



The ESPON 2013 Programme

TIGER
Territorial Impact of Globalization
for Europe and its Region

Applied Research Project 2013/1/1

Annex to the Interim Report



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This report presents the interim results of an Applied Research Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

Information on the ESPON Programme and projects can be found on www.espon.eu

The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

This basic report exists only in an electronic version.

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1. A detailed chart, including some explanations of the general implementation of the project.

The calendar until the end of the project is the following one:

1. November: draft version of all thematic working papers (see the list on point 4) which are to be discussed in an internal meeting in Rome on 9-10th of November. These papers are the material for the final report.
2. For the end of January: all working papers to be included in the scientific report are finalized
3. 28th of February: final report following the structure detailed in section 4
4. In addition, two international seminars with a few experts and policy makers are planned:
 - on urban networks in october 2011 in Reading University
 - on regionalization process in april 2012

2. A more detailed section on the migrations flows (WP 2.3.4)

2.1. The detail working plan for Migrations

First step – to be completed by august 2011

1. Description of the dataset on human mobility. The collected data will be organized and refined in a final and operative database, in order to provide a full information set on human mobility at a regional level, both for the ESPON and the USA space. Detailed description of the variables and sources of the data will be provided as well. A report will present a full descriptive statistical analysis of the data, aimed at supporting the raw data with comprehensive and synthetic graphs and maps of the main phenomena emerging from the data.

2. A first analysis of the role of Europe in the human flows at global level will be provided. This will be achieved through classification and typological procedures to assess whether Europe constitutes a coherent area in terms of human flows or not. Here we propose a classification of regions' typologies on the base of internal and external (with respect to both the individual country's space and ESPON/USA space) attractiveness:

a) a first typology procedure, for the ESPON space, will be at NUTS2 level. At this level we'll use an index of internal attractiveness and an index of external attractiveness. The former one we'll be generated in comparing different degrees of attractiveness of NUTS2 territories belonging to the same country, whereas the latter one will be generated in comparing the attractiveness of NUTS2 territories belonging to different countries. Data concerning the change in net migration (internal and international) will be used. NUTS2 territories will be clustered according to their belonging to the different groups.

b) a second typology procedure, for the ESPON space, will be at NUTS0 level. At this level a comparison with the USA space will be possible. We'll define the internal attractiveness (internal to the ESPON space, internal to the USA space) and the external attractiveness (non-ESPO and non-USA) of the ESPON and USA space. We'll use data based on migration flows and stocks.

c) Through the Labour Force Survey, we will systematically study the statistical relationship between labour data and migration data and we will propose an analysis of the observed relationships of the two dimensions for both the ESPON and the USA space. From the statistical inferential analysis a classification will be derived (along with maps and graphical representations).

Second step – to be completed by December 15, 2011

3. Cross-region statistical analysis of migration flows and stocks.

A dataset obtained by integrating migration information and other socio-economic characteristics at a regional level will be provided, along with a statistical analysis. In order to reach this aim all the datasets of all the TIGER work-packages will be needed.

A reliable exploration of the characteristics of human mobility across regions and countries can be obtained only through a multidimensional analysis. A cross-region statistical analysis will be performed in order to identify statistically robust correlations between migration variables and socio-economic variables. Where panel data are available, also cross-region panel analysis will be carried out. Well-suited statistical techniques will be employed. When the relation between migration and socio-economic variables is to be studied empirically, endogeneity problems are likely to occur, since a two-way relationship between the two dimensions may generate reverse causality and because subsets of explanatory variables may be correlated with each other. This problem, for example, arises when migration flows affect (and are simultaneously affected by) labour market's characteristics. In order to provide statistically robust estimations that can be interpreted in a causal sense, econometric tools for correcting estimate inconsistency due to endogeneity will be employed. In particular, simultaneous regression analysis will be performed, so to that the potential endogeneity of a sub-set of regressors will be accounted for.

The key variables and the drivers of migration flows will be identified. A clustering of territories based on complex typological procedures will be provided. Inferential analysis will complete this task.

4. In-depth analysis of students' and researchers' mobility in the case of Sapienza University of Rome will be completed.

Third step – to be completed by February 28, 2012

5. The final report will provide a conclusive assessment of the migration phenomenon both within the ESPON Space and the USA, and between the ESPON Space and the USA and the rest of the world. Descriptive examination of the collected data, statistical results of the estimation analysis and interpretation of the results will be provided in the final report. Data sources and statistical methodologies will be described in detail as well. Aggregate patterns of migration decisions of specific sub-groups of population (students, researchers) will be discussed.

6. As the main expected contribution of the final report, a description of the typologies of European regions will be presented. In particular, the role played by individual regions and countries in the intra-national and international migration paths will be analyzed. The results of the statistical analysis of the correlation between socio-economic characteristics of regions and migration flows are expected to provide a grid for drawing a typology-classification of European regions, also in comparisons with the USA. Finally, predicted patterns of migration will be presented in order to help the understanding of the future demographic (and socio-economic) characteristics of European regions.

2.2. Preliminary results

In addition, see below some preliminary results showing work under progress which includes mapping of world migratory flows and labour migrations within the ESPION space

- The two first maps allow comparing the “migratory are of influence” of EU and USA.

Migrants in Europe, 2001



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EUROPEAN SPATIAL PLANNING
OBSERVATORY AND TOOL

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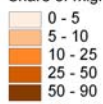
2000 Km

This map does not necessarily reflect the opinion of the ESPON Monitoring Committee

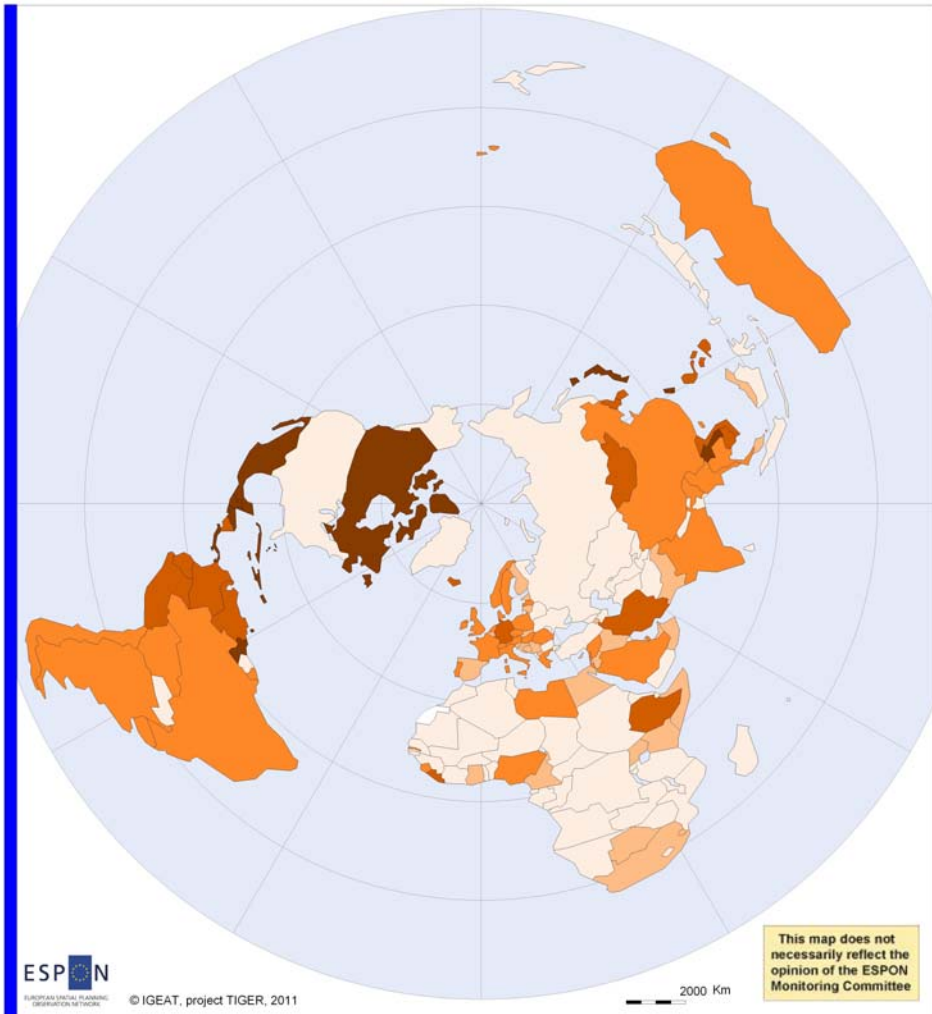
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Source : IGEAT, 2011
Origin of data : University of Sussex, 2001

Share of migrants residing in the ESPON space (%)



Migrants in the United States, 2001



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EUROPEAN SOCIAL FUNDING
OPERATIONAL PROGRAMME

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2000 Km

This map does not necessarily reflect the opinion of the ESPON Monitoring Committee

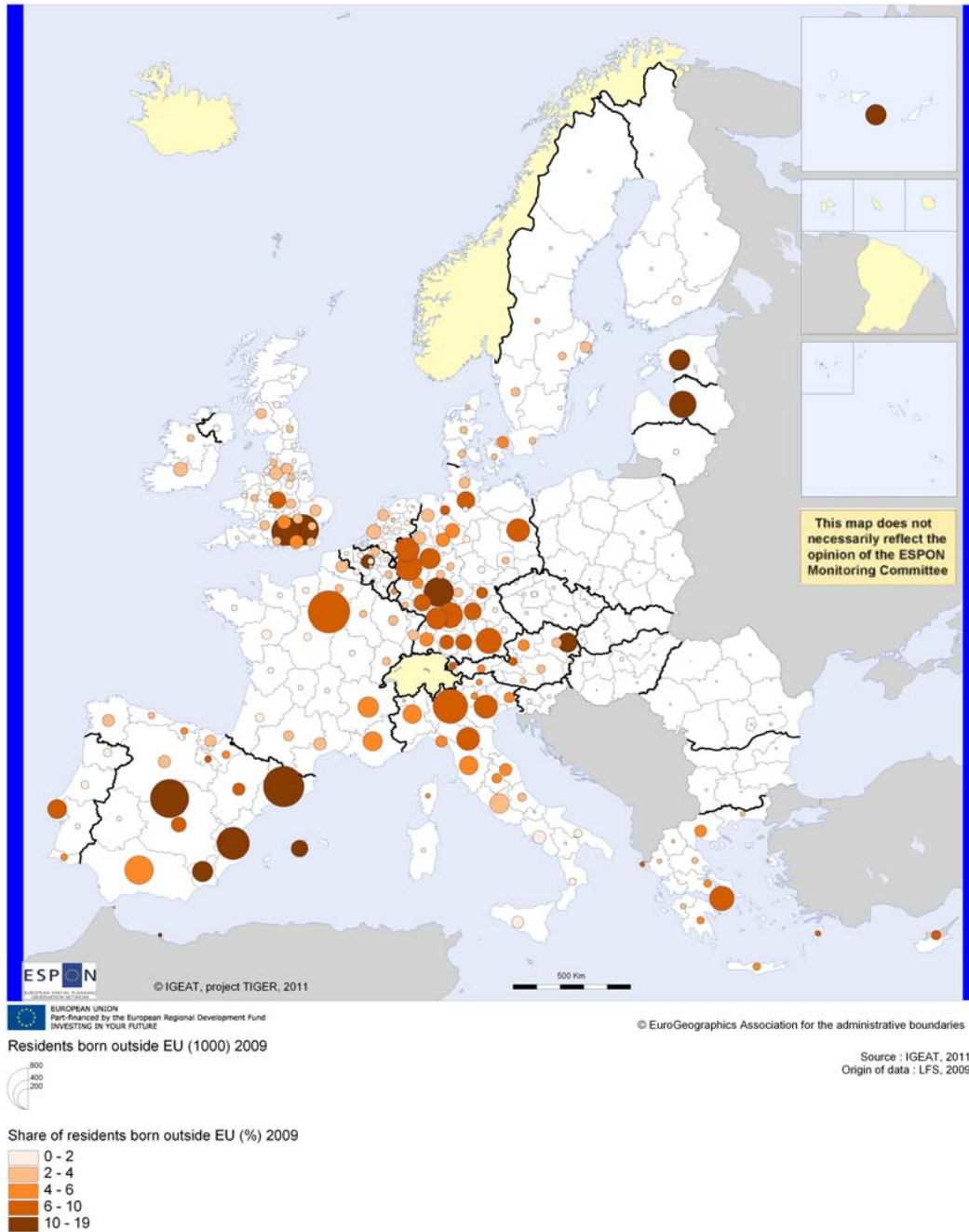
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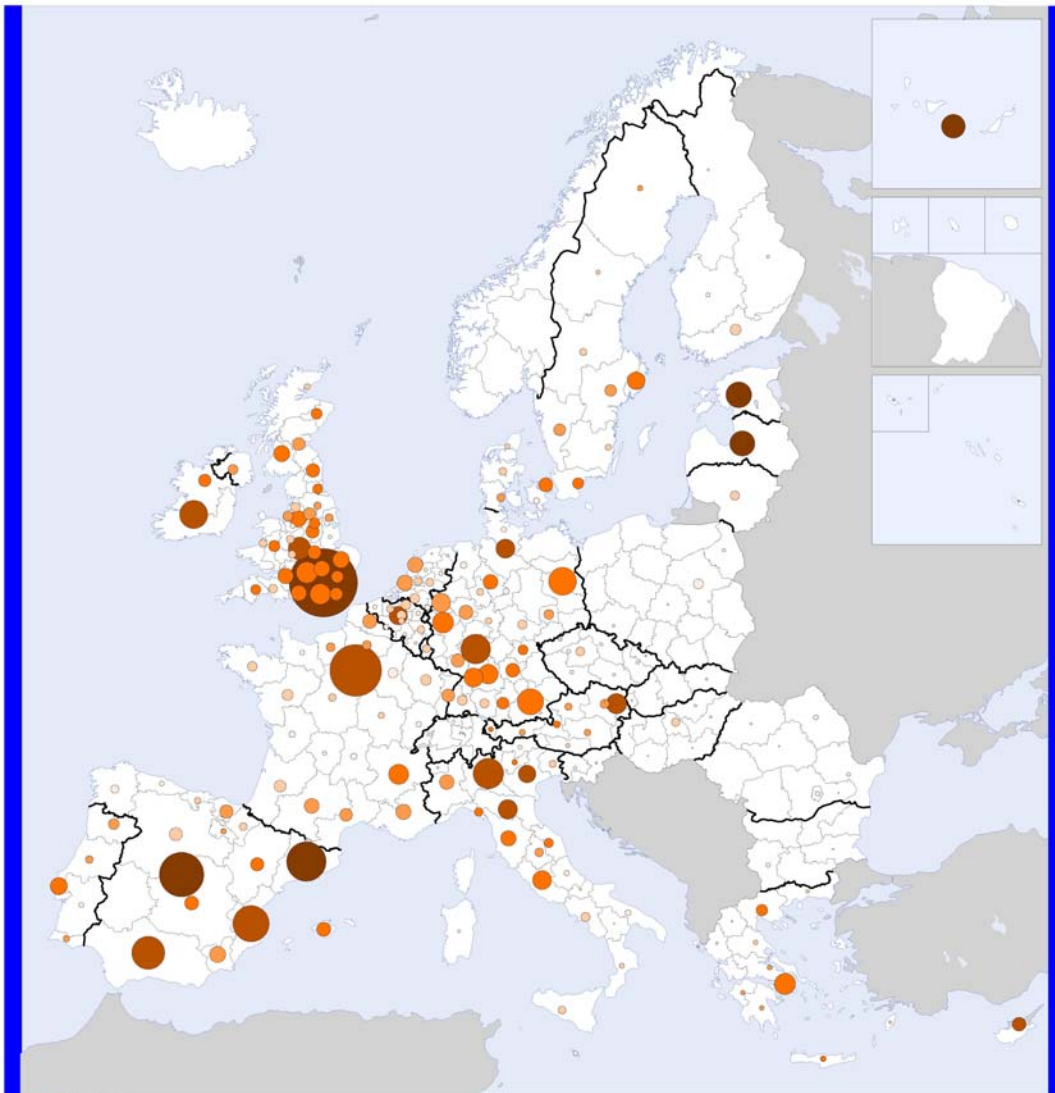
Source : IGEAT, 2011
Origin of data : University of Sussex, 2001

Share of migrants residing in the USA (%)

- 0 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 93

The two following maps show the attractiveness of European regions (NUTS 2) for all non-EU born persons as well as for non EU-born persons with high level of qualification. These are two examples of possibilities offered by Labour Force Survey. Other indicators will be achieved using this source.






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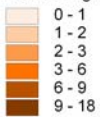
© EuroGeographics Association for the administrative boundaries

Highly qualified residents born outside EU 27 (2007-2009 average)



Source : IGEAT, 2011
Origin of data : LFS, 2009

Share of highly qualified residents born outside EU 27 (%) 2007-2009



3. Clarification on the definition and methodology used to produce “typologies” in the different fields of this project as mentioned in the Interim Report.

There is no general answer to this request. Several typologies are planned in different areas, with many different methods.

This includes the use of

- ascendant hierarchical cluster
 - the combination of Principal Component analysis and ascendant hierarchical cluster
 - the use of Intramax and MAXCOR method on countries flows at the world level
 - mix of quantitative and more qualitative approaches
- etc.

4. Revised table of content for the Draft Final Report

The final report

In the final report, we only produce policy-relevant information focusing thus on final results. The whole scientific approach will be turned upside down by showing the final results and commenting them in-depth. These results are then used to be translated at the end of the day into policy options. The general approach developed in WP2.5 is the base of the structure of the final report.

The whole thematic scientific approach will be developed as complete and coherent working paper to be put in scientific annexes including theoretical background, methods and data, results and conclusions.

Chapter 1. Key-drivers of globalization

Using literature and scientific analyses, we identify and develop the major key-drivers of globalization as the first main pillar of the final report, including the current trends of these drivers and possible breakage points in these trends. The ESPON 3.2 Scenarios project has already identified a series of driving forces, but did not go very far. But this part should also build upon the policy relevant documents, mainly the EU2020 Strategy, the 5th Cohesion Report on Economic, Social and Territorial Cohesion and the Territorial Agenda of the European Union. We plan on providing a more detailed list, also including a differentiation between those drivers which have remained stable and those which have changed because of the current economic crisis. This will be done through the literature survey – nearly achieved but not yet integrated – as well as specific analyses implemented within this project. Of course, key-drivers focusing on territorial impacts will also distinguish between the world regional scale and the city/regional scale.

Chapter 2. Europe and its territories in the world

This part of the report aims at synthesizing the role of Europe and its territories in the world-system on the basis of the different thematic analyses proposed. For each relevant scale, we develop typologies which describe the roles of territories in the world-system and/or global networks.

The chapter is structured according to the relevant scales:

The macro1-regional scale and the position of Europe in the world

The position of European regions in the world

European cities in the world

We propose to integrate the results of the different work packages through the different scales they deal with. This will result in three synthetic typologies at the city, regions and macro-regional scales:

City scale. By integrating the results of the networks and flows analyses of WP 2.3 and of the urban structure implemented in WP2.2.2, we will provide a typology of cities according to the intensity (synthetic index of connectivity derived from network analysis) and nature (types of services, type of gateways...) of their connections with the rest of the world;

Regional scale. The analysis of flows and networks implemented in WP 2.3 will enable us to assess the role of European territories in globalization as well as the impact of the global space of flows on

¹ When we use the term macro-region in the report it is very clear that these are not the political macro-regions within EU such as the Baltic region. We are speaking about large regions at the world level (Northern Africa, Middle East etc). The intra-EU macro-regions are not taken into consideration in our analyses.

European territories. WP 3.1 will provide a typology of regions according to their position in the international division of labour, on the basis of existing studies complemented by analyses based on regional trade statistics as well as value chains. In this synthesis, we will go a step further by integrating the results of the other WPs (attractiveness for migrants, position of the knowledge flows, presence of gateways) to provide a typology of regional vulnerability and strength towards globalization.

World regions scale. First, we will propose classifications of world regions according to their role in the world-system as well as their continental structures. Second, we will classify world regions according to the nature and magnitude of their relations with Europe. This will integrate the results of WP2.3 and WP2.4 which take into account the human, economic, knowledge and political flows between Europe and the other world regions in order to provide a synthetic typology of the relationship of the world regions with Europe. This might for example distinguish between world regions with limited economic flows with Europe but strong political cooperation (this might be the case for some neighbourhood regions) or weak political cooperation but intense economic flows.

Chapter 3. Prospective and visions for Europe in the world

By crossing the key-drivers of globalization and typologies at different scales, we will provide prospective approaches at both world regions and city/regional scales. This means that considering the general trends observed and the role of territories in the global economy and networks, we will try to assess how the different types of territories might evolve in the future. This qualitative prospective approach is thus applied to types of regions and does not provide prospective views for each European region individually.

Chapter 4. Policy options

According to the method developed in WP2.5, we will attempt translating these results into policy options at both the European and city/regional scale. Concretely, this raises three different political questions:

1. what can regions and cities do about their possible evolutions in the world-system?
2. which territorial policies could improve the European competitiveness in the world and/or social and territorial cohesion?
3. how can EU position itself in the world-system and how would this impact cities and regions?

The policy options which derive from the answers to these questions should of course take in consideration the relevant policy documents, mainly the EU2020 Strategy, but also the 5th Cohesion Report on Economic, Social and Territorial Cohesion and the Territorial Agenda of the European Union. From these documents, we should extract the major political objectives of the EU in order to propose and to assess the policy options in line with these political objectives. The analysis of these policy documents will be achieved in the next months as a necessary background and step toward policy options.

1. At the regional scale and cities scale, in line with the previous approach, policy options will be segmented according to the types of regions and cities. First, regions and cities are more or less directly related to the space of global flows, at least they are not connected in the same way. Obviously, gateways and global cities are more directly concerned than some rural peripheral areas which are less directly connected to global networks. Second, according to their structures – mainly their position in the international division of labour – globalization processes affect regions and cities across Europe differently. Typologies of regions and cities according to their structures and position in

the international division of labour (provided in the first step) are thus very important in order to establish relevant segmented policy options at these scales.

2. Territorial policies obviously impact cities and regions but also Europe as a whole. For example, should we invest mainly in the global cities, which are the gateways of globalization, to improve Europe's position in the world? What would be the negative consequences of such a choice in terms of territorial and social cohesion? Or, since these gateways are already well connected in the global networks, should we rather support second-ranked or even smaller cities to be better connected to the global networks?

Of course, the answers to these questions cannot be separated from the question how Europe positions itself in the world.

To reflect upon the position of Europe in the world, we build upon two opposite visions partly relying on "Europe in the world" visions. A third vision is also examined that includes the European neighbourhood. The main opposition is between a closed and an open Europe.

The "closed Europe" (or continent vision) is largely in contradiction with the official vision of European documents which sometimes ignore globalization but rarely blame it, the social and political forces that could support such a vision are not mentioned in the ESPON report. Indeed, these forces exist because this vision could rely on both left Keynesianism and some conservative forces which could call for more protection, not only in terms of security (where this vision fits best with the official one), but also in economic terms. In the new context of the crisis, we cannot exclude the fact that these visions could gain some stronger support.

The "open Europe" (or archipelago vision) starts from the assumption that network relations are more important than purely geographical proximity" (Europe in the world, page 74). In this perspective, global cities and/or gateways have a central role to play in the future of Europe in the new context of globalization. In a normative vision, the main features are openness to global networks which implies free trade, deregulation and low European protection. It states that the concentration process in global cities is a necessity to face the challenges of globalization.

A third option takes the neighbourhood of Europe as a key to Europe's position in the world. In a normative vision, it insists on the integration of a territory from Russia to southern Africa in order to better face global competition, secure its frontiers and increase opportunities for the growth of the European economy.

The project will not choose between these different visions but rather assess whether they are in line with the major EU objectives: competitiveness, social cohesion and territorial cohesion. This project will give few insights about the impact these visions would have on social cohesion but could provide more concerning the consequences in terms of competitiveness and territorial cohesion.

We will mainly assess in a qualitative way how these visions might impact the competitiveness of the different types of regions in the same logic as in the first point.

The scientific report

The scientific annexes gather all thematic approaches and provide the necessary scientific information which underlies the results presented in the main report.

List of scientific Working papers

Working paper 1. World divisions and world regions. (Responsible: Clarisse Didelon, CNRS)

Working paper 2. Urban structures and connectivity: a typology; comparison with US (Gilles Van Hamme, IGEAT-ULB)

Working paper 3. Europe in the world cities network (Responsible Kathy Pain from Reading with Hoyler, Lizieri, Taylor, Vinciguerra).

Working paper 4. Urban connectivity, structures and performances (Responsible: Gilles Van Hamme, IGEAT-ULB, with Pain and Vinciguerra, Reading University). This paper is also linked to WP2.3.1.

Working paper 5. Territorial inequalities (Responsible: Gilles Van Hamme, IGEAT-ULBshort)

Working paper 6. London case study (Responsible: Kathy Pain, Reading)

Working paper 7. Europe and its regions in the international division of labour: toward a typology. (Responsible: Gilles Van Hamme, IGEAT-ULB)

Working paper 8. Global value chain analysis and offshoring process in Europe - case studies of :

8.1. Clothing industry (Poli Roukova, BAS)

8.2. Software industry (Poli Roukova, BAS)

8.3. Automotive industry (Peter Warda, JIBS)

Working paper 9. Mapping the position of Europe in real estate flows (Responsible: pain, Lizieri, Vinciguerra, Reading University)

Working paper 10. Stock exchange flows (Responsible: Maude Sainteville, CNRS)

Working paper 11. Knowledge flows between Europe and the triad. To be extended at the country level and/or toward other non European parts of the world than US and Japan (Responsible: JIBS, already done, some additions needed)

Working paper 12. Meta analysis on spillovers on knowledge flows (Responsible: JIBS)

Working paper 13. Determinants and patterns of human mobility in Europe in the world context (Responsible: Montanari, Staniscia, Sapienza University)

Working paper 14. Mobility of students and researchers with a special focus on Sapienza in Rome (Responsible: Montanari, Staniscia, Sapienza University with Yann Richard, CNRS)

Working paper 15. Maritime networks, port systems, and gateways (Responsible: Ducruet, CNRS)

Working paper 16. Case study on Le Havre and the Seine corridor

Working paper 17. Europe and European cities in the airflows (Responsible: IGEAT-ULB)

Working paper 18. Political cooperation between Europe and the rest of the world. Regionalism or not regionalism? (Responsible: Yann Richard, CNRS)

Working paper 19. The regionalization of the world: the example of trade agreement (Responsible: Gilles Van Hamme, IGEAT-ULB with Yann Richard; already done but to be improved)