Territorial Impact of globalization on European Regions

Inception report (31 august 2010)

Under the coordination of:
- IGEAT-ULB: Van Hamme Gilles, Medina-Lockhart Pablo, Marty Benoît

With the participation of:

- SAPIENZA ROME UNIVERSITY: Montanari Armando, Staniscia Barbara

- JIBS: Warda Peter, Karlsson Charlie

- CNRS-France: Richard Yann, Didelon Clarisse, Ducruet César, Joly Olivier, Sainteville Maude

- The University of READING: Pain Kathy

- NIGGG - Bulgarian Academy of Sciences: Roukova Poli

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1. General objectives and architecture of the project

The ESPON 3.2 project on spatial scenarios identified Globalization as one of the four main challenges for European regions in the future. This has been taken up in diverse documents dealing with regional development such as the Territorial Agenda and the 4th Report on Economic and Social Cohesion, as well as, to a limited extent, the Green Paper on Territorial Cohesion. Beyond this regional scale, raising the competitiveness of Europe as a whole in the context of Globalization is also one of the major driving forces behind the most important EU-level policy of the last decade, the Lisbon Strategy.

Within this policy context, the main question in the policy domains covered by ESPON is obviously the role and fate of regions and regional economies in Europe's path in a globalised economy. This means, on the one hand, the impact of increasing openness, increasing trade and more global location decisions on the economic development of individual regions and, on the other hand, the role of regions in the overall position of Europe in the global economy. The project raises both of these issues:

1. the impact of globalization on European territories at different scales. Since globalization certainly has a spatially differentiated impact, this first issue altogether raises the question of regional competitiveness in globalization but of its impact on territorial and social cohesion. How can territorial policies help to improve the position of the different types of regions in the world and ensure the objectives of social and territorial cohesion despite the potentially unequal impacts of globalization on European territories?
2. The second issue takes the reverse perspective. What is the situation of Europe in the world and how can it be improved? More precisely, how can territorial policy improve European competitiveness? For example, should we invest mainly in the global cities to improve Europe's position in the world?

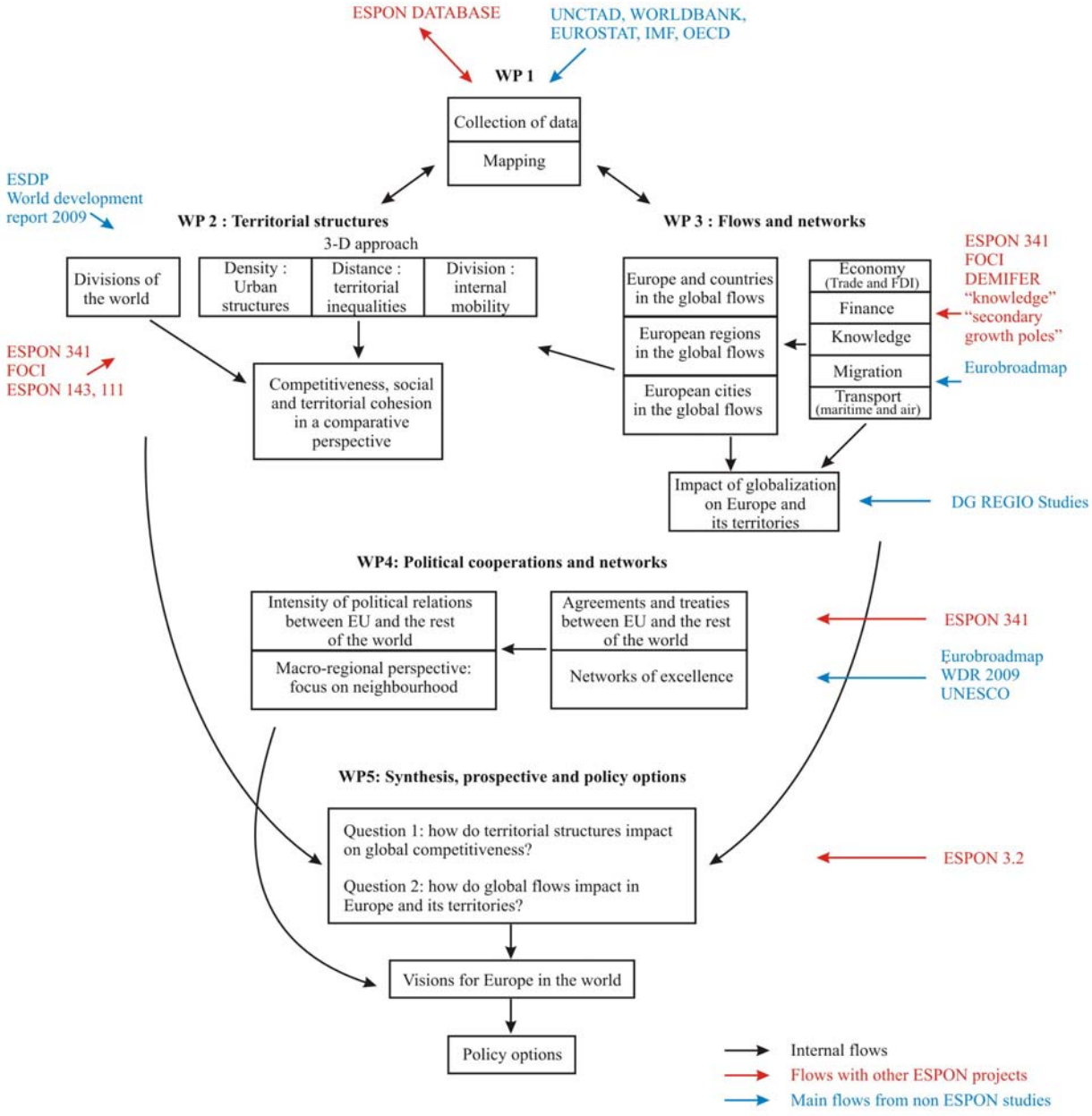
In the project, to give insights on these two major issues, we intend to achieve three main objectives which constitute the main material of the research:

i. the first main objective is to assess the territorial structures of Europe in a comparative perspective and their impacts on competitiveness, social and territorial cohesion (WP2.2).
ii. the second major objective is to assess how Europe, its regions and cities participate in the global flows and networks (trade, FDI, finance, knowledge, human mobility) and how the global processes impact on the territorial structures of Europe (WP2.3)
iii. the third major objective is to analyse how Europe and its territories position themselves in the world through cooperation and networking with other parts of the world and how it participates in achieving the objectives of improving competitiveness as well as social and territorial cohesion (WP2.4)

These objectives will feed each other as indicated by **figure 1**. Work Package 2.5 has the objective of integrating the different WP's in a forward-looking and political perspective.

This inception report will give precisions about data, methods and deliveries of each sub-work package. The main messages from the literature are also briefly synthesized in this inception report but more detailed literature review is to be found in the annex for the following topics: divisions of the world, cities in globalization, European cooperation and regionalism and migratory flows. These annexes aim at providing the current knowledge in terms of theories, facts and figures on which we can build our own specific research. This will help when thinking about policies since these reflections should integrate the current knowledge as much as the new insights provided within this project.

Figure 1: General implementation of the project



2. Data, Methods and deliveries of the main WP's

WP 2.2. Territorial structures in a comparative perspective

WP 2.2.1. Divisions of the world: Europe in a comparative perspective

I. Objectives

- To provide a functional division of the world that can be used throughout the project
- To compare Europe with other parts of the world according to competitiveness, territorial cohesion and social cohesion.

Our starting point will be the results of the ESPON 3.4.1. "Europe in the World" project, but we propose to go deeper in the analysis of territorial structure and pattern of the world using more indicators than strictly "economic activities" by exploring other indicators that will provide a more balanced and therefore richer way to describe the world.

II. Main messages from the literature: divisions of the world

Many divisions of the world coexist and they belong to different kinds. According to the literature reviewed two types of world divisions can be identified. First, some conceptual divisions of the world based on metageographies, i.e. "set of spatial structure through which people order their knowledge of the world". Then, functional divisions of the world, that seems to be more neutral, but that are often based also on metageographies. Between those two kinds of divisions, a third intermediate one can be identified: the continents division of the world.

Conceptual divisions of the world. Based on a conceptual specific point of view of the word, divisions of the world placed in this category are both results and instrument of ideological power, as they are intensively used by politician, diplomats and military strategist… The East/West divisions of the world belong to this category but also the "North/South", "developed/under-developed", "core/semi peripheries / peripheries". We should also add in this category the "civilization" division of the world proposed by S. Huntington mainly because of the correlative message of conflict between them. ***Continents*** are an ancient subjective (European) division of the world often used as functional neutral regionalization. They seem neutral and even "innocent" but they raise more and more problem in the organization of information at the world level.

Functional divisions of the world. As far as grouping of states are considered, **regionalization** is a division of the world that emerges with the signature or cooperation treaties (EU, ALENA, MERCOSUR, ASEA etc…). But those functional divisions of the world are not operational for a geographical analysis at the world scale because some of them are overlapping and in the same time some spaces are excluded. For statistical purposes, the **United Nations statistical division** proposes two main divisions of the world on its web page "Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings"[1] but unfortunately does not explain its methodology. The first division proposed is a hierarchical division in 4 levels. In this first division, geography is mobilized to provide a division that seems neutral and objective. The other divisions proposed are grouped under the name "selected economic and other grouping". The first one classifies the geographical regions seen previously according to their level of development. Two "regions" are proposed "developing regions" and developed regions. This quite simple division of the world is commented by a note stating that there is no "established convention for the designation of "developed" and "developing" countries or areas in the United Nations system" and restringing then the decision taken "in practice" concerning one particular country or region. Another

[1] http://unstats.un.org/unsd/methods/m49/m49regin.htm

example is the **divisions of the world proposed by the World Bank.** They mix an economic, geographical and maybe cultural approach. On the page "countries and regions" of the World Bank web site[2] six regions plus one are proposed. The "plus one" region includes USA, Canada, Australia and developed countries in Europe. The rest of the world is where the World Bank deploys its activities. It is split into 6 regions that seem to be built on geographical and cultural criteria.

Other **operational divisions** of the world have been produced but they are confined to the academic world. The WUTS (World unified territorial system) set up by the ESPON 3.4.1. "Europe in the World" is an example of academic operational division of the world. It is a proposal of harmonized hierarchical division of the world based on the model of NUTS created by Eurostat. This division of the world has purely statistical and cartographical objectives and it is organized in 5 hierarchical levels, from the level of States (WUTS5) to the level of the World (WUTS0). This WUTS system has been built through a participative method with all partners implied within the ESPON 3.4.1 project. The WUTS system proposes 5 hierarchical levels, plus the world level:

- WUTS 0: the world
- WUTS 1: three global regions (EurAfrica, Americas, AsiaPacifica)
- WUTS 2: seven macro regions
- WUTS 3: seventeen meso regions.
- WUTS 4: twelve micro regions (only at the level of European Union and its neighbors).
- WUTS 5: States

One of the main advantages of the WUTS is the correlated comprehensive creation of nomenclature that allows aggregating or disaggregating easily the spatial units. That is very convenient for statistical and cartographical purposes. However the major critic that could be addressed to the WUTS is the methodology behind it. The first proposal was based on a "mixture" of conceptual visions of the world but also with some functional preoccupations. It used both the continental vision (visible in the names used), the north/south vision (making the WUTS 1 region as the grouping of a developed core and its "natural" semi peripheries and peripheries), but also a kind of civilization vision with for example when aggregating "Latin America" or by creating a north African / Western Asian area that isolate the "Muslim world". As an example of "functional" criteria used in the constitution of WUTS, is the decision assumed by the authors to use the criteria of aggregate "which could be relevant for the elaboration of European policy recommendations or for the development of strategic Plans". This operational perspective is even more stressed by the flowing division in micro region that is only proposed for European Union and its neighbors. This Eurocentric way used to build world divisions is related to the project orientation but is quite damageable in a global perspective. Last but not least, some even more subjective points of view have been mobilized for the elaboration of the WUTS, for example when integrating the partners' comments that were clearly based on representations.

In ESPON DB the problematic of world division is not at stake, but the partners of this project are preparing a database at the world level that could allow to shift from an existing division of the world to another (between Chelem database and UNPP database for example). Our objective in ESPON TIGER is to keep the principle of the hierarchical division of the world that is very convenient and to build a new division of the world with a more solid methodology.

III. Approach, methods and data

In order to decide which spaces to compare with Europe and what to compare, we make some important choices.

Which space to compare? We acknowledge that the wish of the ESPON program is that we provide comparison at least with North America and Asia regions. But we have to be careful in the choice of countries that will compose those regions. There is no discussion about the fact that the three spaces

[2] http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/0,,pagePK:180619~theSitePK:136917,00.html

are quite different at least in a political point of view: European Union is quite an exception with its political integration processes. So two different works should be done in parallel:

- Produce "neutral" functional divisions of the world covering the entire world space in order to analyze the world territorial structure. This will be done at the state level and whenever it will be possible at the infra state level. That will allow us to assess the position of the European territory within the world territory and to check if homogeneous world regions appear *a posteriori*.
- Build three *a priori* regions (European, North American and East Asian) in order to compare the European Union with its main world competitors regions.

Which phenomenon to compare? In order to choose the indicators that will allow us to compare Europe and other world regions, we will take the "Lisbon strategy" as a starting point. Our first task will be to decide what are the indicators better reflecting the aims of the Lisbon Strategy: to make the EU "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion" by 2010. Those indicators will be gathered in a database covering the 1990-2010 period at world country level (see Table 1 of proposed indicators below).

IV. Workplan and deliveries until the end of the project

Date / Time period	***WP***	***Task***	***Main Deliveries***
Aug - Sept. 2010	WP 2.2.1	Check availability of data at world level	Final list of data that will be collected
Sep 2010 to Feb 2011	WP 2.2.1	A) Building of the database. Realization of explorative maps of each simple indicator. B) Literature on world regions and world divisions. Proposal of comparable world regions. C) Comparison between EU and other comparable world regions for simple indicators.	Database at world level (national scale) "Atlas" of the Lisbon Strategy indicators at world level
Mar to Sep 2011	WP 2.2.1	Analysis at infra national and national scale at world level of the different indicators in order to check the existence of "a priori" world regions. Deeper comparison between EU and other comparable world regions.	Database at world level at infra national scale whenever it is possible" Functional division of the world
Sep 2011 to Feb 2012	WP 2.2.1	Deepening of the work on the regionalization of the world by using regionalization methods based on the fuzzy logic approach taking into account the three conceptual principles of regionalization (homogeneity, interaction and localization and based on the concept of similarity)	Report on comparison between EU and two other comparable world regions and on regionalization of the world

Table 1: Proposal of ESPON TIGER database for WP 2.2.1 : divisions of the world

I. Indicator for competitiveness

1.1 - Wealth and economic growth

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
GDP	1952-2006	Madisson database	Yes
GDP per inhabitant	1952-2006	Madisson database	Yes
Income	???	???	To be checked

1.2 - Population and demographic strucure

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
Population	1950-2050	UNPP	Yes
Migration	1950-2050	UNPP	No
Dependency ration	1950-2050	UNPP	No
Life expectancy	1950-2050	UNPP	No
Median age	1950-2050	UNPP	No
Age structure	???	???	No

1.3 - Telecommunications

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
Telephone subscriber	1994-2009	UIT	To be checked
Cellular	1994-2009	UIT	To be checked
Internet host	1994-2009	UIT	To be checked
Internet User	1999-2009	UIT	To be checked
Nb PC	1994-2009	UIT	To be checked
Telephone lines	1994-2009	UIT	To be checked

1.4 - Research and tertiary education

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
Diploms by domains	2000-2005	UNESCO	??
Student in tertiary educ.	2000-2005	UNESCO	??
Origin of student	2000-2005	UNESCO	??
Public expense by student	2000-2007	UNESCO	??
R&D expenses	1975-2009*	UNESCO	??
R&D personnel	1975-2009*	UNESCO	??

1.5 - labour market

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
Cost of work	1995-2008*	OIT / LABORSTA	??
Employment	1995-2008*	OIT / LABORSTA	??
Employment by sector	1995-2008*	/ LABORSTA, World E	??
Unemployment	1995-2008*	OIT / LABORSTA	??

II. Territorial and social cohesion indicators

2.1 - Health

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
Not yet decided			

2.2 - Environmental indicators

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
CO^2 emissions	1990-2006	???	
Ecological footprint	??	??	
Other indicators ?			

2.3 - Poverty and inequalities

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
UN HDI Index	???	UN	
Gini index	-	UN, World Bank	
Poverty	-	UN, World Bank	

2.4 - Gender approach of work indicators

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
Unemployment by gender	1995-2008*	OIT / LABORSTA	??
Income by gender	2005	PNUD , HDR	??

2.5 - Synthetic measures of territorial inequalities

Indicator	*Time coverage*	*Sources*	*Infranational scale ?*
standard deviation of GDP per capita and other indicators at different scales	1960-2008	IGEAT, Eurostat for Europe, BEA for USA	not relevant
sigma convergence measuring the evolution of the GDP per capita	1960-2008	IGEAT, Eurostat for Europe, BEA for USA	not relevant
Comparison between GDP and incomes	1960-2008	IGEAT, Eurostat for Europe, BEA for USA	not relevant

WP 2.2.2. Territorial and urban structures: a comparative perspective

I. Objectives:

- To assess the contemporary urban structure in Europe, including the role of gateways. More precisely, to assess the position of European cities in the cities world network;
- To compare the urban structure of the European territory with that of other developed world economic regions identified as strongly connected to the advanced knowledge-based global service economy;
- To assess the territorial inequalities of Europe in a comparative and long term perspective.

II. Approach, methods and data

In this part of the study, we will build on the data and analyses provided by the ESPON 1.1.1 and 1.4.3 projects as well as the current FOCI ESPON project. By using the results of WP2.3, especially WP2.3.1, WP2.3.2 and WP2.3.5, we will be able to assess the connections between European cities and the rest of the world and moreover to provide an in-depth analysis on gateways (financial, maritime, air), including the physical assets of these different types of gateways. It will enable us to map the changing urban structures which support connectivity to global service business flows across the European territory. Second, this Euro-centric mapping will be compared with contemporary urban structures present in other 'developed world' economic regions. Together, these two scales of comparative urban analysis (within Europe, and between Europe and other developed world regions) will inform consideration in WP2.3.1 and WP2.3.2 of how contemporary global spaces of business flows map onto the territorial structures of urban spaces of places.
At a regional scale, the evolution of territorial disparities within Europe and other world regions will be assessed in a time perspective to achieve a comparative measure of territorial cohesion.

1. Sources and methodologies for studying urban structures

Three major steps are followed to provide an assessment of European urban structure, also in a comparative perspective with USA:

1.1 – The delimitation of cities
Several delimitations of European cities exist. In order to be comparative, we will use functional delimitations of cities, which correspond to Large Urban Zones (LUZ) provided by the Urban Audit. While the basic idea is to consider the influence area of core cities through daily commuting, exact definitions differ across Member States. In order to have more statistics, we also use the NUTS3 proxy of LUZ, that is the NUTS3 that fit best to the LUZ area defined by the Urban Audit (see FOCI interim report for precisions). Finally, ESPON DB proposes a more homogenous delimitation of European cities based on functional areas (FUA).
In USA, the delimitation of Metropolitan Areas has been provided on the same principle, but in a much more homogenous way throughout the US territory. The Office of Management and Budget (OMB) has defined « Core Based Statistical Area » throughout the country. Metropolitan Areas include all counties which send more than 25% of their workers to the core area. This definition is also used by the US census Bureau and the Bureau of Economic Analysis which makes easy the collection of data for US metropolitan areas.
Delimitations are thus roughly comparable between Europe and USA as long as we use Large urban zones and Metropolitan areas. On this base, we provide a list of cities, which include all European and US cities with more than 500000 inhabitants.

1.2 – A database for large urban zones (Europe) and Metropolitan areas (USA)

On the base of the list of cities and their delimitation, we build a database that includes:
- basic indicators, such as population, GDP, GDP per sector from 1995 onwards

- More sophisticated indicators that allow understanding the position of cities in the world networks. Indicators include the number of headquarters, the extra-continental flights, GAWC indicators on networks of advanced services… Most of these indicators will be collected in the WP2.3 but not all. This includes mainly indicators of gateway function (airports, ports, financial gateways, commanding cities). The weight of the major gateways will be assessed at the global level, but mainly we will compare the internal level of concentration of the gateways at the macro-regional level. For more details, please refer to WP2.3.2 and 2.3.5.

1.3 – Mapping and analyses

Finally, we propose to map and analyse the indicators to assess the urban structure. Some simple analyses include:

- indicators of urban concentration in terms of population, employment and added value (share of the 5,10, 50 first cities; gini coefficient…);
- indicators of concentration of gateway functions (airports, ports, financial centres, political functions);
- indicators of economic structure of the cities and regions (share of manufacturing, of basic or high-level services).

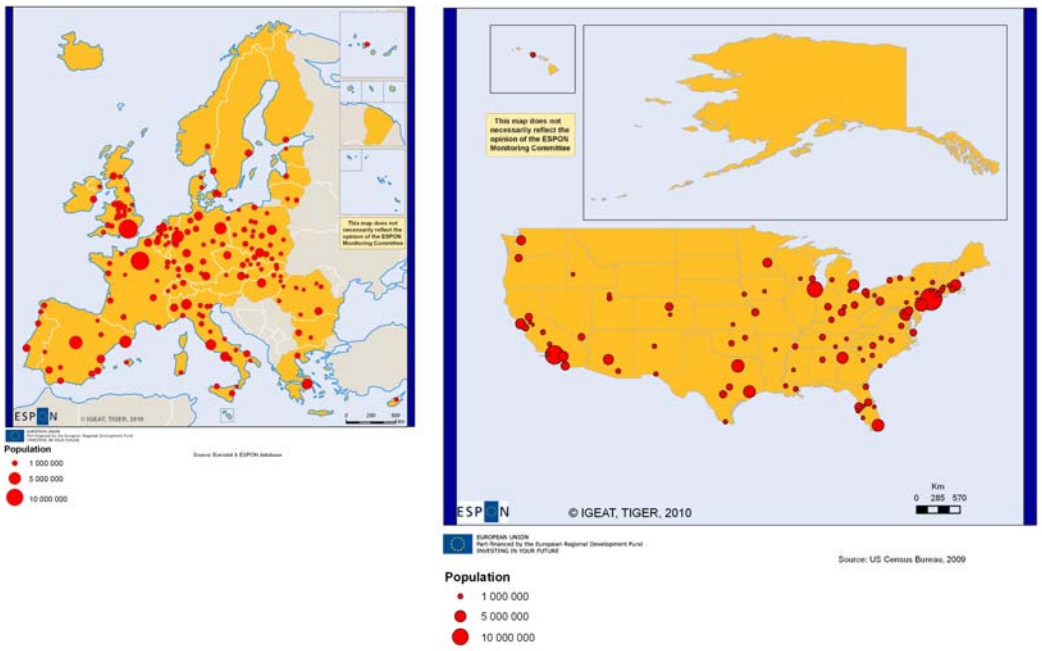
Map 1 and table 1 provides an example of this approach. From Table 1, it is evident that, compared to US, urban concentration is much lower in the European ESPON space.

Table 1. Population of major cities in US and Europe in 2006

Rank of the cities	Europe (ESPON space)			USA		
	Total	Share of		Total	Share of	
		the cities population	The whole population		the cities population	The whole population
1 to 5	41 012 300	17%	8%	52 818 471	27%	18%
1 to10	61 055 900	25%	12%	78 639 292	40%	27%
1 to 20	87 813 300	37%	17%	112 803 829	58%	38%
1 to 50	139 554 600	58%	28%	160 919 486	83%	54%

Source: FOCI, Urban Audit, US Census Bureau

Map 1. Population of cities (functional areas) with more than 500000 inhabitants in US and ESPON space, 2006



2. Sources and methodologies for analysis of territorial inequalities

For Western Europe, it is possible to go back until 1960 in terms of GDP level, using national statistics at regional level. With EUROSTAT, we can use indicators from 1980 onwards. In terms of GDP per capita; Eastern Europe can only be integrated from 1995 onwards. In the USA, it is possible to have much more historic data at the state level using the data of the *Bureau of Economic Analysis.* Data at a more detailed geographical scale are also available: this will enable us to achieve better comparability with European data. Data from the US Bureau of the Census and of Labor Statistics can also be used for more detailed scale analysis.

Of course, when measuring territorial inequalities in a comparative perspective, the scale question is decisive. This question of scale has been explored in a report for the European Parliament ("Regional disparities and cohesion: what strategies for the future", May 2007) and will be further developed in this comparative and long term perspective we intend to implement in this part of the project.

Analyses and indicators

- standard deviation of GDP per capita at different scales (national, NUTS2, NUTS3)
- Convergence measures of GDP per capita at different scales:
  - sigma convergence C_σ measuring the evolution of the GDP per capita over n years, calculated as the annual variation gap of the coefficient of variation between two periods t_0 et t_n, where m_i is the GDP mean of the year i and σ_i its standard deviation
  - beta convergence C_β which measures the relation between the GDP per capita (logarithmical) variation over a given period compared to the initial level.
- Comparison between GDP and incomes in order to assess spatial redistribution of revenues at the NUTS2 level.

III. Workplan and deliveries

Date / Time period	***WP***	***Task***	***Main Deliveries***
Sep 2010 to Feb 2011	WP 2.2.2	Making of the database; mapping of all basic indicators for US and Europe	Database for Europe and US cities Maps of basic indicators for European and US cities
Mar to Sep 2011	WP 2.2.2	-The specification of a set of indicators identifying the *processes* of urban change; - Completion of the database using the results of network analysis of WP2.3; - Building a database on territorial inequalities for Europe and US, as well as other big countries in a time perspective;	
Sep 2011 to Feb 2012	WP 2.2.2	- Analyses of the urban structure in a comparative perspective - Analysis of the evolution of territorial inequalities in a comparative perspective	- Maps of gateway functions for European and US cities - Synthetic indicators (and mapping) of territorial cohesion in comparison with other parts of the world - Final report that include a complete assessment for European urban structure.

WP 2.3. Flows and networks

WP 2.3.1. Economic flows and networks

I. Objectives

- To answer the question Globalization or "continentalisation". It requires assessing at different scales the openness to globalization and the geography of this openness to the outside world;
- To assess the national/regional/cities position in the international division of labour;
- To assess the territorial impacts of globalization inside Europe.

II. Messages from the literature

Trade and FDI are the key drivers of global economic integration (OECD, 2007a). In the two last decades, trade and FDI flows have considerably increased in both absolute and relative terms. The main drivers of these processes are well known: reducing transportation and communication costs, liberalization of trade, increased specialisation at different scales, globalization of value chains (OECD 2007b; Curve, 2007). Transnational companies are among the main actors of this process: by increasing cross border vertical integration, they induce at the same time growing flows of investment and trade (intra-branch and intra-firm trade). This global process has, as we already stated, unequal impacts across territories. In Sassen's dual perspective (Sassen, 1996), it produces at the same time a dispersal spatial process and a concentration of commanding and strategic functions in some big cities. In such a perspective, globalization should benefit first global cities which concentrate high level and commanding functions and are the most interconnected spaces at the global level. But it should also benefit those regions which are able to take advantage of the dispersal process of production of goods and services. Within Europe, this is mainly those regions and cities that are able to rise in the value chain and/or restructure to higher added value productions (DG Regio, 2008, 2009). This is because for most parts of Europe, regions are not anymore able to compete with extra-European producers of intensive labour production, with temporary exceptions. In theory, the regions most specialized in this type of low qualified strongly competing sector should be the most vulnerable to globalization. However, the DG Regio study concluded that this was not necessarily the case since a significant part of these regions has been able to rise in the value chain or restructure their economies.

III. Data and methods

Our project should build on this existing base (DG Regio studies, ESPON 3.4.1, OECD studies) and develop new improvements concerning territorial impacts of economic globalization. To assess the position of Europe, its regions and its cities, we will use several sets of original data and methods.

1. Regional trade

Regional trade statistics will enable us to go beyond the sectoral approach by having a more direct approach on the economic links between regions and the rest of the world. We are gathering these statistics through different national sources. FDI regional statistics in value will also be collected.
The final objective is to assess the position of region in the division of labour as well as the geography of its trade.
These data will enable us assessing the following indicators at different scales (region, nation, Europe):

- **rate of openness** : trade/GDP; FDI/GDP
- **The geographical specialization of trade and FDI:** share of the different parts of the world in the international trade;
- **The product specialization of trade:** share of the different types of products in the international trade;

At the European and country level, a time perspective is possible until 1967 through CHELEM database. In contrast, regional trade is only available for recent years in most of countries.

The following table gives the availability of regional trade data across ESPION countries:

Country	NUTS level	Availability	by commodity	by country	year	Main source
Österreich	0	HIGH COST			2007-2009	http://www.statistik.at/web_de/statistiken/aussenhandel/
Belgique-België	1	YES	CTCI digit2	all countries	2007-2009	Regional statistical offices
Bulgaria	2	YES	CTCI digit2	all european countries	2007	NSI (NVulkov@NSI.bg)
Ceska Republika	2	NO	CTCI, digit 1		2008-2009	infoservis@czso.cz
Deutschland	2	YES	CTCI digit2	all countries	2007-2009	https://www-genesis.destatis.de/
Danmark	0	YES	CTCI digit2	all countries	2007-2009	http://www.statistikbanken.dk/statbank5a/
Eesti	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
España	2	YES	TARIC 99	all countries	2007-2009	http://aduanas.camaras.org/
Suomi / Finland	2	YES	No product differentiation	World	2007-2009	http://epp.eurostat.ec.europa.eu/
France	2	YES	Specific classification	all countries	2007-2009	http://lekiosque.finances.gouv.fr
Ellada	2	HIGH COST	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Magyarorszag	2	NO	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Ireland	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Italia	2	YES	Sezioni Ateco 2007 (119)	all countries	2007-2009	http://www.coeweb.istat.it/
Lietuva	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Luxembourg	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Latvija	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Malta	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Nederland	2	NO	CTCI digit3	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Polska	2	NO			2007-2009	http://epp.eurostat.ec.europa.eu/
Portugal	2	YES	CTCI digit2	all countries	2009	http://www.ine.pt
Romania	2	HIGH COST			2007-2009	http://epp.eurostat.ec.europa.eu/
Sverige	2	NO			2007-2009	http://epp.eurostat.ec.europa.eu/
Slovenija	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Slovenska Republika	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
United Kingdom	1	YES			2007-2009	https://www.uktradeinfo.com/index.cfm
Kypros / Kibris	0	YES	CTCI digit2	all countries	2007-2009	http://epp.eurostat.ec.europa.eu/
Norvège	0	YES			2007-2009	http://statbank.ssb.no/statistikkbanken/
Suisse	1	YES			2007-2009	http://www.ezv.admin.ch/themen/

Table 2. Data on regional trade across ESPON countries

As we can conclude from the tables, the scale at which we can work on regional trade is usually large (NUTS1 or 2). We miss data for 8 countries at this stage for reason of excessive cost or because these data do not exist. For smaller countries, we might choose to keep national data, while for others, we will assess regional trade by breaking down detailed national trade with detail regional employment by sector.

2. Value/Commodity Chain Analysis

Since regional trade only gives a partial view of the position in the division of labour, notably because it does not allow assessing the task issue on a systematic territorial perspective inside Europe, regional trade analysis will be complemented by Value/commodity Chain Analysis.
To be exact, it will not so much allow the assessment of the position of each European region in the international division of labour as to achieve a better understanding of the processes and the dynamics in which European territories are involved. This analysis will be conducted in three different sectors: **clothing, software and automotive industry**.
By overlaying the results of these analyses with economic regional typologies (see for example those provided in ESPON3.4.2 on competitiveness), some geographic generalizations will be possible inside the European space.

Value chain analysis will be conducted through a survey that aims to answer the following questions:
- *What is produced where*? Or - Identification of distribution and implementation of tasks within the main value chain in which country/region/ firm participates.
- *How is it produced*? Or - Organizational forms and related governance structures within main value chains.
- *What is the social/territorial impact?* Or - Social consequences: quality of jobs, working conditions, labour standards, and wages

The selected methodological instruments are as they follow:

1/ Desk-top research –literature overview -it will provide knowledge about the research achievements in selected branches concerning current trends in their development and impact on different European regions. A literature overview of the existing studies on the position of European regions in the International division of labour by GVC and GCC analysis in terms of tasks rather than sectors will be done.
2/ Field survey (firm interviews) will support our research with recent developments of the focused sectors. It will include the following stages:

a) Firm selection
b) Design and elaboration of questionnaire
c) Implementation
d) Evaluation and analysis of the data,
e) Elaboration of variables for systematization of results, using regional sectoral data of trade and production
f) Draft report on survey findings

Firms will be selected according to size and ownership, kind of affiliation to European chains/networks, share of inward/outward production/services of total production, share of exports of total sales, share of EU markets.

Interviews will be done through completing of semi-structured questionnaire, where the questions will be aggregated in three sections:

- General characteristics
- Value chain characteristics: organizational forms and governance
- Territorial impact – labour issues

The number of surveyed firms is planned to be twenty. Ten interviews will be done under each case study divided by type of organization. The first one will be this of the foreign affiliates with vertical structured organization of production and second one - independent domestic-owned firms.

Concerning clothing and software industries, firms – respondents will be selected among these which are located in the two biggest towns of Bulgaria – Sofia and Plovdiv and their regions. Bulgaria is one of the less developed countries within EU and in the same time it shows a relative stable position in clothing sector and growth in software in terms of main indicators. It will be a very appropriate example which may confirm or reject our hypothesis about the development possibilities in EU ladding regions due to the globalisation challenges. The findings from the survey will update knowledges about the recent developments in investigated sectors in Eastern European regions. It will facilitate the analysis of regional trade data with more detail information which is not recorded by the statistic. They will contribute to the answers of research questions: what, where and how is produced and what is the territorial impact.

3. Network analysis

This will complement the previous approaches with analyses focusing on the advanced service economy. Indeed, the rising importance of the network organisation of the knowledge-based service economy has been recognised in the Lisbon Strategy since its inception a decade ago, but mapping flows in city-based network structures has proved empirically challenging in previous European research.

The approach to be adopted here applies network theory to the study of advanced producer services which are connecting European cities to the world city network applying Loughborough University expert Professor Peter Taylor's 'interlocking city-network model' to a European scale. Unique primary data on the location, size and functions of offices in global business service networks worldwide collected since 2000, will be analyzed to fill the present void in European analysis of city connectivity to their spaces of flows in a global context. This will inform consideration of the role of processes of spatial dispersion and concentration in the world service economy in relation to the urban territorial

structures in different areas of Europe. Globalization and World Cities (GaWC) Research Network data allows the connectivity of individual cities to a world-wide network of service nodes and changes in global connectivity to be calculated. Existing analyses at a global scale will be updated to investigate and map the connectivity of cities across the European territory to world-wide business service networks. Changes in the connectivity of European cities to other cities conferred by advanced producer services office networks will be analyzed for the years 2000, 2004 and 2008. Data on firms in six service sectors will be analyzed: banking/finance, insurance, accountancy, law, management consultancy and advertising. The analyses will refer to the world location and density of 100 firms in 315 cities in 2000 and in 2004, and of 175 firms in 526 cities in 2008. Analyses and visualisations of changes in the connectivity of the European urban system to the 'world city network' from 2000 to 2008 will show how the composition of European cities has changed within Europe and in a global context up to the half of 2008 when the financial crisis impacted on city economies worldwide. This will also shed light on the adjustment of Eastern European cities to 'new economy' advanced services in a European and global context.

4. By combining the different perspectives, we will assess the territorial impacts of economic globalization. On the basis of existing DG Regio studies about the spatial consequences of the liberalization of trade (2008, 2009), completed by value chain and regional trade analyses at the regional level as well as network analyses at the city level, we will provide a complete picture of the cities and regional participation in the global economy and of regional (and cities) vulnerability/strength in the face of globalization.

IV. Workplan and deliveries

Date / Time period	***Topic***	***Task***	***Main Deliveries***
Sep 2010 to Feb 2011	Regional trade	Collection of data on regional trade and FDI	Database on regional trade; mapping and analysis at European and national level
Mar to Sep 2011	Regional trade	Analyses about the position of European regions and nations according to trade	
Sep 2011 to Feb 2012	Regional trade	Analyses about the position of European regions and nations according to trade and relationship with economic structure and wealth.	1) Maps of regional and national trade according to product and geographical specialization 2)Typology of European regions according to trade
Aug - Sept. 2010	Value Chain analysis	1) Elaboration of synthesis report	1) Synthesis report: ' International division of labour among European regions: case studies of clothing industry and software services impact'
Sep 2010 to Feb 2011	Value Chain analysis	1)Regional trade data for clothing industry and software industry 2) Field survey preparation - Design and elaboration of questionnaire	1)Industry regional data base 2) Questionnaire draft
Mar to Sep 2011	Value Chain analysis	1) Field survey implementation: firm selection; interviews; 2) Evaluation and analysis of the data 3) Elaboration of variables for systematization of results	1)Draft report on the survey findings of clothing industry 2) Draft report on the survey findings of software services
Sep 2011 to Feb 2012	Value Chain analysis	1) Assessment of impact on division of labour from GCC/CVC prospect in European regions	1)Final report on regional impact of clothing industry - 20 pages 2)Final report on regional impact of

		1) Typology of European regions on the case of clothing industry 2) Typology of European regions on the case of software services	software services – 20 pages
Sep 2010 to Feb 2011	Network analysis	Data synthesis and analysis	Exploratory visualizations based on network analysis.
Mar to Sep 2011	Network analysis	Analysis and mapping	A series of schematic maps depicting the connectivity of the European urban territory to flows in the global advanced service economy benchmarking the position of 'Europe in the world' just before the recent financial crisis.
Sep 2011 to Feb 2012	Network analysis	Analyses of the position of European cities in advanced service networks and comparison with other types of network data.	Based on global service connectivity change data, a classification of nodal structures reflecting sectoral and functional clustering-dispersion distinctions in the contemporary European urban system.
Sep 2011 to Feb 2012	WP231		Synthetic typologies of the position of European regions and cities in the global economy.

WP 2.3.2. Financial flows and the impact of the financial crisis

I. Objectives

- To assess the position of Europe and its cities in global financial flows.
- To explain the spatial consequences of the crisis.
- To analyse data on real estate investment flows in Europe that create the 'spaces of places' in which the global service economy operates.

II. Main messages from the literature

The growing importance of transnational financial flows through global stock exchanges and property markets for cities has been recognised in the literature for at least three decades. A group of the world's most powerful international financial centres has been theorized as *embedding* capital flows in the 'global cities' literature (Sassen 1991, 1994, Budd 1999). The agglomeration economies associated with the location of stock exchanges and the clustering of international business services in such centres (Porter 1998, Taylor *et al.* 2003) have become increasingly dependent on the availability of physical infrastructures provided by global investment. Recent financialization of the world economy, as well as the European Union, associated with ICT advances, economic integration and the deregulation of financial markets, has led to an acceleration of financial flows through global 'circuits' (Sassen 2006) and city capital markets (Lizieri 2009). Within Europe, the MiFID (Markets in Financial Instruments Directive) directive and on-going regional consolidation of the stock-exchange industry facilitate these transnational financial flows. In consequence, few authors now assert that global financial integration might annihilate any geographic relevance of space and places, forming a fluid, smooth and uniform world. Furthermore, these developments have drawn attention to the exposure of cities (globally and in Europe) that are economically reliant on the finance and business service economy to global financial shocks. Volatility of office rents and capital values varies significantly with city characteristics and so this has implications for European regional and city

strategies based on property-led urban regeneration and economic clustering (Lizieri 2009). Territorial governance strategies therefore need to be informed about the ways in which inter-city financial flows and contemporary property markets are *connecting, or disconnecting,* European cities to global finance circuits worldwide (Brenner 1998, 1999, 2004, Brenner and Theodore 2002, Knox and Pain 2010).

III. General approach, methods and data

We will assess the position of Europe and its cities in global financial flows on a worldwide scale as revealed by stock-exchange and property market flow data. By analyzing time-series data on virtualized financial market flows which facilitate the construction of Europe's 'space of places', we will inform hitherto unanswered questions in the literature about the embeddedness of capital flows in European cities and the spatial consequences of the world financial crisis.

Our research method on **stock exchange flows** will describe the geography of the financial system in progress both at *global* and *regional scales* and will assess the consequences of *changes in* the financial system using a territorial approach. We will first explore the extent to which the stock-exchange industry generates *inequalities of domain, erects barriers*, and simultaneously *strengthens the spatial concentration* of financial intermediaries within global cities, while *reinforcing macro-regionalization*. Our analyses will examine how stock exchange flows are shaping European *economic territories* as well as the integration of Europe and its financial metropolises *within global networks and flows of finance*. In addition, we will examine *the effects of the recent financial crisis* both on financial centres and on the pattern of globalization. To do this, we will build and analyze an innovative database of cross-listing and trading flows matrixes, using statistics which will reflect almost the total universe of stock markets around the world. This indicator will highlight the choice of corporate issuers concerning the listing place(s) where their shares are listed and where they raise capital. Conversely, cross-listings will also reveal the unequal attractiveness of stock markets. In addition, this indicator will allow us to draw typologies and to rank financial centres into a world-wide hierarchy.

Our research method on **real estate industry flows** will describe the geography of financial flows and differential market patterns both *within Europe* and *relative to other world regions before and since the impact of the financial crisis*. We will examine the relationship between the *concentration of financial service centre activity* and *office rental movement* in global cities. Analysis of the occupation costs faced by office-based firms, the returns available for investors and the co-movement of these indicators across cities will be conducted, with data available post-credit crunch. It is difficult to find reliable and comparable stock figures, particularly on a time series basis so in order to do this we will use several data sources. A number of international real estate agents (for example CBRE, Cushman Wakefield, DTZ, JLL) and research houses (e.g. PMA) monitor office markets in major cities within Europe, providing estimates of stock, vacancy rates, prime rents and yields (which enables estimates of capital values). Cambridge University expert Professor Lizieri's specialist experience in analyzing these data and in resolving the considerable definitional problems associated with their use will inform and guide this research.

Data and analyses:

Financial flows of the stock-exchange industry:
The production of the innovative database of cross-listing and trading flows matrixes (first period of the work 2010-2011) will be based on statistics provided by the official listing of each stock market using statistics from specialised institutions and agencies such as Bloomberg or Reuters. The main innovation is the use of these stock market indicators which are rarely studied in the literature concerning globalization or in ESPON studies. By building new databases on a time series basis, we will be able to explore the recent evolution of the indicators and to observe the results in a long term perspective taking into account both the financial crisis and industry mutations. Insofar as the attractiveness of a stock market can also be explained in terms of local and specific characteristics of

its host financial centre, the analysis (second period of the work 2011-early 2012) may be completed by direct research work in different relevant financial centres, mainly world financial centres, especially European financial centres, onshore or offshore.

Financial flows of the real estate industry:

CBRE and JLL data will be used to examine the relationship between concentration of financial service centre activity and office rental movement in global cities. Analysis of the occupation costs faced by office-based firms, the returns available for investors and the co-movement of these indicators across cities will be conducted, with data available post-credit crunch. Analysis of rental and capital value movements in European cities from market peaks to the second quarter of 2009 will investigate falls experienced by cities dominated by global financial services. Rental levels will be modelled using a range of city level and national explanatory variables and tests for patterns of co-movement using a range of multivariate techniques including factor analysis.

Annual and quarterly Investment Property Databank Ltd. (IPD) data on the size of commercial real estate stock, capital values and investment returns in major Western European markets will be analyzed to provide indicative figures (as available) about institutional investment flows up to 2009 (the proportion of the investment market and the length of time series data available will vary from country to country and will be more restricted for the emerging Eastern European markets). Commissioned IPD analyses of average rental and capital values, size and characteristics of stock and investment performance, at a city level, will provide aggregated results.

Quarterly Real Capital Analytics (RCA) data on top property investment deals worldwide from 2005 will be analyzed to show the location and type of deals, the investor (where known), the size of property and the capital value. More detailed commissioned data will be used to analyze the concentration of investment activity by city at a global scale over 2007 and 2008 for ownership and to create matrices and cross-tabulations of deals and investors at city (and regional or national) level.

Workplan and deliveries:

Date	**WP**	**Process**	**Deliveries**
Sept 2010 to January 2011	WP2.3.2	Collection and preliminary analysis of data on stock exchanges and real estate industry.	
Interim report: 28 February 2011	WP2.3.2		- Interim data base on stock exchange cross-listing and trading flows matrixes. - Data base on rental and capital value movements.
February 2011 to June 2011	WP2.3.2	Continue data collection and analysis.	
June 2011 to December 2011	WP2.3.2	Continue data analysis. Production of tabulations, visualizations/maps.	
Draft final: 28 February 2012	WP2.3.2		1). Schematic maps depicting the spatial attractiveness of each European stock market. 2). Typologies and ranking of financial market places into a world-wide hierarchy. 3). Schematic maps based on real estate time-series data. 4). Urban rank-size tabulation based on post 2008 market activity.

The deliveries outputs will provide information on the *place structuring effects* of financial investments which are vital to support and sustain Europe's global economic competitiveness, the integration of Europe within global networks of finance, taking into account the impact of the financial crisis, and the extent to which real estate investment strategies are reproducing or changing historic patterns of urban concentration.

WP 2.3.3. Knowledge flows

I. Objectives:

- To analyze the position and trends of the EU and EU member states in global flows of knowledge, notably through license payments and imports of high value goods
- To analyze the extent of spatial knowledge spillovers over the European territories, notably through patent citations

II. Main message from the literature

The current era of globalization started around four decades ago and manifested itself at almost the same time in a number of knowledge-intensive urban regions. It is based on a rapid expansion of the networks of motorways and air connections and on an increased capacity and speed of information processing and transmission. It is characterized by a rapid knowledge-intensification that manifests itself through strongly increased R&D investments and a rapid increase of the share of knowledge-handlers in the labor force in the Western countries but increasingly so also in newly industrialized countries. Thus, the generation of knowledge is widely dispersed and takes place in regions all over the world. Any country or region that wants to preserve or increase its international competitiveness must have enough efficient knowledge channels to be able to tap the latest relevant knowledge wherever it is generated. This new knowledge is used as an input in product development as well as knowledge generation in the region.
In the current era of globalization the diffusion of knowledge has been facilitated by the decreasing costs for transportation of goods, people, and information, deregulation, liberalization, and lowered barriers for international trade and foreign direct investments. However, there are no guarantees that a more rapid diffusion will benefit all nations and regions, since the value of the knowledge for the receiver is dependent upon his/her absorptive capacity. Furthermore, since there are increasing returns in knowledge production there are strong forces stimulating the spatial agglomeration of knowledge production. The spatial extent of knowledge spillovers and knowledge flows more generally is a critical factor for the territorial development in Europe.

III. Methods and data

In this study, we will work in collaboration with the ESPON project on innovation, and we will focus more on the possible impacts of growing knowledge flows at the global level.
Given the importance of knowledge for growth it is a fact that most knowledge flows don't leave a paper trail, which makes it very cumbersome to empirically analyze knowledge flows at different spatial levels. Statistical offices don't register knowledge flows, so there are no official data on knowledge flows at any level. However, there are certain possibilities to get indications of the extent of some important knowledge flows. We want in particular point at three possibilities: i) license payments between countries, ii) the imports of high-value goods, and iii) R&D, patents and patent citations. License payments emerge when companies sell their proprietary knowledge to other firms either because they find it profitable to share knowledge they use with other companies or because they have decided not to use their knowledge themselves. Many studies of knowledge spillovers focus on either the spillovers of R&D to patent production or the structure of patent citations and neglect imports as an important vehicle for knowledge diffusion.

Indicators and sources

Official data from the OECD, UN, the World Bank, EUROSTAT, etc. will be used to analyze license payments and imports of high-value goods. Each EU member state will be categorized as regards whether they are net importers or net exporters of knowledge according to their license payments and whether they have a high share of high-value goods in their imports or not. Each country will be classified according to the two dimensions in a diagram and we will also indicate the movement over time of the different countries. We will also analyze the situation concerning the imports of high-value goods for the EU as a whole, highlight the relative importance of intra- and extra-EU flows, and illustrate how the situation has changed over time.

By using European Patents Offices statistics, it is possible to provide regional statistics about patents. Moreover, concerning patents which involved at least one extra-European partner, it is possible to build networks of inventors between European and extra-European inventors (at regional and/or city scale).

From these statistics and sources, we can construct the following indicators:

- trade balance in license payments at national level;
- imports of high value goods by geographical origin (share of intra and extra-EU trade in high value goods);
- number (and ratio) of European patents which involved extra-European inventors, at regional level.

As regards the extent of the spatial knowledge spillovers over the European territories we will collect the scientific studies that have been published during the last decade, summarize their main results, discuss their strengths and weaknesses, and make a meta-analysis[3] of their results. This will make it possible to evaluate more precisely the extent and the geographical reach of intra-EU knowledge spillovers over the European territories. Since the existing studies cover different countries or groups of countries, different sectors, different periods, etc. and use partly different methodologies it will be possible to analyze, e.g., the extent to which differences in the reach of knowledge spillovers differ with the institutional milieu of countries including the different national systems of innovation as well as the effects of different research methodologies.

IV. Workplan and deliveries

Date	**WP**	**Process**	**Deliveries**
Sept 2010 to January 2011		Meta-analysis on the spatial issue about knowledge flows; Building of three data bases	
Interim report: 28 February 2011	WP2.3.2		- main conclusions about the meta-analysis - Data base patents
February 2011 to June 2011	WP2.3.2	Continue data collection and analysis.	Data base on license payments and imports of high value goods
June 2011 to December 2011	WP2.3.2	Mapping and analysis of the position of Europe, its nations and regions in the knowledge flows	
Draft final: 28 February 2012	WP2.3.2		- Schematic maps depicting the the situation of European territories in the knowledge flows – - Complete analysis about the position of European territories in the global flows of knowledge

[3] Meta-analysis is a well-established method in the medical sciences that today more and more are applied also in the social sciences.

WP 2.3.4. Migratory flows

I. Objectives:

- to establish the relationship between tourism and migration in Europe at the macro scale, identifying areas characterized by different degrees of mobility and by different roles played by production-led mobility and consumption-led mobility;
- to assess the position of Europe in the global human flows, considering the main distinction between production-led and consumption-led mobility;
- to evaluate internal mobility in Europe in a comparative perspective with Northern America;
- to assess the attractiveness of Europe and its territories to international qualified labour force and international students;
- to assess the position of Europe in the female mobility;
- to analyze specific forms of mobility (highly qualified migration, students mobility, women migration) at the local scale using specific case studies in order to understand those phenomena that cannot be understood through mere statistics.

II. Main message from the literature

The profound transformations that have occurred in the European continent during the last fifteen years have certainly contributed to the radical qualitative changes that have affected, and still affect, human mobility flows in Europe and at global scale. Although the analogies between human mobility in Europe and in North America are evident, attention from scientific literature has been limited.

Up until then, the literature had actually referred to the "push-pull" concept. In post-industrial society, work or recreational mobility tends to assume more subtle differences as occurs with places of work, free-time, recreation, training and education. The propensity to emigrate, which so far was based on decisions made by single individuals, is today considered to depend also on the characteristics and culture of the families and communities of origin. Mobility can be activated in various ways: (i) For economic reasons; (ii) For social and demographic reasons; (iii) For residential reasons; (iv) For reasons linked to quality of life; (v) For educational reasons; (vi) As a result of the consequences of natural events or disasters also connected to climate change; (vii) For reasons linked to political, military and religious events and persecution; (viii) For the necessity of work demands based on the business internationalisation; (ix) For tourism, recreation and free-time: for activities in constant qualitative evolution which attract increasing numbers of people.

More recently human mobility flows relate to two socio-economic procedures – production processes and consumption processes – and to the way they overlap in time and space. In this context, there no longer exist definite places of departure and arrival, but a series of places which are simultaneously places of departure and arrival, with flows which concern both consumption and production activities.

Studies are hindered by the difficulty in correctly detecting and studying the phenomenon at a general level. It is therefore convenient to analyse the phenomenon integrating quantitative and qualitative data on a local scale.

In the scientific literature a new interest is shown for the mobility of: (i) university students; (ii) women; (iii) researchers. In this case a quantitative/qualitative approach will be applied in order to identify the reasons for: (i) new flows of international students in some European universities; (ii) the leading role of women in taking decisions concerning human mobility; (iii) the effects of scientists' mobility due to a growing number of research programmes (the FP6 and FP7 will be taken as a reference) supported by the European Commission.

III. Methods and data

Taking into account the main themes described above, our analysis will be based on statistics on migration and tourism. We will consider flows of people moving out of each territorial unit – out-migration and out-going tourism – and those moving into each territorial unit – in-migration and incoming tourism -.
Our analysis will concern:

- Interregional intra-national migration movements, taking place in / within the same country;
- Interstate migration movements, taking place in / within the ESPON space;
- Extra-European migratory movements, taking place between the rest of the world and the ESPON space;
- Interregional intra-national tourist flows, taking place in / within the same country;
- Interstate tourist flows, taking place in / within the ESPON space;
- Extra-European tourist flows, taking place between the rest of the world and the ESPON space.

More precisely, **the following indicators** will be considered:

- **Migratory balance between Europe and different parts of the world**, including tourist migrations;
- **Indicator of intra-European mobility at national and regional scale** (share of migrants), to be compared with the same indicators in Northern America;
- **Balance of extra and intra-European movements of highly qualified and students** for European territories, to measure attractiveness.

The analysis and indicators will be done at different spatial scales:

- For the analysis concerning mobility between the ESPON space and the rest of the world, data at the country level will be used concerning flows. By using the stock of foreigners, we could work at a more refined scale. However, the use of stock of foreigners as an indicator is problematic because of the diversity of nationalization policies within Europe. This will require to be very careful when analyzing such data;
- For the analysis concerning mobility in within the ESPON space, data at the country level will be used. Here also, by using stock of (intra-European) foreigners, we can work on a more refined scale. Diversity of nationalization policies is here less problematic because it becomes less and less important to become national citizens for European citizens;
- for the analysis concerning mobility in within the same country data at nuts 1 and nuts 2 levels will be used;
- for local case studies data at nuts 3 and nuts 4 levels will be used.

The sources of data will be diversified using as much as possible data already produced in the ESPON framework, from former and current ESPON projects, mainly ESPON 1.1.4 and DEMIFER. Other major sources are: OECD-Sopemi; WTO; EUROSTAT. We will also produce statistics thanks to the *Labour Force Survey* (*LFS*). This will enable us to study migrations at the NUTS 2 level by categories of diploma, by using the question about the country and region of residence one year before. The *Labour Force Survey* can be used for nearly all European countries at a relatively stable geographical division from 2000 to 2007. Before 2000, many changes in the regional division have occurred and Eastern countries are often missing. Given the insufficient sample to study migratory process by diploma at NUTS2 level, NUTS1 level might be used and samples of different following years could be added up.

These analyses will be complemented by <u>case studies</u>. Through the study of a representative sample it will enable us to better understand general trends identified at macro level and to identify possible trends for the future. Indeed, studies are hindered by the difficulty in correctly detecting and studying the phenomenon at a general level. It is therefore convenient to analyse the phenomenon integrating quantitative and qualitative data on a local scale. This case study will focus on specific types of mobility often difficult to catch at a general level: (i) university students; (ii) women; (iii) researchers.

In this case a quantitative/qualitative approach will be applied in order to identify the reasons for: (i) new flows of international students in some European universities; (ii) the leading role of women in taking decisions concerning human mobility; (iii) the effects of scientists' mobility due to a growing number of research programmes (the FP6 and FP7 will be taken as a reference) supported by the European Commission.
The metropolitan area of Rome will be used for testing the above mentioned variables. In order to implement a qualitative approach the research will be applied to the Sapienza University of Rome. That University has 150,000 students; the research will be focused on the university courses most attractive for international students (Corso di Laurea in Mediazione and Corso di laurea in Scienze Turistiche) and where the percentage of foreign students is around twenty per cent. The research will be also applied to the female component of the largest foreign communities in Rome. The mobility of scientists will be analysed using the Sapienza University of Rome where about one hundreds teams are involved in the European supported FP7 research projects.

IV. Workplan and deliveries up to the end of the project

Date	**WP**	**Process**	**Deliveries**
Sept 2010 to January 2011	WP 2.3.4	Collection of data on human mobility in the Espon Space and USA	Data base on migrations
Interim report: 28 February 2011	WP 2.3.4	Improvement and development of the data base	Data base on regional human mobility
			Maps of human mobility at regional level
February 2011 to June 2011	WP 2.3.4	Analysis of quantitative and qualitative data at local level. Identification of trends in human mobility of university students, women and scientists participating to European researches	Data base of specific components of students, females and scientists human mobility at case studies level Maps of students, women and scientists mobility at case studies level
June 2011 to December 2011	WP 2.3.4	Quantitative and qualitative data analysis and interpretation	Correlations and assessment of the main patterns of the various forms of human mobility analysed in the Espon Space
Draft final: 28 February 2012	WP 2.3.4	Preparation of the final report including possible trends	Typologies of European regions in the global human flows

WP 2.3.5. Flows and gateways: maritime and airflows

I. Objectives

- To assess the position of Europe in maritime and air flows;
- To assess the changing patterns of ports and airports in maritime and air flows;
- To assess the territorial impacts of global maritime flows on regional development.

Although Europe's external trade volumes are dominantly carried by sea transport (90%), the spatial pattern and evolution of its maritime connections have not yet been paid much attention. The main objective of the WP3 is thus to underline the position of Europe and its port gateways in worldwide maritime flows. Three levels of analysis are considered: global, regional, and local, as well as relations between those scales. The global level focuses on the weight and position of Europe in global port

traffic and maritime connections over time, notably looking at their changing geographic distribution and identifying which dominant port gateways have ensured Europe's maritime relations with the rest of the world. On a world level, the position of Europe will be analysed on various degrees of aggregation: as one single entity, as groups of port gateways (maritime ranges), and as individual cities (multiple or single terminals). The regional level looks at how such traffic and connections are distributed within the European territory, taking into account the previous level (world) while proposing a multi-scalar view on port gateways. We also wish understanding the mutual influence between global level and regional level since port gateways are embedded within local, regional, national, and trans-national economies and spatial systems. The local level will focus on one gateway-corridor through a case study highlighting concrete issues of regional planning and socio-economic development in relation with port and transport activities.

II. Research background

There exists numerous studies of European ports and gateways but few of them have a European-wide or worldwide focus, such as traffic concentration analyses. More likely are individual case studies on a local level of port hinterlands, port terminals or the port-city interface where technological and socio-economic changes are more readable (e.g. waterfront redevelopment, value-added and planning issues). European ports have mostly been analysed from a continental perspective (e.g. their position and accessibility in the road network), notably due to the inland centrality of the London-Milan megalopolis. Therefore, the link with the research on maritime networks remains rather limited, whereas European ports are often compared with each other based on sole traffics regardless of their position globally. Conversely, research on maritime networks is dominantly local in scope, with studies of specific basins such as, for instance, the Caribbean, the Mediterranean, and East Asia, notably about container ports and liner shipping services, while their industry coverage is bound to few or main operators. Recent research has provided some measures of the polarised structure of the global liner shipping network but without looking at its detailed geographic coverage and its evolution except from identifying the most central ports on the East-West trunk route. There remains much to do on the interdependence among the three main elements of the port triptych: maritime foreland, port (city), and hinterland, although this concept has emerged in the 1960s and has been put in question later on with the advent of newer concepts such as transport (or commodity, supply, value, logistics) chains and global production networks. No research has been done yet putting together those elements in a simultaneous analysis, although it may best highlight the strengths and weaknesses of European ports and gateways in the worldwide and European context.

III. Data and Methods

Each level of analysis requires specific data and methodology: position in a global network (i.e. based on vessel movements), and position in the port hierarchy (i.e. annual traffic figures for the port itself, but also infrastructures and socio-economic aspects of the gateway).

1. Position in the maritime network:

Data on effective daily vessel movements is available from *Lloyd's Marine Intelligence Unit* (LMIU), a service of Lloyd's, the world leader in maritime insurance and shipping information based in London. Its global coverage is almost complete (98% of the world fleet measured in TEUs[4] in 2006).

[4] Twenty-Foot Equivalent Unit (TEU): normalized measure of container traffic and vessel capacity referring to the number of 20-foot container boxes that can be carried on a ship. Vessel capacities can also be measured in deadweight tonnage (DWT) or "commercial capacity".

Data also includes ship operators' names, daily ports of call (previous, current, and next), allowing many measures by link and by port. At present, the database is available in 1996 and 2006 for fully cellular container vessels, but the study period is planned to be extended while including other types of vessels for the years 1988, 1990, 1992, 2004 and 2005, while other years can be collected in UK at the Guildhall Library where data is available in paper format (see workplan). Based on this data, several methodological steps shall be followed:

- **Building the graph**: we consider each vessel movement between two given ports as one link (or edge), and each port as one node (or vertice). A value (or weight) can be attributed to each link and node based on the capacity of circulated vessels. The graph may be studied under two different topological spaces due to the specificity of liner shipping that functions through cyclical routings: (a) the graph of direct linkages that simply considers the succession of port calls (i.e. port A to port B; port B to port C; etc.) or (b) the graph of all linkages, adding to the latter indirect connections (i.e. port A to port C) and where each vessel creates one complete graph. Comparing results from both graphs seems necessary for a better fit with the specificity of maritime networks.
- **Evaluating the network's structure**: the extent to which the world maritime network has a scale-free, small-world, or other structure has strong implications on the respective position of ports and their possible evolution paths within it. We shall first use classic indices from graph theory to describe the graph (e.g. Alpha, Beta and Gamma for measuring lattice degree, graph complexity, and global connectivity respectively) but also more robust methods derived from complex systems theory indicating to what extent a network is polarised by a few hubs (i.e. scale-free networks) and/or if there is a more or less high probability to find community structures (tightly connected groups of ports) within it (i.e. small-world networks). The structure of the network may vary according to the level of aggregation of the ports into regions of different size.

- **Calculating centrality and accessibility indices**: several local measures may be calculated for each spatial unit considered (from port level to region level). Foreland specialisation or diversity may be calculated using classic measures of specialisation and diversity and by using multivariate analytical methods for classifying ports, based on their distribution of traffic worldwide. Another range of measures is derived from graph theory and social network analysis: degree centrality (number of links to other ports), betweenness centrality (number of positions on possible shortest paths), and other measures of overall accessibility in the maritime network (Koenig number, Shimbel index, eccentricity, etc.). Some measures may take into account the weight of links (traffic) so as to complement sole topological measures.

- **Delimitating coherent maritime regions**: are European port always clustered together or do they have preferential relations with other (neighbouring or not) ports? Several methods are available for delimitating subgraphs or subgroups of ports in the worldwide maritime network. The Nystuen-Dacey algorithm may first be used for showing which ports are the main pivots of the global system and what is the geographic coverage of their tributary area. Because it does only retain the maximal flow of each port, other methods applied on all linkages should be used as complements, such as recent methods of graph hierarchical clustering based on the Strength index or based on traffic flows (e.g. bisecting K-means).

2. Position in the port hierarchy:

While the list of indicators for measuring port activity and quality is endless and would reach beyond the scope of this study, we propose to focus on the most common (and internationally available) one: throughput volume (measured in tons, by commodity, or in containers), which reflects upon ports' overall performance and specialisation. Within Europe, such characteristics might not play the same role everywhere, with some port gateways serving distant hinterlands (e.g. Rotterdam, Hamburg), some being pure transhipment hub ports (e.g. Gioia Tauro in Calabria, Marsaxlokk in Malta), and others being dedicated to more captive hinterlands such as the adjacent city and region, often smaller ports but whose importance for the local economy can be enormous. In particular, we wish to highlight whether different commodities concentrate among European ports and over time, and how do these

trends relate with the broader and changing position of Europe in the world maritime system as a whole? Are European trends visible in other world regions? To what extent port traffic hierarchies and dynamics illustrate regional integration processes?

Selected available sources are the ones which are accessible on a world level or large region level, and are published as yearly figures of port traffic. The Journal de la Marine Marchande publishes a yearly bulletin on world port traffics by commodity since 1970, and despite the possible irregularity of the list of ports (depending on the willingness of port authorities to fill in the questionnaire), it remains one of the best traffic data sources available at cheaper cost. Other complementary sources to be used are yearly figures from the Institute of Shipping and Logistics (Bremen), the Review of Maritime Transport, and Containerisation International Yearbooks (1970-2009) for container traffic. More specific data on traffic per commodities can be obtained for Europe from Eurostat (1997-2009), for USA from the Army Corps of Engineers (1997-2009) and for Japan from the Ministry of Trade (JETRO). Other parts of the world rarely possess equivalent quality and precision of data except from individual port authorities or ministries of transport.
The analysis of port traffic includes classic description of traffic distribution and evolution among world regions of which Europe as well as within Europe at port level, but also the application of concentration measures such as Gini or HHI so as to verify for Europe (and other regions) the relation between traffic growth and traffic polarisation. Traffic growth regimes of seaports can also be related to regional integration dynamics, which can be underlined by comparing, at given port ranges and along a given period, the standard deviation of traffic growth rates with the average traffic size. Another line of analysis is about the diversity and specialisation of port traffic based on commodity data, notwithstanding the necessary harmonisation of commodity categories across different areas. For instance, USA data details more than 150 categories of shipped products for every port, but Eurostat comprises only about 30 categories classified not by product but by method of shipment (e.g. container, roll-on / roll-off, vehicle, etc.). Using the aforementioned data on vessel movements by type of vessels (i.e. container, dry bulk, liquid bulk, etc.) may solve the problem of limited comparability. The methodology can reveal which ports are more diversified and how this level of cargo diversity relates to local and/or global aspects of the gateway.

3. Case study:

To better understand the territorial impacts of global maritime flows on regional development, we opt for a case study. Indeed, looking in-depth at local planning and socio-economic development issues of a particular gateway may be fruitful to balance the obtained results from quantitative analyses. Given the recent emphasis on the "Grand Paris" project and the important role of maritime transport and logistics in this gateway-corridor vision, we believe that this case would be worth analysing in the light of other existing corridors in Europe and the world, such as in the Benelux area, which have been launched earlier and have received greater attention from scholars and professionals. The combination of Paris global city with Le Havre and Rouen seaports makes it a good example of a multimodal logistics region in the making.

IV. Workplan and deliveries

The workplan is dominated by a large amount of work required to collect, scan, format, and analyse vessel movement data that are available mostly in paper source. In parallel, we identify a case study and run a field work based on existing literature and interviews with local officials.

Time frame	Task	Data/sources	Deliveries/objectives
September 2010 – January 2011	Scanning and formatting paper sources on vessel movements	Lloyd's Voyage Records (LVR) (1988, 1990, 1992, 2004, 2005)	A worldwide database on links, ports, and flows
	Collecting and formatting port traffic data	Journal de la Marine Marchande (JMM) yearly port traffic statistics	A worldwide database on port traffic by main

		(world); Institute of Shipping and Logistics (ISL); Containerisation International Yearbooks	commodities (1970-2010)
Interim report: 28 February 2011	• Maps and analysis of the worldwide maritime network at different years and for different commodities, including main maritime routes and indicators of port hierarchy • Maps, diagrams and analysis of port traffic hierarchy and evolution on world level and within major regions (Europe, USA, Japan)		
February 2011 - June 2011	Topological analyses of the worldwide maritime network	LMIU 1996 and 2006, LVR 1988-2005	Global topological measures; application of algorithms (dominant flows, clustering…)
	Collection of complementary data on vessel movements	Lloyd's Voyage Records (1970-1987) at Guildhall Library (London)	Complement the global database
	Case study preparation, literature critical review and contact network building	Scientific and grey literature; local decision-makers and firms	Underline specific trends in global-local issues at the selected gateway-corridor
June 2011 – December 2011	Second analyses of the worldwide maritime network	LMIU 1996-2006; LVR 1970-2005	Map collection of the global network evolution / port hierarchy changes
	Traffic evolution and foreland organisation of European ports	Port traffic data and maritime network data	Highlight trends of traffic concentration; create new indicators of foreland specialisation and geographic diversity
	Field work for the case study on the gateway-corridor	Literature synthesis, relation with field interviews	Policy recommendations about planning and economic development at the selected gateway-corridor
Draft final 28 February 2012	• Typology of Europe's port gateways based on global and regional indicators • Finalised case study on the gateway-corridor		

Similar but more simple analyses will be achieved for airflows, assessing the evolution of the position of Europe and its airports since 1990 in global airflows through OAG data.

WP 2.4. Political cooperation and networks

I. Objectives

➢ To analyse the different forms of cooperation between Europe and the rest of the world and to assess which vision of Europe of the world it supports
➢ To focus on neighbourhood policies to see whether there is a real integration between Europe and neighbouring regions
➢ To assess the "new regionalism" by the analysis of network cooperation and networks of excellence between European actors, including public bodies such as regions, and the rest of the world

This work package aims to check the validity of the "regionalization and regional integration hypothesis", to analyse how Europe and its territories position themselves in the world through cooperation and networking with other parts of the world and to show how this positioning

participates in achieving the objectives of improving competitiveness as well as social and territorial cohesion.
To address the "regionalization and regional integration", we will work on the European Union and the Espon. Does the EU, as an actor in international relations, give any priority to its regional neighbourhood when it comes to political cooperation in various domains (economy, environment, migrations, energy and so on)? Do various European non official actors develop and implement strategies and cooperation networks oriented to actors located in the neighbourhood or mainly in more remote parts of the world? Are different kinds of flows involving the EU, sometimes related to these strategies, regionalized or not? Do they tend to concentrate at the regional level? Do they reveal the existence of strong relationships and, why not, strong interactions between the European territory and its neighbourhood?

II. Main messages from the literature

EU is now considered as an actor in the international relations and to a certain extent as a global actor and a normative power which takes part in the global governance.
The EU is a major actor in its regional context. It has been deepening its relations with all the neighbour countries over the last two decades in various domains. This multifaceted process is partly based on a regionalist strategy (generally called "regionalism") which enhances trade exchanges at the macroregional level, deepens North and South relations, bolsters the common management of international public goods at the macroregional level and is sometimes presented as a relevant transitional step for some national economies before getting fully embedded in globalization and full multilateralism. In fact, regionalism no longer designates a simple *de facto* increase of relations inside a cluster of countries (regionalization). It is more a proactive way of doing things by which several countries try to better regulate their relations at the political level in various domains (regional development, culture, trade, economy, etc.).
The current wave of regionalism was launched in the 1980s and urges groups of states to deepen their integration at the macroregional level and to share some institutions and politics. This process challenges the independence of states and national economies. It goes along with a so called "new regionalism" based on networks of cooperation between non state actors generally. In this framework, different types of actors are encouraged to develop networks of horizontal relations with other regions in the world in various domains. It may help some regions maintain their competitiveness by developing fruitful and more direct cooperation with other ones without going through the central administration. It encourages horizontal relations more than hierarchical ones. It involves many kinds of actors from private and public institutions in complex networks of relations and interactions. It stands for a more flexible territorial basis, etc. The regions of the EU member states are fully involved in this new horizontal and networking regionalism in several domains (twinning, decentralized official development assistance, etc.).
These questions do not simply relate to purely academic discussions. The place and role of Europe in the world can be described as a threefold one, characterised by three visions: a continental vision, a centre/periphery vision, a global and networking vision or "archipelago vision", assessed in the *Europe in the World* report (Espon 3.4.1). These visions are confirmed by the observation of empirical facts. They are articulated with a fourth one deeply explored by the "Europe in the World" Espon TPG, based observed facts and tendencies and on scenarios regarding the future of EU as a global actor. The EU will certainly not be able to maintain its status at world level in the long run. The response to this could be a revised form of regional integration no longer strictly limited to the European Union (i.e. EU European member states) but enlarged to a broader territorial basis which encompasses neighbour countries, especially those of the former USSR and those surrounding the Mediterranean Basin. This enlarged regionalism is based on a state run and EU run regionalism but also on functional interactions, social practices, etc. It involves not only the EU and the states but also the regions of the EU and many social and economic actors (civil society, individuals, firms, etc.). That is why this work package will pay as much attention to the initiatives of the EU as an official actor as to those of lower level actors such as students and universities.

III. General approach

In this project, we will start by testing the visions which were set up above in different perspectives in addressing the empirical perspective of flows and in analysing the existing multilevel cooperation between Europe and the rest of the world. These perspectives will be applied to various domains in order to check whether the European Union and the European regions have really embarked on the open and new regionalism. To answer the questions raised about regionalism, we will analyze several important topics: the networks of scientific cooperation, the international flows of students and the different forms of cooperation between the European Union and the rest of the world.

As regards the networks of scientific cooperation (networks of excellence), we will make the cartography of several types of scientific networks involving several European universities (such as UNESCO Unitwin and Cultural Cooperation for the World Heritage), of various university networks (research teams networks in the European Union 7th FPRD, higher education network participating in the Erasmus Mundus Programme over several years), a geographical analysis of the cooperation projects and agreements set up by a sample of European universities with other universities whatever their location in the world is. How to choose the universities of the sample? The choice will be based on the international yearly ranking provided by the *Times Higher Education Supplement* which provides of world top 50 in five academic domains: engineering and IT, life sciences and biomedicine, natural sciences, social sciences, arts and humanities.

As regards the international flows of students at two levels, we will take into consideration the country to country inward and the outward flows and/or stocks of students by nationalities. The objective is to build an O/D matrix at the world level. Statistical treatments should allow us to check whether these flows are regionalized or not and whether they are more regionalized today than in the 1990s. The data are available on the UNESCO website and much information is available also at the library of the Institut international de Planification de l'Education in Paris. We will make the cartography of the geographical origin of the foreign students residing in European countries and the cartography of the European students residing in other countries, whatever their country of residence is (Europe, neighbourhood, rest of the world). If possible, we will analyse the evolution of their geographical distribution (inward and outward stock) over the last decades.

As regards the different forms of cooperation between the European Union and the rest of the world, the treaties signed with third countries and organizations will be sorted by domain (migrations, energy, trade, etc.). This information will be collected on the website of the treaties office of EU. We will make the cartography of all this material in order to describe and explain their distribution and evolution over the time. The treaties will be sorted according to their content. Are they legally binding or not? Do they set mutual obligations of not? In a word, do they pave the way for a process of integration of EU and the considered partner countries?

IV. Workplan and deliveries

Date / Time period	***Topic***	***Task***	***Deliveries***
September 2010 to February 2011	Flows of students	- Data collection and construction of an O/D matrix of international flows of students at several periods - Cartography of international flows of students at several periods	- Database at world level (country to country) - Maps of flows at different level - Preliminary results about international flows of students
	Scientific cooperation and networks of excellence	Construction of the sample of European universities	
February to June 2011	Scientific cooperation and networks of excellence	- Official websites analysis and conception of an additional questionnaire - Data collection at several international institutions about academic programs	

		(Unitwin, FP7, universities, Erasmus Mundus Program, etc.)	
	The political cooperation of the European Union	Collection of data on the treaties office website (on the official website of the European Union)	
June to december 2011	Scientific cooperation and networks of excellence	- Treatment, cartography and interpretation of the collected information	- Maps and preliminary results
	The political cooperation of the European Union	- Cartography of the bilateral treaties sorted by domains and by intensity; - Interpretation of the results;	Maps of political cooperation of EU
February 2012			Final analyses on the three topics: - international flows of students - political cooperation - Scientific cooperation and networks of excellence

3. A synthesis of the main deliveries

The project will deliver synthesis on the main thematic, some of which leading to synthetic typologies at different scales:

1. at the scale of world macro-regions, the position of Europe will be assessed through competitiveness, social and territorial cohesion indicators
2. The territorial structure of Europe will be assessed at two different scales
   - the European urban structure will be assessed in a comparative perspective with USA, including for major gateway functions (port, airport, finance…). This will result in a typology of European cities according to their position in the European and world urban structure
   - Territorial inequalities will be assessed in a comparative perspective, from 1960's onwards
3. In terms of flows and networks, the position of Europe, its regions and cities will be assessed according to different types of flows. This will lead to the following important typologies:
   - Typologies of the world regions according to different types of flows with Europe (trade, FDI, finance, knowledge and migrations). Each region will be classified according to the intensity and the nature of its relations with Europe
   - Typology of European regions according to their role in the international division of labour by the combination of regional structure, regional trade and value chain analysis
   - Typologies of European regions according to the vulnerability/strength to the globalization. This simplified typology will take into consideration the position of regions in the international division of labour, its openness to the global economy and the global trends to assess the vulnerability/strength of each region in the global economic context.
   - Typology of cities according to the intensity and nature of their connections with the rest of the world, using financial flows, real estates and the position in the networks of advanced services.
4. The geography of cooperation between Europe – mainly EU – and the rest of the world will be analysed, with a special focus on neighbourhood. This will result in a typology of the world regions according to the intensity and nature of cooperation with Europe from different perspective.

In the final part of the project, reflections will focus on policies. It will lead at two main deliveries for the draft final report:
1. Synthesis of the key-drivers in relation with the main political questions
2. Synthesis of policy options at different scales (Europe, regions and cities)

These major deliveries will be complemented by different case studies, aiming at better understand some processes and sometimes offering a transversal approach:
1. *The case of London as an example of world city:*
An extensive interdisciplinary literature has discussed the importance for Europe of London's international role as a 'world city' and an 'international financial centre'. In addition, the INTERREG IIIB North-West Europe study: '*POLYNET: Sustainable Management of European Polycentric Mega-City Regions'* has indicated the vital importance of developing a better understanding of the interaction between global financial flows and London agglomeration economies in order to inform a European spatial vision and strategy. The objective for the London case study is therefore to understand the relationship between its position in global and Europe-wide financial networks and the internal spatial structure of the city.
2. Analysis of global value chain in different sectors precisely aims at going beyond a sectoral perspective and assessing the position of regions in terms of tasks inside the sector. Three sectors will be studied which represent three types of industries with different technological content: a labour-intensive industry particularly affected by globalization trends (**clothing**), a medium-technology industry (**automotive industry**) particularly affected by the recent crisis and a knowledge-based industry (**software**).
3. The analysis of networks of excellence implemented by European Universities in order to assess how European institutions develop networks across the world in the field of knowledge.

4. A case study on the metropolitan area of Rome aims at better understanding processes behind specific forms of mobility, that is students, women and highly qualified
5. A case study on gateway function. Looking in-depth at local planning and socio-economic development issues of a particular gateway may be fruitful to balance the obtained results from quantitative analyses. Given the recent emphasis on the "Grand Paris" project and the important role of maritime transport and logistics in this gateway-corridor vision, we believe that this case would be worth analysing in the light of other existing corridors in Europe and the world, such as in the Benelux area, which have been launched earlier and have received greater attention from scholars and professionals. The combination of Paris global city with Le Havre and Rouen seaports makes it a good example of a multimodal logistics region in the making.

4. Divisions of tasks in the partnership

The following table synthesizes the responsibilities in the partnership

	Lead partner	P2	P3	P4	P5	P6
Name	IGEAT	CNRS	University of Reading	Sapienza Università di Roma	Internationella Handelshögskolan i Jönköping AB	NIGGG - Bulgarian Academy of Sciences
WP2.1	P	C	P	P	P	P
WP2.2.1	P	C				
WP2.2.2.	C		P			
WP2.3.1	C		P		P	P
WP2.3.2		P	C			
WP2.3.3	P				C	
WP2.3.4	P	P		C		
WP2.3.5	P	C				
WP2.4		C				
WP2.5	C	P	P	P	P	P
WP3: Dissemination	C	P	P	P	P	P

C = coordinator
P = partner

5. Dissemination

1. As far as data and indicators are concerned, dissemination will thus mainly be assured through the ESPON database, which is the main instrument for data dissemination in the ESPON programme.

2. Three thematic workshops will be organized during the course of 2011, after the interim report. They aim at deepening the reflection on the main thematic of the project and will include major international institutions that are deeply involved in studying these thematic. It means that representatives of these institutions will be invited to the workshop, as well as academic researchers. The following workshops are planned:

- "Territorial and urban structures" as a source of competitiveness, with representatives of the OECD and/or the World Bank whose 2009 report focuses on this aspect (before June 2011);
- "Position of European territories in the international division of labour and the impact of Globalization on these territories", with representatives of the OECD and EU (September-October 2011);

- "Cooperation between Europe and the rest of the world in the perspective of regionalism", with representatives of UNESCO (November-December 2011).

3. All written outputs will be presented, either in the form of data/indicator sheet collections, or in the form of working papers on the project web site for download (as work in progress, not as official ESPON reports). These working papers are a first step towards scientific dissemination. Wherever scientifically relevant, the scientific innovative work will be presented at relevant scientific events. If this work is collective, the proposition will always be discussed between the project partners. For each project partner a budget has been foreseen for participating in this dissemination effort. In a second step, this most innovative work will be submitted to scientific journals for publication.

4. All results will obviously be presented at ESPON seminars and the ECP event.

5. For dissemination to the political world and planners:
   - An informative Emailing list will be activated whereby interested persons can register to receive regular updates about the projects results. The information about this mailing list will be disseminated via different channels, via the ESPON ECP network and MC members, but also to stakeholders at European level (Commission, Parliament, Committee of the Regions, regional representations, world institutions etc.).
   - the project will produce a more generally accessible form of output, which will include a brief summary of the main scientific results, including some of the most important maps at different scales, and a discussion of the policy options. A budget is foreseen for printing and dissemination of hardcopies of this readily accessible summary of the project at the end of the project. This type of dissemination is necessary to reach other persons than the small circle of the most informed people, for which e-mailing and web dissemination is probably enough. Up to 5000 copies can be printed and a large number can be sent by mail, with the rest to be distributed at relevant events. This will allow us to inform a wide audience of the project results.

6. Calendar of further steps

- TPG meeting the 14-15th October in Brussels. Discussing the comments on the inception report and the work to be achieved until the interim report.
- November 2010: Espon seminar in Liege
- 28 february 2011: Interim report
- Sounding board meeting in Brussels: date to be decided between 25th and 29th of april 2011
- TPG meeting the day after the sounding board to discuss the results of the sounding board meeting
- June 2011: ESPON seminar in Hungary
- October 2011: TPG meeting towards the draft final report
- 28 february 2012: Draft final report
- Sounding board meeting in Brussels; date to be decided between 23th and 27th of april 2012
- June 2012: ESPON seminar in Poland
- 30th of june: Final report