolises are of particular importance. Whereas Paris is comparably well connected, the Brussels connection, and also the Rhine direction and the Strasbourg/Basel link, are not yet adequate. Focussing political attention on these links is, as is also indicated by the Delphi study, doubtless a useful approach.
- **Neighbouring CBPMRs and domestic metropolises:** The spatial setting of the Greater Region CBPMR cannot be understood without paying attention the surrounding metropolises. The Greater Region is 'embedded' in the form of a pattern comprising a series of metropolises, two of them domestic ones (Brussels region, Rhine valley/Frankfurt) and three of them cross-border metropolitan areas (Lille, Aachen-Maastricht and Strasbourg-Kehl).

19.1.3 Governance: the political setting of the Greater Region

Cross-border cooperation in the Greater Region dates back to the early 1970s and can be regarded as providing a solid basis for future cooperation. Its strength can be seen in the involvement of the decision-makers at the top political levels and the many years of experience.

The institutional cooperation in the form of the 'Summit of the Executives of the Greater Region' is complemented by a variety of further institutions, some of them closely linked to the Summit (such as CESGR and IPR); others are complementary at the regional level (e.g. Eurodistrict SaarMoselle) and the local level (e.g. Euregio,

city networks). Certainly, this diversity represents an asset for cross-border cooperation.
At the same time, the challenges are obvious as the involvement of four national backgrounds multiplies the border effects in political terms. In particular, the 'multi-level mismatch' must be seen as a major bottleneck in terms of cross-border cooperation, meaning that different and sometimes incompatible allocations of competences in many spheres occur on either side of the border. The current organisation is not ideal for the overcoming of these multi-level mismatches, as the approach is mainly based on a rotating intergovernmental system ('presidencies of the Greater Region's summit'). The second most important challenge is to activate the private sector for cooperation and to ensure the adequate involvement of the municipal and metropolitan actors within the interregional cooperation.

Some of the main results of the Delphi study regarding governance can be summarised in the following bullet points:

- The experts of all countries involved agree that cooperation has to focus on a core area of the Greater Region.
- The priorities with regard to the policy focus are clear – transport, spatial planning and R&D are the key areas.
- The currently-established EGTC (European Grouping of Territorial Cooperation) can be seen as an important steppingstone towards a governance framework that complements the current structures. There is a strong will to establish a strong EGTC in the medium term.

19.2 Strategic options

19.2.1 Developing options

The research results from METROBORDER deliver clear arguments, saying that the CBPMR strategy for the Greater Region is a promising and almost indispensible vision. The challenge now is to *concretise* this path.
Combining the territorial analysis from the Greater Region and the results from the Delphi study, there are good arguments to develop general dimensions of action that will be introduced in the coming sections. At that point of time, however, the transfer to the political sphere has to be made as the concretisation of this (political) vision is the original role of politics.
In order to fuel this process of political concretisation of the vision, we will illustrate this by means of exemplary specific actions that might be set on the agenda soon. Before doing so, we introduce three dimensions ("Leitbilder") of political action.

19.2.2 Leitmotiv “economic metropolis”

The aim of being the cross-border “economic metropolis” aims at an economically prospering Greater Region.
The functional analysis of METROBORDER shows that the overall economy is organised in a polycentric way, but that the metropolitan economy is largely based on knowledge intensive services in Luxembourg. The cross-border functional integration is well advanced, most prominently illustrated by the highest number of cross-border commuters in Europe.
Still, one of the main challenges in the economic sense is the critical mass: compared with other – cross-border or domestic metropolitan regions – the Greater Region comprises quite small centres. This comes along with a vulnerable structure – if just one sector or one major enterprise is in crisis, the whole regional economy might be affected.

Internal focus

From the internal perspective, the cross-border cooperation has to develop synergies and complementariness. In that, the role of the public sector is threefold. The first task is to initiate or expand cross-border economic activities on the regional level. Secondly, the task is to avoid unsustainable public investment in domestic and intra-regional frameworks when similar efforts are made on the other side as well. Thirdly, the facilitation of the cross-border economic activities has – in the long run – large implications with regard to a multi-lingual and multi-cultural work force, infrastructure investments etc.
Linking actors from the economy to the cross-border cooperation within the Greater Region is one of the most urgent concerns with regard to governance in general. Despite the CESGR and the various institutionalised networks (e.g. of the Chambers of Commerce, CICM, business associations etc.), a strong transnational/supraregional platform seems to be lacking. Not only the semi-public institutions like the chambers have to be linked: Maybe even more important is the involvement of entrepreneurial decision-makers from key sectors that have to be identified and asked to join.

External focus

The external focus aims to position the Greater Region more prominently on the map of the globalised economy. Cross-border cooperation helps to achieve the critical mass allowing turning the particular international character of the Greater Region into a gateway position for the European Single Market.

In general terms, one has to admit that the economic metropolitan quality of regions is not easy to ‘govern’ as the processes involved are complex and of long-

term character. Still three spheres of activity have to be considered (see Fig. 41). Firstly, the Greater Region has to be supported in order be an attractive *location* for investment. One can assume that the improvement of the Greater Region's location factors is already the concern of all actors involved. A joint strategy might better exploit the complementary structure. Secondly, only via cross-border cooperation the *marketing* and 'branding' of the Greater Region is plausible (see below for further details). Thirdly, further positioning the Greater Region as economic global node is a challenge.

The added value of working together across the border is seen in two major points: Only a large scale spatial planning of the Greater Region has the potential to overcome bottlenecks (like in transport) and to receive the full support of national and European institutions.

Field of action	**GR as 'attractive location'**	**GR as 'brand'**	**GR as 'global node'**
Kind of action	- Joint improvements of location factors	- Territorial marketing	- Attracting new firms and actors with decision-making capacity
Typical instruments	- Joint lobbying in national and European institutions with regard to transport issues, labour market regulations etc. - Joint cross-border spatial development - Establishment 'guichet unique'	- PR activity in diverse media - Cross-border umbrella platform for associations and chambers - Joint trade fair presentations - …	- Joint acquisition trips of high ranking politicians and entrepreneurs (missions) - …

Fig. 41 Objective "economic metropolis" with an external focus – potential fields of action

19.2.3 Leitmotiv "Laboratory of Europe"

The 'laboratory of Europe' perspective develops the potential that the extraordinary international and multicultural Greater Region bears. This addresses mainly two spheres:

Firstly, the inhabitants ('*civil society'*) from the different subregions experience Europe – in terms of its internationality – much more than most other European citizens. In particular the cross-border commuters and the citizens in settlements located directly at the border presumably have the most intensive experience of internationality and intercultural life. This is due to the liberalisation of the borders and the rapid and dynamic functional integration following in particular the Luxembourgish economic boom. Still, the potential is not exploited – especially the multi-lingual competences are not complete. Education is the major policy in this respective. Exploiting these potentials means a further harmonisation with regard to the use of public facilities and – at least as important – new flagship projects (multi-national education infrastructure, Greater Region holiday camps etc.).

Secondly, the *political sphere* of the Greater Region has to deal with cross-border mismatches in many dimensions on a daily basis. The Greater Region has a long standing experience in cross-border cooperation, and has – in a complex environment and throughout an outstanding economic development – achieved some good results. However, the purely intergovernmental organisation with its rotating presidencies is still a relatively cautious one. This question of supra-regional structures is a delicate one, but is worth to be discussed as a potential complementary element.

19.2.4 Leitmotiv 'Mobile and accessible region'

The 'mobile and accessible region' aims at improving transport issues, but also at facilitating professional mobility.
In fact, professional mobility is an issue of relatively constant attention within the Greater Region, as the recently established task force for cross-border commuters illustrates. These efforts have to be carried on. The step-by-step dismantling of barriers in social security etc. has no alternative. A joint Greater Region employment centre with offers from all regions and with specialised trainings in language and intercultural competences might bear some potential.

Efforts to improve the situation serve two aims: Firstly, the functional integration – in terms of economic functioning etc. – will largely be improved. Secondly,

transport infrastructure has a high potential of being a joint symbol. The latter can be illustrated with other European examples: The Öresund region is well known mostly because of its spectacular tunnel-bridge-construction crossing a sea border; the bridge between Strasbourg and Kehl is famous at least since President Obama crossed it recently; the fast boat trip between Vienna and Bratislava (Twin City Liner) is one of the most attractive touristic cross-border highlights in Europe; and the Airport Basel / Mulhouse is famous for its position much closer to Basel but on French territory. These projects – just to mention a few – are certainly heavy infrastructure investments, but this effort pays not only in terms of accessibility but also in terms of identification and reputation. The challenge of the Greater Region is the higher as the numerous subregions do not meet at a single point. Still, the potential both for connectivity as for symbolism is obvious.

19.3 Specific actions

The next steps towards the establishment of the Greater Region CBPMR have to, firstly, reflect on governance issues (*institutionalisation*): In particular, a stronger supra-regional mandate should be envisaged in the medium term. Moreover, the implication of economic actors and of municipal decision makers should be reflected.

Secondly, the cross-border cooperation has to think about more concrete, visible projects, and outcomes (*concretisation*). This is true for more technical tasks, but also for the symbolic dimension of cross-border cooperation in the Greater Region that is yet to be exploited. The policies of transport, spatial planning, and education can be regarded as most promising for developing such concretisation in the short and medium term. The concrete actions have to take into account that cross-border cooperation does not have political competences for all of political problems at hand but has to concentrate on particular fields.

The following sections develop exemplary actions that are – from the scientific perspective – promising. As mentioned above, however, the concretisation of political visions is the original mandate of the political sphere.

19.3.1 Fostering economic cooperation: the ‘automotive platform’ as an example

The automotive industry is an excellent example in order to a) link the economic sphere more closely to the political cooperation and b) to develop interregional synergies and complementarities.

In all parts of the Greater Region not only production and R&D-activities are present, even if they rarely cooperate. Also politically induced cluster initiatives have been established in a domestic framework on either side of the borders. Linking these structures is highly promising and is a good example for the establishment of a 'network of the networks'. Similar reflections are applicable for the field of logistics, eco-technology and of R&D in materials science.

A joint strategy has to be developed in form of a pilot project, bringing together economic actors from all sides of the borders and from the semi-public and the private arenas. A pilot scheme is to be developed for a certain sector. In the framework of such a project, the future potentials in supply chain management in the Greater Region have to be explored.

In parallel, governance related constellations can be tested in the framework of this project. Exploring the potentials with limited scope (just one sector) and limited time frame (just a pilot project) is a pragmatic answer to this barrier.
The setting might be developed as shown in Fig. 42, possibly supported by a fitting focus of the respective presidency of the Greater Region Summit.

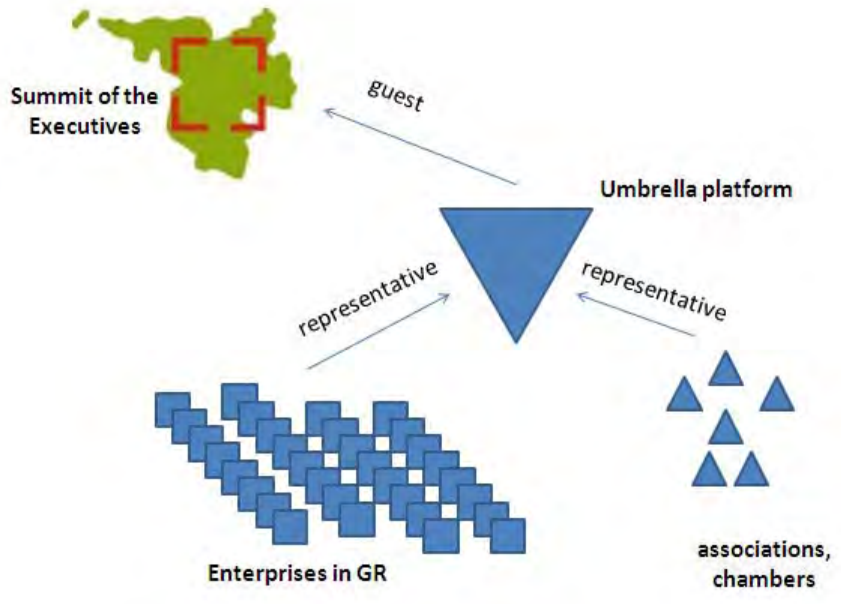


Fig. 42 Governance setting of a potential pilot project "network of the networks" for economic subjects

19.3.2 Closing knowledge gaps: Territorial Observatory

It is well known that national borders are still a reason for diverse statistical problems. This is true for research on the European level and also in the Greater Region with its four countries involved and the diverse statistical multi-level-mismatches. Obviously, trying to overcome these problems is part of the role as 'laboratory of Europe'. Closing these knowledge gaps is of particular importance not only for academic, but in particular for political reasons:

Having the above mentioned problem of the 'critical mass' in mind, the challenge to safeguard the relative success of this region demands sophisticated strategies. The ESPON project METROBORDER – relying mostly on European data – is a first step, but next steps with regional data and knowledge have to follow. The currently starting INTERREG project "GIS of the Greater Region" is, without a doubt, a step into the right direction. A further upgrading towards a *Territorial Observatory*, as currently discussed, is a promising idea.

In the Greater Region, but also in other cross-border regions in Europe, the spatial development policy has been a driving force for progress in cooperation. If, in the Greater Region, this policy wants to go on playing this role, an improved knowlegde on territorial assets is important.

There is strong evidence that the political will within this policy is currently large: the Greater Region's position paper on the EU commission's Green Paper on Territorial Cohesion, and also the high degree of political support revealed by the Delphi Study, have to be named in this respect (Fig. 43).

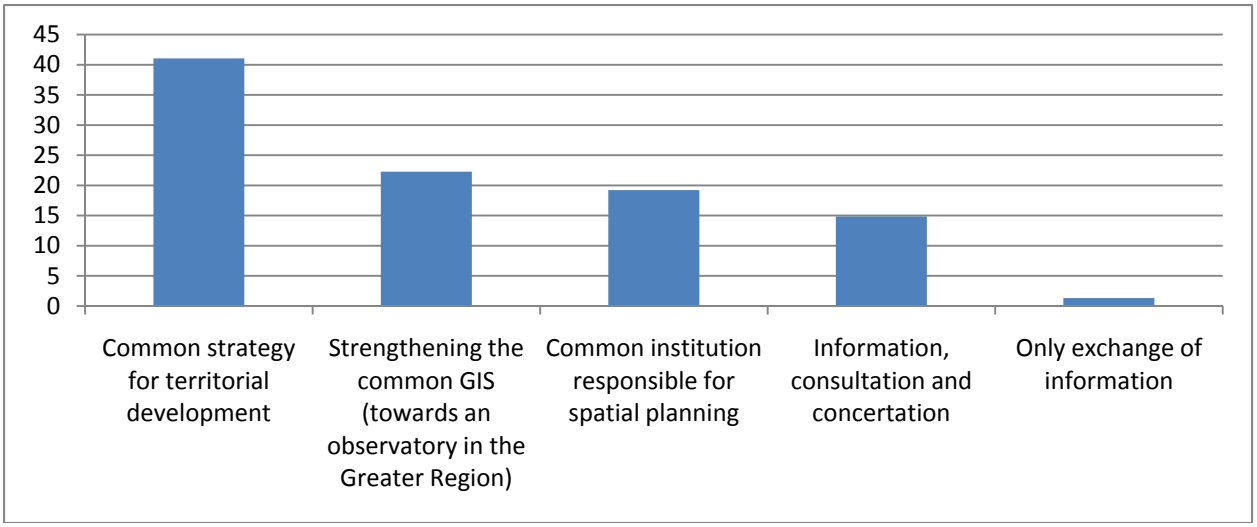


Fig. 43 Vision of GR-Delphi experts for the future spatial development (in%, n=229)

19.3.3 Governance: towards a strong EGTC

The Greater Region has a long standing experience in cross-border cooperation, and has – in a complex environment and throughout an outstanding economic development – achieved some good results. However, the intergovernmental, rotating organisation of the regional cooperation is considered as sometimes heavy procedure and not always efficient with regard to the output. This situation reminds of the European Integration of the early years. If the Greater Region does take the challenge of being the *laboratory of Europe* serious, the institutional consequences are obvious – the supra-regional level has to be developed.
Ways have to be explored towards a more integrative, but not less transparent and democratic governance.
The currently establishing EGTC Greater Region – which is mostly a technical secretariat – can be seen as a first step in this regard. It might serve as an incubator for a strong political EGTC. Concretely, the most pressing issues should be object to the EGTC work, in particular spatial planning, transport and research & innovation (for details on EGTCs in general, see chapter 15).

At the same time, the experts show a certain consensus on the better involvement of the municipal level – the large cities and the smaller centres – as well of the economic world. Fig. 44 proposes a visualisation showing how to combine the involvement of further actors as well as the creation of a supraregional level. The currently established EGTC is taken as a starting point for political competences that has to be organised with the formally legitimised institutions.
In a next step, the delegation of clearly defined tasks is to be defined (cp. Fig. 44). The Delphi study has revealed a surprisingly strong will towards a strong political EGTC, in particular with regard to spatial planning, transport and research & innovation.
In the long run, a ‘shared competence’ – as it is established on European level for territorial cohesion or the internal market – might be the ambitious aim.
If this vision is pursued in the political world, the composition of the Greater Region Summit has to be reflected. Linking economic and municipal actors more closely to the Summit structure is worth to be debated.

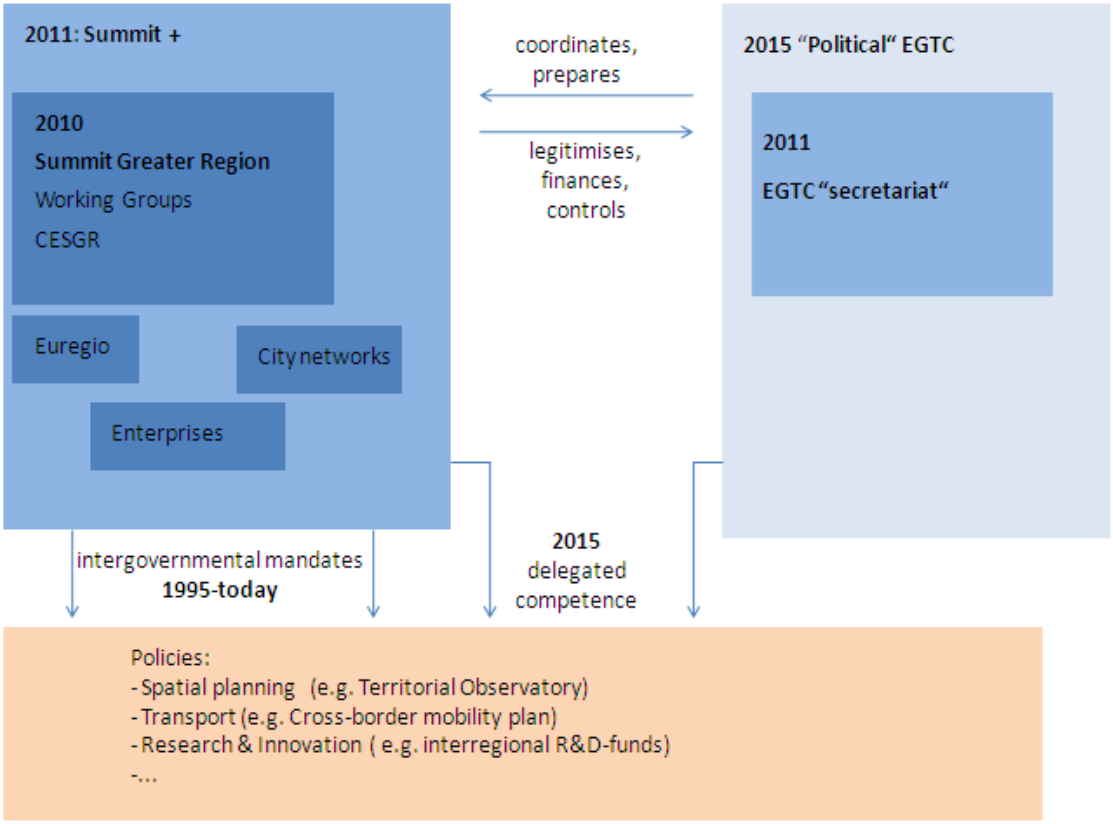


Fig. 44 Governance perspective for the EGTC

19.3.4 Territorial Marketing: competition for a flagship project

The multinational character of the Greater Region is – without a doubt – the most original argument in territorial marketing for the Greater Region. However, territorial marketing has not yet been established in the Greater Region as an important policy. Considering the outstanding structure of the Greater Region on the European map, its relatively small publicity and prominence *as Greater Region* (not as Luxembourg) is striking.

The objective of territorial marketing is to create a common 'brand' in terms of territorial marketing and economic promotion, in order to enhance visibility, influence, and prosperity. Territorial marketing has to reflect on whom it wants to address: external political actors, potential economic investors and the civil society (within and without the Greater Region's perimeter) are potentially important addressees.

But before printing flyers and designing internet pages, a common will and strategy on how to stage the Greater Region has to be developed. In this respect, much might be learned from domestic strategies of joint metropolitan marketing where in

particular the respective majors have been crossing municipal and regional borders in marketing activities. Most probably, the abstract name of the “Greater Region” will have to be reflected.

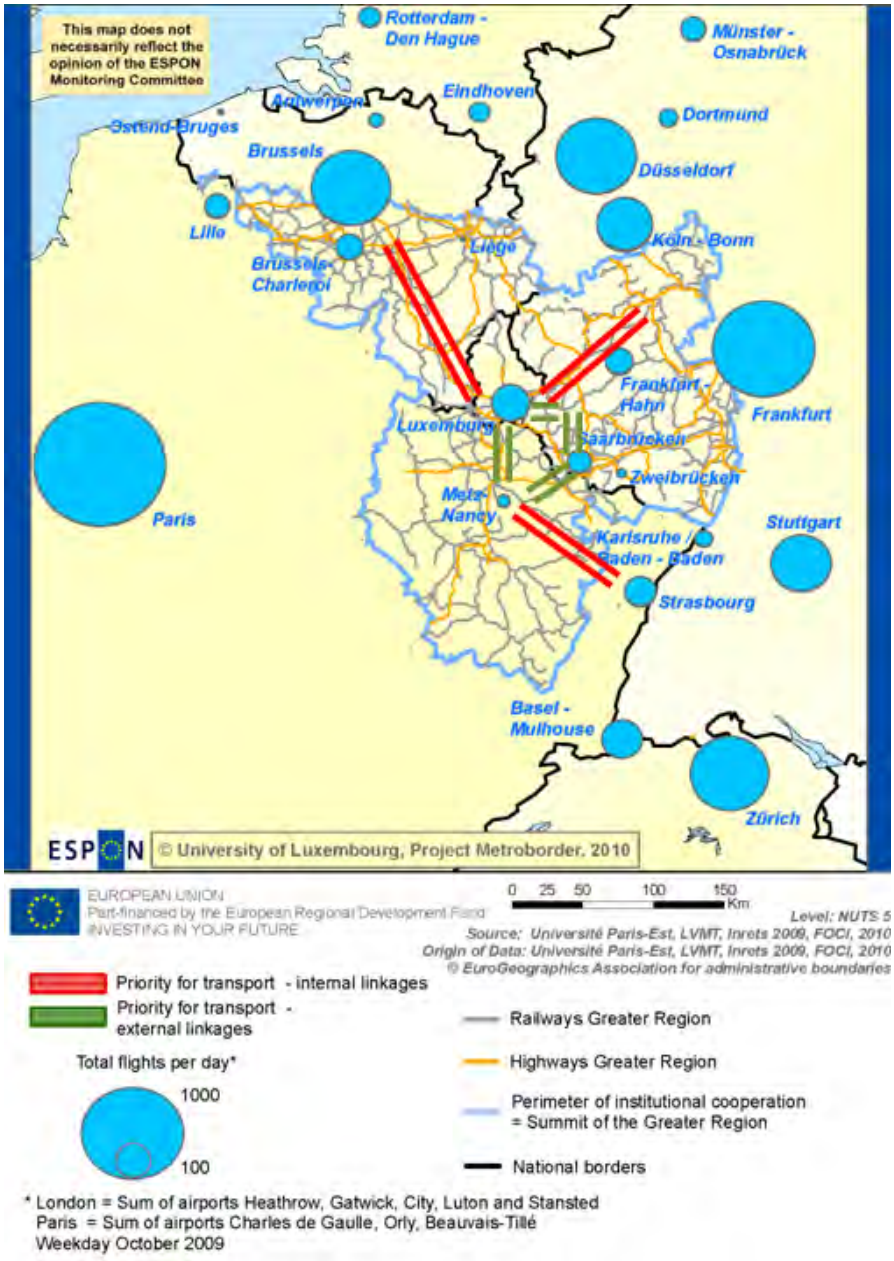
Territorial marketing can profit a lot from large scale flagship projects. The European Capital of Culture (2007) was a good step, but due to the project structure the visibility is limited in time. A built flagship of the Greater Region is challenging as the numerous subregions do not meet at a single point. A next step towards a joint flagship could be a competition between invited planning and architecture bureaus, consultancies and universities.

19.3.5 Transport issues: The Greater Region mobility scheme

Transport issues are regarded as one of the most pressing policies in the Greater Region. Many of them must be handled on the bilateral level as concrete investments and technical questions have to be handled, and the currently elaborated bilateral mobility concept between the Saarland and Luxembourg might be pathbreaking.
Map 35 illustrates the most pressing shortcomings with regard to metropolitan connectivity of the Greater Region according to the Delphi results: The interregional connectivity towards Paris in the West can be considered as rather good. However, the slow connection towards Brussels does not fit any ambition of being a laboratory of Europe; the link towards Strasbourg/Basel is considered as insufficient. The connections on the axis Luxembourg – Koblenz/Rhine valley is picturesque but slow.

Against this background, a multilateral ‘Greater Region mobility concept’ is overdue. Leaving all these challenges to bi-national cooperation, seems not to be efficient. A Greater Region mobility concept should give answers to the following questions:

- Joint political lobbying and funding strategies in order to improve the metropolitan connectivity, i.e. towards those metropolises at the fringes of the Greater Region’s perimeter and beyond.
- Joint planning procedures within the Greater Region
- Joint infrastructure concept (e.g. the different technical requirements (minimum speed for TGV or ICE etc. Pendolino for faster inter regional connections;
- joint operating strategies (in particular cross-border tariffs in public transport; development of synergies and complementarities with regard to the airports).



Map 35 Shortcomings of the metropolitan connectivity with regard to rail – shown on the map for connectivity via plane (simplified results from Delphi study)

19.4 Remaining questions

The ESPON project METROBORDER has brought pioneering results in order to understand the spatial configuration of European *CBPMRs*, it has illustrated the positioning of the Greater Region and future strategic options are on the table.

On the political level, attempts to establish the Greater Region as a *CBPMR* are young and the political enthusiasm for pioneering work is large.
However, many interesting questions are not yet answered, and new answers lead to new questions. Both from the scientific and from the political side, further efforts have to be made in order to secure the basis of the CBPMR. The following four aspects will illustrate this need.

Polycentricity

The notion of polycentricity comprises various dimensions and potential operationalisations. The Greater Region is – without any doubt – organised in a polycentric way. Depending on the thematic, however, the patterns of centrality differ largely:

- In morphological terms, the polycentricity of the Greater Region is obvious, but this is not very meaningful.
- In demographic terms, the polycentricity can be stated with regard to the population numbers of the Functional Urban Areas, and – to a lesser extent – for the Morphological Urban Areas. With regard to population growth, an impressive growth is linked to Luxembourg, whereas large parts of the German regions loose population, and France and Belgium are in between.
- In economic terms, the polycentricity depends on the indicators: Measuring the presence of headquarter functions results in very different findings than counting the number of employees; mapping retail structures shows different settings than mapping the banking sector or the automotive sector.

More reflecting on the polycentric organisation of CBPMRs in general and within the Greater Region in particular is asking for more than one further research project, given the conceptual complexity and the data problems.
At the same time, the political level has to reflect on polycentricity, too. It largely depends on the political vision and from the understanding about what role is assigned to the notion of polycentricity, considering both complementary and assimilating elements.

This debate on polycentricity is very much linked to (territorial) cohesion. On the European level, the notion of cohesion is currently being discussed in the context of the respective Green Book and of the current Cohesion Report. Scientific literature is far from agreeing on a clear definition and operationalisation of territorial cohesion, and might never do. Thus, in the Greater Region an adapted regional approach towards cohesion has to be developed.

Economy

The scientific and the political points of view agree on the outstanding importance of the economy for the success of cross-border cooperation and integration. In the framework of the METROBORDER project, we have seen the pattern of headquarter functions and we have zoomed into the automotive sector.

The lack of relevant economic data is in particular due to general statistical problems, but also to the particular sensitivity of data in a competing economy.

The availability for sector specific flow data would be extremely helpful. A breakdown of available data to a finer scale is missing and would be most welcome, too.

Investing public money in cluster initiatives etc. might be more efficient if intra- and inter-regional value chains would better be known so that cross-sectoral views could be applied. But again, a CBPMR strategy has to address both sides: closing knowledge gaps, and establishing a political strategy that relies also on visions and courage.

Civil society

A political vision for a region has to serve the interests of the people: this principle of democracy is also true for cross-border issues. However, we have plenty of cross-border problems, but not a particular cross-border democracy, identity or even people. The scientific and political debate on this field is complex (problems of legitimisation, representation etc.) and they go beyond the scope of a CBPMR strategy as they meet all facets of cross-border integration.

Having in mind the complex challenges and often abstract notions of the CBPMR strategy – just this abbreviation is exemplary – it is not easy to make it a popular strategy in the broad sense. Ongoing endeavours of that kind in the Upper Rhine ('pillar civil society') illustrate this instructively.

The scientific perspective can only contribute to this by exploring the needs, perspectives and criticism of the inhabitants. Still, the CBPMR idea is far from being an elite strategy: improving the transport situation, facilitating the smart use of cross-border differentials are just two aspects that are potentially popular, but this has to be 'sold' and debated – in particular from the political side.

The term METROBORDER has turned out to be established in order to label the political project of a cross-border polycentric metropolitan region (in contrast to the Upper Rhine, where the label of the Trinational Metropolitan Region has already been institutionalised). It is true that the label METROBORDER does not comprise any geographical anchor, but – as the history of the first "Euregio" at the German-Dutch border has shown, that a label just indicating the idea of the cooperation can be a successful denominator.

These open questions from the scientific and the political perspectives must not lead to scepticism towards a CBPMR strategy, rather the opposite: Given the general added value of a METROBORDER vision, the further implementation has to meet the challenges of concretisation with considerable efforts. This challenge should be met, and the current political window of opportunity has to be used.

20 Dissemination

ESPON & other European programmes	
PAST EVENTS	
01-02.06.09	ESPON seminar, Prague (moderation of a table discussion on cross-border issues)
02-03.12.09	ESPON seminar, Malmö (presentation of the project)
05.11.09	ESPON workshop on "approaching new functional areas": presentation of the project, Luxembourg
12.02.10	URBACT workshop "Citylab on metropolitan governance": presentation of the project, Lille
10.06.10	ESPON seminar Alcala/Madrid, Spain (presentation of the project)
06.10.10	Open Days 2010 Panel "ESPON provides regions with targeted analysis"
COMING EVENTS	
17.11.10	ESPON seminar, Liège/Belgium
PAPER DOCUMENTS ALREADY DELIVERED	
09.04.09	Inception report
28.02.10	Intermediate report
31.10.10	Draft final report
COMING PAPER DOCUMENTS	
31.12.10	Final report
WEB DISSEMINATION	
	ESPON page dedicated to the project (with reports) under www.espon.eu webpage https://METROBORDER.uni.lu
STAKEHOLDERS (EU & consultation committee)	
PAST EVENTS	
09.01.09	Stakeholders meeting, Strasbourg
04.05.09	Stakeholders meeting, Brussels
05.05.09	Presentation of the project, organised by the Luxemburg Presidency of the Greater Region in the Committee of the
29.10.09	Regions, Brussels
10.03.10	Workshop DIACT-MOT-METROBORDER: presentation of the
11.03.10	project, Paris

	Stakeholder Meeting, Walferdange/Luxembourg
	Consultation Committee, Walferdange/Luxembourg
COMING EVENTS	
08.11.10	Stakeholder Meeting, Paris
January 2011	METROBORDER Final event (Basel)
STAKEHOLDERS – GREATER REGION	
PAST EVENTS	
03.03.09	Presentation of the project to the stakeholders of the GR,
22.04.09	Luxembourg
	MORO Workshop (coordination with the German research project
12.05.09	MORO), Aachen
	Presentation of the inception report to the stakeholders from the
25.06.09	GR (comité de suivi), Luxembourg
12.03.10	Bilateral BBSR/METROBORDER meeting, Luxembourg
	Presentation of the intermediate report to the „comité de suivi
13.07.10	GR“, Luxembourg
04.10.10	Workshop/Strategy Building with regard to Delphi Study - comité de suivi, Walferdange
	Workshop Strategy Building in general – comité de suivi, Walferdange
COMING EVENTS	
17.11.10	„comité de suivi Grande Région“, Walferdange
...	...
STAKEHOLDERS – UPPER RHINE	
PAST EVENTS	
19.02.09	Conference Metropolitan region Upper Rhine
26.02.09	Upper Rhine conference coordination committee
27.03.09	“Präsidium” Upper Rhine Conference
11.12.09	Plenum Upper Rhine Conference
14.09.10	Workshop Strategy Building, Regierungspräsidium Freiburg
COMING EVENTS	
02.12.10	12th tripartite congress on “education research innovation”
Nov/Dec 10	Plenum Upper-Rhine conference

SCIENTIFIC COMMUNITY

Scientific conferences

22.09.09	Evrard: Randlagen ‚in der Mitte Europas': Grenzüberschreitende Metropolregionen als europäisiertes Handlungsfeld, Deutscher Geographentag, Vienna
20-22.05.10	Hahn: "The Transition of the Automotive Sector as a Catalyst for the Mobilization of Regional Knowledge? The Case of the Greater Region SaarLorLux". Conference of the IGU Commission on the Dynamics of Economic Spaces: 'Industrial Transition? New Patterns of Production, Work, and Innovativeness in Global-Local Spaces'; Schloss Wahn/Cologne, Germany
24.05.10	Chilla/Evrard: Putting cross-border regions on the map - Constructing regions of transnational cooperation. Regional Studies Association, Annual Conference, Pecs/Hungary
23.-25.9.10	Walther O, Sohn C, Decoville A. 2010. Spatial integration in European cross-border metropolitan regions. Association for Borderlands Studies Conference, Veria, Greece, r.
19.10.10	EVRARD, E. : Région métropolitaine polycentrique transfrontalière : Mode(s) d'emploi ?, Colloque « Construire des ponts à travers les frontières : vers une cohésion territoriale en Europe ?, Conseil de l'Europe (en collaboration avec l'Université de Strasbourg et l'Info Institute de Kehl), Strasbourg

SCIENTIFIC publications

CHILLA, T. ; E. EVRARD, C. SCHULZ (2010): Metropolregionen in grenzüberschreitenden Räumen. Geographische Rundschau 62 (11)

CHILLA, T.; E. EVRARD, C. SCHULZ (submitted): On the territoriality of cross-border cooperation - 'Institutional mapping' in a multi-level context. European Planning Studies

Decoville A, Durand F, Sohn C, Walther O. (to be submitted): Comparing cross-border integration in metropolitan regions. Journal of Borderlands Studies.

EVRARD, E. (forthcoming) : Région métropolitaine polycentrique transfrontalière : Mode(s) d'emploi ?, Colloque « Construire des ponts à travers les frontières : vers une cohésion territoriale en Europe ?, Conseil de l'Europe (en collaboration avec l'Université de Strasbourg et l'Info Institute de Kehl), Strasbourg

EVRARD, E., T. CHILLA (forthcoming) : Devenir une « Région métropolitaine polycentrique transfrontalière : représentations et ambitions politiques », Actes colloques Université de Haute Alsace, Mulhouse

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