

ATTREG The Attractiveness of European regions and cities for residents and visitors

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1 Executive summary

This ATTREG Interim Report, delivered at the 8th month of life of the project, revises the project methodology (at request of the reviewers of the Inception Report) providing further clarifications on "audiences" selected for the study of mobility flows and on the procedure of selection and conduction of case studies, as well as details on our "policy analysis" framework. In Section 3, it illustrates the preliminary results of our project, presenting the details and outcome of data collection, including a broad overview of the geographical cover and sources of variables and indicators to be used in subsequent stages of the project, and a selection of maps based on them with short explanations regarding the observed territorial distribution and phenomena. Finally it proposes a more detailed insight of how this information is going to be used to yield relevant policy inputs at various different levels. In the last Section 4., this report males the point of the project in its current stage of development in relation to the planned research schedule and gives details of the next steps. Moreover it provides a more detailed and centred overview of the dissemination strategy (again following the recommendations of the reviewers of the Inception Report), specifically focusing on regional, national and European policymakers and policy networks as target groups, and a n exhaustive overview of the type of links and common interests that we expects to develop with other ESPON projects and other research consortia.

The ATTREG projects aims to explore the importance and future perspectives of territorial attractiveness for European spatial development and the way it can become an element of spatial policy, at various levels, to contribute towards the objectives of European regional cohesion. It so does by

- Measuring human mobility flows or "audiences" of regions and cities, distinguishing "permanent" or long-term migrations (and segmenting it by groups of migrants by socio-demographic profiles and motivations) and short-term or leisure-driven mobility which can be classified in traditional or less traditional forms of tourism. This report details the key characteristics of four audiences that have been defined to our analysis: "top-workers/creative class", or a highly skilled group of migrants, by and large covering the 25-54 age band and proceeding from OECD countries, that selects working and residence locations on the basis of quality of place factors (quality of life, quality of the working environment and level of development of the economy, social and cultural factors, etc.), a second group of "opportunity-driven" migrants, that could be described as low-skilled, young migrants from non-OECD countries, who are especially focused on local job markets and social and institutional characteristics, and then two visitors groups, the conventional tourists, attracted by an "organised" supply and by local place characteristics, such as climate and attractions, and non-conventional forms of leisure mobility such as short-term student mobility and retirement migrations, whose drivers are likely to be different from those of "normal" tourism
- 2) Measuring territorial capital factors (or endowments) that, according to a broad and multidisciplinary overview of theories and reference works (included in our Inception Report), may be the drivers of such mobility flows. The project has identified six forms of territorial capital assets (environmental, economic, human, socio-cultural, antropic and institutional) that have been organised and measured through a number of indicators at NUTS 2-3 level
- 3) Relating by means of statistical techniques assets and audiences, and creating regional typologies on the basis of observed relations (by types of audiences attracted; by regularities and anomalities in the "signs" of such relations; by geographical and ESPON-derived regional specificities and typologies; etc.). The project assumes that

flows of the various audiences (thus tourist stays and migrations) can be regressed over lagged stocks and changes in stocks in territorial capital assets measured through indicators. The estimates will reveal the existence of outliers, groups of assets that seem to be working in the same directions in attracting audiences and groups of audiences that move in a regional way (our of synergies or conflicts), or different behaviours observed in different geographically specific regions or ESPON regional types. The results from the analysis will be included in a policy report to be circulated among all relevant policy networks so as to build a "community of interest" for our project and familiarise it with the main dimensions of our project also in terms of self-diagnostics from our project key dimensions

- 4) Questioning and researching by means of multiple scale case studies the characteristics and foundations of regional typologies, specifically addressing the issue of "factors mobilisation" as embedded in policy processes and including data that are not available EU-wide. The principles for case study selection and conduction focus on the necessity to cover the broadest possible range of regional types (different territorial levels, from the very local to groups of regions); geographical specificities (insular and mountain regions, peripheral regions, coastal regions, peri-urban regions, cross-border areas, etc.), and geographical locations within the ESPON space and in CEC countries, which are included in our study. Specifically then the project will address regions fitting different typologies identified by 3) and where the maximum collaboration of local policymakers can be achieved. The results from the case studies will form part of a report to be discussed with key policy stakeholders
- 5) Projecting such relations into the future by means of a scenario analysis, using the socio-demographic scenarios defined by previous ESPON projects and analysing the potential role of policies that affect attractiveness on the basis of an estimation model to be tested at case study level; this report lays out the main lines of such analysis within a roll-backwards model of analysis of future trends on the main dimensions of attractiveness.
- 6) Synthesising the quantitative and qualitative results obtained in 1)-5) into a comprehensive outlook into current and future perspectives on territorial attractiveness and using such outlook within a reference framework that allows assessing the validity and potential results of various policy options at different scales. this report includes a broad overview of assumptions and methods that will allow us to organise the project results as inputs for policy, especially using the socio-demographic scenarios developed by DEMIFER and looking at the potential impacts of specific policy options considered by the Europe 2020 Strategy and the Territorial Cohesion Agenda documents ("green, inclusive, sustainable Europe")

As far as the first results from the ATTREG project are concerned, data collection has been on the whole successful, although we still miss some of the variables and indicators that should have been made available by the recent round of ESPON 2013 projects. Also the data cover for CEC countries has been successful though some of these variables are still on hold (and not included in the maps delivered in this report) as the methodologies are being reviewed.

The collected "raw" variables and indicators from a variety of sources, as well as the new indicators created by this project, have been organised in a project database with codes to facilitate the querying of dataseries and complete metadata info. An overview of the current content of the database (only including indicators) is included in the Annex A of this report,

also providing information on geographical cover, sources and other synthetic metadata info. As illustrated in Table 1, we have identified five measures of mobility:

- Four variables measure net migration rates in the period 2001-06 with the capacity to consider net-migration rates for those aged 15 to 24 years (student age), 25 to 49 years (early career age) and 50 to 64 years (an age group considering retirement).
- One measure of student mobility (the number of ERASMUS students)
- Five measures of tourist flows (distinguishing between different types of visitor as resident/non-resident and hotel staying/non-hotel staying). These measures relate to two different time periods (2001/03 and 2007/09).
- Three measures of people flows through airports located in the NUTS2 area (general mobility).
- Finally, one measure of commuting self-containment (or the avoidance of inter-NUTS2 mobility) obtained from the Labour Force Survey.

All these indicators measure "changes" to reflect the inflow or outflow of audiences, to be explained through the spatial distribution of stocks and changes in stocks of the territorial assets considered over this period. As the attraction of audiences is generally modelled as the "result" of variations in assets, ideally we would like to use measures that are lagged with respect to variations of endowments; however, as will be seen in the next chapter, we are strongly constrained by data availability in this respect. In any case, we are looking at changes in audiences (increase or decrease of residents, and changes in tourist arrivals) over approximately the last decade or the second half of the decade.

Table 1 Relationship between mobility groups and mobility variables

Mobility group:	Top workers / creative class	Opportunity- driven immigration	Traditional mass tourism	New forms of tourism
Mobility variable:				
Measures of net migration by				
age	+	+		+
ERASMUS students	+			+
Visitor arrivals			+	+
Movements through airports		+	+	+
Commuting self containment	+	+		

Regarding territorial capital, the definition of endowment factors provided above allowed measuring endowment scores at two points in time as well as — whenever possible and relevant — measuring change between our two moments in time for a total of 73 variables or indicators (Table 2).

The calculated indicators were used to yield a descriptive cartography providing an outlook of the distribution of territorial capital of different types, once again a "plain" one type-by-type (in stock and changes), and more complex descriptions that classify regions according to "types of capital" that are over-or under-represented.

Table 2 Endowment variables by type and time period

	indicators developed	indicators are available for the two time periods
Environmental capital	14	14 ^a
Antropic capital	13	1
Economic capital	13	13
Human capital	7	6
Social capital	14	6
Institutional capital	12	5
Total variables	73	31

The more relevant aspects observed in this cartography can be so summarised.

- The flows of "top-workers/creative class" appear to favour equally metropolitan areas and national capitals (less the largest, possibly most congested MEGAs like London and Paris), as well as regions in the western Mediterranean Arc and a number of rural of peri-urban regions in France and Italy. The draw power of the "blue banana" is apparent but quality of life factors seem to place an added advantage on coastal region in the "sunny belt", producing a general movement of population from north and east to south and west both at the level of the ESPON space and at the level of individual countries. Opportunity-driven labour seems to follow a similar trend but with a higher concentration on economically strong regions and a more tolerant social attitude towards immigrants. The postcolonial pattern is still evident in producing migration flows. Retirement migration exhibits a neater trend southwards, with interesting results in terms on unrealised potential in certain southern Italian and south-eastern Balkan regions.
- Tourism flows cluster in "classic" destination areas and economically stronger urban regions. Short-term flows seem to disenfranchise from "classic" holiday-related tourism and assume the traits of a more complex mobility driven by blurred and diverse professional-leisure factors. Within tourist flows we note a general trend towards the increase in quality of tourism received (with the exception of Britain) and towards the reorientation towards international tourism that seems to favour a selected number of relatively backwards tourist regions. In general, tourism flows seem to push regional convergence throughout Europe, drawing visitors to less advanced regions and peripheral areas, but "non conventional" forms of mobility disclosed that there is much more potential (and possibly more sustainable) to be reaped by lagging regions focusing on different mobility groups than traditional mass tourism.
- Environmental endowments determine an advantage of sunnier and less developed regions, but with interesting spatial differences regarding the "stability" of climate conditions.
- Economic and human capital endowments disclose how different "pull factors" regarding the mobile workforce are spatially distributed (comparing the vitality of the private sector, the degree of dependence on visitor consumption activities and the quality of public sector service provision in an area, with important (and spatially clustered) consequences from the accession of EU 12 countries. We also focused on creative class, highlighting the primacy of cities but also of countries that have pointed more decidedly for a "creative economy".

- Antropic endowments reveal the advantage of heritage-rich and diverse regions, but also the north-south breach in the "green" character of urban areas.
- Socio-cultural endowments confirm the potential attractiveness of the "sunny belt" of Europe: northern-central Spain, Italy, France, but also Alpine regions. More diverse societies are potentially drawing audiences, as well as more "satisfied" ones, and in both cases, the direction is east-west and north-south with some exceptions ("unsatisfied" society in Italy, west of the Iberian peninsula) and reveals that also rural areas in France, UK and Ireland can count on a certain level of socio-cultural diversity.
- Finally, the analysis based on institutional indicators highlight that attractiveness is facilitated between and within EU15 and EFTA countries but hindered between EU12 accession countries and the EU15 block, while the 2004 accession impacted negatively on regions in Poland and Slovakia. High levels of unemployment in former East Germany generate a potential "push" factor for workers in these areas to migrate elsewhere where the prospects are better, and, by contrast areas of North-East Italy, Austria and South East England look attractive by reason of low levels of unemployment and proximity to large population centres.

Finally this report details the main targets and channels of a dissemination strategy primarily oriented to policymakers and policy networks.

- The production of short, readable, summaries of our key research findings, to be supplemented by reports summarising the key policy implications of our work, targeting policymakers and politicians at European level, European organisations responsible for dissemination of knowledge such as EUKN, and representative organisations such as EUROCITIES and CEMR, as well as national representatives of local government and regions. These bodies will receive different types of recommendations in terms of what constitutes attractiveness and what could be mobilised to improve attractiveness. Such recommendations will take into account not only factors such as the prevailing economic conditions, the geographical specificities, the spatial scale at which policies are carried out, but also the potential policy instruments available and the potential policy combinations.
- An advanced web-based "support tool" that can be used relatively quickly and easily by decision makers to baseline their existing situation and monitor their progress over time towards being a more attractive city/region. In a first stage, this web-based tool would utilise the indicators of attractiveness developed in RA3 and the associated regional typologies, allowing cities/regions to compare themselves to similar places in the same typology. Ideally in a second stage (after the completion of the project and the validation of its results) we would like to enhance this a tool using the complete project results, thus also the scenario modelling and policy analysis, enabling policymakers to assess options and explore the impact of a new developments or sets of policies
- Two dissemination events intended to transfer and discuss the project results with policy stakeholders. The first, as mentioned above, will be the Second ATTREG International Workshop, to be held in Tarragona in November 2010 and will be primarily directed at policy stakeholders from case study regions. A second dissemination event will be a "policy seminar" organised presumably in Brussels or Rotterdam after the delivery of the final report (May-November 2012), and open to various policy networks as well as to the wider ESPON community.

2 Outline of methodology

A number of conceptual and methodological aspects deserve further clarification in this Interim Report, as signalled by the reviewers of the Inception Report. These regard a detailed characterisation of the four "audiences", the identification of the case studies and of the spatial scenarios to be addressed and the choice of analytic methods in relation with them, as well as the form, use and timing of output dissemination. The discussion that took place during the 2nd TPG meeting, held in Leuven, 18-20 November 2010, as well as during the First ATTREG international Workshop, also held in Leuven on the 17th of November and the meeting with the Sounding Board held that same day (and we should also mention the participation of an ATTREG delegation to the Internal ESPON Seminar in Liege, 17-18 November 2010), allowed clarifying a number of practical aspects especially in relation to the data sources available and the dissemination of the project results in its different stages.

In this Section, this Interim Report will review (and revise, when so advised by the Sounding Board) the theoretical and methodological framework of the project, in its various "analytic steps", in the light of early findings and the data collection conducted. In the next Section 3, it will illustrate our preliminary research operations and findings. Finally in Section 4 it will set the stage for the next steps of the project until the delivery of the Draft Final Report, including the dissemination strategy.

2.1 From Inception Report to Interim Report

The Inception Report of the ATTREG project "The attractiveness of cities and regions for residents and visitors", delivered on June 30, 2010, illustrated in detail the theoretical background (in Annex D), the overall analytical and methodological framework, the sequence of research tasks involved and the outputs expected at each stage, reflecting the consensus on research questions, scientific methods and potential outputs reached during the 1st TPG meeting in Venice (8-10 April, 2010) and during the first research activity RA1, which occupied the first three months of life of the project, from April to June 2010.

In great synthesis, the ATTREG project aims at a full comprehension of the attractiveness of cities and regions, and positions it as one of the main elements shaping the spatial development of Europe, as well as an area for policy requiring the development of new and richer tools. It so does by assuming - as does an important stream of the recent geographic and regional economics literature - that territorial assets matter for regional and local development as they attract flows of population into regions, or "audiences" as we call them, which are distinguished by the character of their displacement (ranging from permanent or long-term, in which case we are in fact discussing migrations and new residents, to short-term, in which case we are mostly talking about tourism) and their nature or motivation, normally reflecting the work-leisure binary. All these audiences determine important effects locally, because they become embedded, in different ways, in regional development processes, as workers, taxpayers, consumers, citizens, etc. Moreover they produce spatial effects (to be investigated in this study) because the direction, magnitude, accumulation of these flows would determine a change in development opportunities (either by subtraction of human resources and development agents between regions, or by the regional effects produced by the concentration of audiences in one area on the surrounding areas).

Our project takes into account recent research developments in geographic and regional economic studies (in addition to sociology, urban studies, planning, etc.) in that it proposes to bring in two innovative ideas in the study of this issues:

- 1. It conceives the "audiences" as positioned in a continuum rather than a binary opposite of long-term/short-term mobility and work/leisure motivations, incorporating recent reflections on the increasingly "mobile" character of the contemporary society (and on mobility as the normal condition of individuals).
- 2. It incorporates the debate on "territorial capital", also produced within the ESPON programme, recognising that work-related mobility and migrations, as well as tourism, do not depend only on economic variables, but extend to a large number of other dimensions, related with tangible and intangible "territorial endowments".

Based on these theoretical considerations, the Inception Report set on to define a number of specific research questions, derived from the more general objectives of the study as included in the specs for this project, and an analytic and operational framework which allows the TPG to produce relevant scientific results to answer these research questions and transfer this knowledge to the policy community which is eventually the final user of ESPON research. The research questions are the following:

- 1. How do different "audiences" react to different territorial asset endowments? To what extent and how are these responses stratified spatially? What main trends and what key determinants can be observed in the relation between territorial assets and attraction of residents and visitors (of different types)?
- 2. How does the attraction of specific groups evolve over time? What has been the effect on the sustained capacity of regions and cities to attract other groups?
- 3. What is the role of mobilisation strategies and specific policies in these outcomes?
- 4. To what extent has attraction of different groups been a determinant of regional growth and competitiveness? Are such outcomes "sustainable'?
- 5. What are the roles of different economic sectors in the enhancement of attractiveness for cities and regions? What impact do more general economic trends (e.g. the decline of traditional manufacturing or the increasing importance of services) have on regional attractiveness?
- 6. What is the likely development in the relation between territorial capital, attraction and competitiveness in the next 15 years under different scenarios?
- 7. What is the future role of policy, from the local to the pan-European level, in mobilising attraction factors so as to achieve more sustainable development throughout European regions and cities? How can "attractiveness" be integrated into the spatial planning toolbox that is being developed by ESPON?

At request of the ESPON MC, we will add now another research question which has been found relevant by the Sounding Board members:

8. What is particular role of medium-sized cities and small towns as "attractive centres" and how are they integrated in this way into national urban systems and the national economy, depending on the specificities of each country and the specific phase of development, historical and institutional background? And what about other "geographical specificities" like border regions, peripheral sparsely populated areas, islands, etc., that are the focus of attention of recent policy documents like the Territorial Cohesion Agenda of the EU?

A conceptual model was then proposed to address these points, based on distinguishing between flows (the "mobility" measure), endowment factors (characteristics of territorial areas that together are labelled as "territorial capital") and on the presence of mobilisation

(the force of place-based agency). It also considers, in a dynamic way, the feedback that mobility of different types could produce on original attraction factors. This conceptual model is outlined in a synthetic form in Fig. 1.

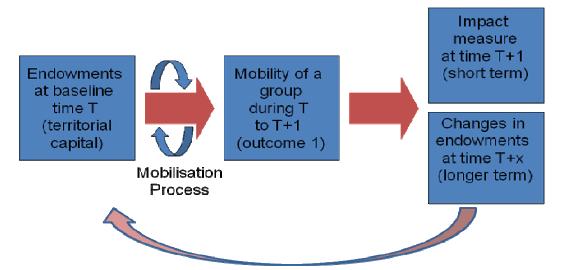


Figure 1: Conceptual model relating mobility to endowment factors and change

This analytic framework unravels in a number of research activities, connected between them (results from one activity become inputs for others) but allowing for feedbacks and loops and also including a number of interaction moments with other ESPON project, and especially those delivering relevant results for ATTREG during the lifetime of the project (see pp. 7-8 of the Inception Report). The specific methods deployed in the different stages or "Steps" of the analysis are detailed in Fig. 2.

One main aim of the work at this stage of the project has been to convert these concepts into variables for analysis and to fine tune analytic methods to the outputs of a new wave of ESPON projects that have become available during this period (EDORA, DEMIFER, FOCI, etc.). This process of specification has involved specifying variables/indicators in terms of content (what does the variable tell us), in terms of time (at what time periods is the variable measured) and in terms of scale (at what scale is data available to construct robust variables). In addition this process has reviewed whether there is sufficient data available within the three candidate countries (Turkey, Croatia and Macedonia) to include them in the analysis.

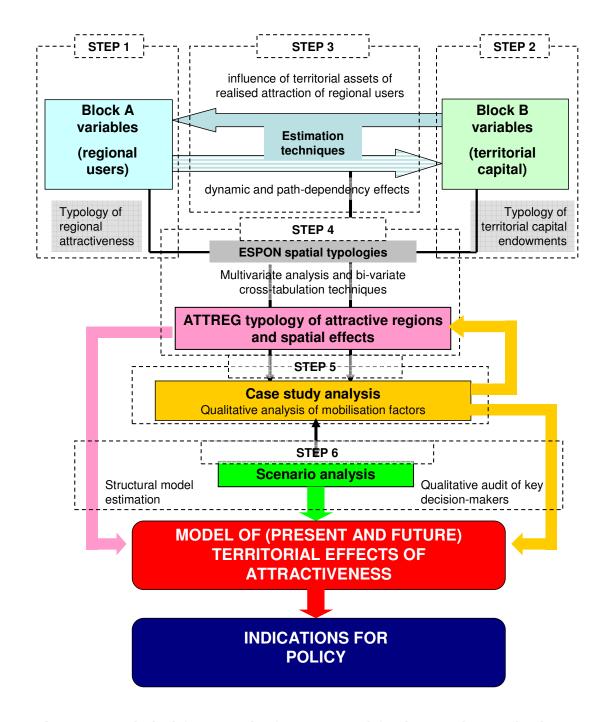


Figure 2: Analytical framework of ATTREG and fundamental steps in the analysis leading to final results

2.2 Defining and measuring the "regional users"

Taking into account the theoretical concerns expressed in the Inception Report (and summarised in 2.1), our project focuses on four main groups of mobile citizens, or "audiences", attracted into regions and cities of Europe. Two of them share the traits of "migration" in that they refer to a long-term, structural form of mobility whereby people displace to a different areas than the one of origin and become residents, and possibly

employed, in their destination regions. Among this type of mobility, we distinguish between two groups of "migrants".

- The first group could be characterised as proceeding in their great majority from developed economies; internal or international migration from peripheral and rural areas to urban and more central areas is typical, but the reverse is also possible, from congested city centres to less central peri-urban or straightforwardly rural areas. We will term this first audience as "top workers / creative class" (this definition could be revised at later stage of the project if the results of the analysis will offer a different perspective). Generally the members of this audience have a high attainment level, and their opportunities to find good jobs are spatially dispersed; for this reason the choice of residence is eventually determined to a certain extent by the quality of life and of the socio-cultural environment that they expect to meet, involving factors not easy to pinpoint and measure, such as the "beauty" and status of places, their connectedness and accessibility, the quality of public life, the chances to come in contact with peer groups but also to enjoy a diverse social environment, etcetera. Among this group, it is possible to have a more detailed outlook to the determinants of mobility of cohorts with interesting profiles according to recent literature, such as the "creative class" (or professionals dealing with cultural and symbolic production), or the researchers (knowledge producers).
- The second group proceeds mostly from lagging regions or non-OECD countries towards more developed economies. Their mobility is mostly motivated by the availability of job opportunities, but the possibility to develop their life in a "friendly", tolerant environment may play a part in the choice of destination; their skills or attainment level is generally low, and they tend to occupy the lower layers of the labour market. We will consequently term this audience as "opportunity-driven immigrants".

It will be clarified later that in the absence of data regarding the origin of migration flows at NUTS 2 level, we have been focusing on socio-demographic data to discriminate among these two groups of migrants.

The other two groups are defined as "visitors", in that their mobility is typically short term¹ and the motivation of displacement is different from (strict) work and residence reasons, but for the considerations expressed before we also recognise that the boundaries between professional reasons and leisure are increasingly blurred and that many forms of work-related or even structural mobility are now accounted as forms of tourism. We thus distinguish between two main groups:

• The third is represented by "traditional mass tourists", mostly implying short stays, the use of collective establishments such as hotels and other forms of tourist accommodation. For this group, economic considerations (the convenience in terms of purchasing parity and the level of development of destinations) play a part that is at least as important as territorial "attractions" and features (climate, image, etc.) in the choice of destinations. Among this group, wherever possible we will distinguish between different types of tourists which could be assumed to have different motivational factors in the choice of destination and also different profiles in terms of impacts, such as foreign as opposed to domestic tourism, and tourists using hotel accommodation as opposed to those using other forms of accommodation that are typically available to lower-budget visitor segments. Though the level of approximation can be large, we thus

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¹ In statistical terms, definitions of "visitor" by international organisations such as the UNWTO delimit the permanence in one place from zero to one year, whereas "tourists" are required to stay at least one night in a place different from the place of habitual residence

try to further distinguish in our analysis between an upper-layer and a lower-layer of the tourism market, the first being roughly associated with hotel tourism and more sensible to "place characteristics", and the second with non-hotel tourism and more sensible to "economic considerations".

• The fourth is represented by "new forms of tourism" where the drivers and motivations of mobility extend to non conventional factors. Among these, we are pragmatically focusing on two groups which have been targeted as the main agents behind interesting regional development processes: that is, the mobility of students in formation and the mobility of retired people and/or second home owners. The movement of these audiences is generally registered as "tourism" (because permanence is generally shorter than one year, and travellers retain their original residence), but the choice of destinations, though incorporating elements of traditional tourism, extends to considerations that are more typical of the upper-layer work-related mobility.

Each such group is delimited and measured (Step 1 in Fig. 2), both in stocks and in changes over time, through indicators built on data series that have been collected (or are in the process of collection as they become available) and stored in an ATTREG database (see Table 1 at p. 3). These data have for the largest part been obtained from the ESPON database 2013, at NUTS 2 or NUTS 3 level (through the web application or directly from the data group or from the original authors of the series), but also derive from different sources reflecting the partly "unconventional" nature of the audiences object of our study, especially for what regards tourists.

2.3 Defining and measuring sources of "territorial capital" as factors of attraction

Our main working hypothesis in this project is that a sustained capacity to attract each such group depends on a different (at least in part) set of factors, relating to what have been defined earlier on as "territorial capital", in its various dimensions. They all are more likely to flow in a place where there are good infrastructure and public services, high quality environmental and cultural assets, and a good climate; however, it is obvious that the characteristics that drive top workers into a certain area are different from those that attract visitors on a vacation. In the process of operationalising our "endowment factors" we developed the following set of definitions for the sub-classes of endowment (Block 2):

- Environmental Capital (EnC) relates to the natural environment and climate characteristics of the NUTS2/3 region. These are relatively unchanging and generally not susceptible to change through policy action by the European Commission, nation states or regional/local authorities.
- Antropic Capital (AC) relates to the quality of the built environment (one dimension of "quality of place"), the nature of infrastructure and the facilities that frame the tourism "offer" of a NUTS2/3 region (such as the number of tourism "beds'). Although some of these variables (such as the percentage of built up land cover) are large scale and relatively unchanging in the short term, the nature of infrastructure provision is open to policy action (such as investing in universities or transport infrastructure).
- **Economic Capital (EcC)** relates to the performance of the economy within the NUTS2/3 region. These measures cover labour demand, the generation of wealth and employment rates (as a measure of the capacity of a regional economy to generate the "right type" of job).

- Social & Cultural Capital (CC) variables capture the characteristics of the people living within a NUTS2 area either in terms of demographic characteristics (by age), well-being (happiness, wealth and health) and social capital (trusting people and satisfaction with democracy), as well as the socio-cultural composition of the local society reflecting factors à la Florida. These are a set of variables that are partly covered by Camagni and Capello's works on the soft intangible qualities of territorial capital².
- Human Capital (HC) variables measure the availability of labour within a NUTS2 region (as unemployment) as well as the blend of skills (measured in relation to occupation) and educational attainment (measured as qualifications) within the resident labour force. Human capital endowments are classically related to policy interventions such as the provision of education and active labour market programmes.
- Institutional Capital (IC) variables measure the provision of public services/investment in a region as well as the degree of satisfaction of residents with public services. These are taken as proxies for "good governance" and frame the likely capacity of place-based institutions to maintain quality of place.

Each source of territorial capital in Block B consists of a number of n indicators (n going from a to f) covering the whole ESPON territory at the finest possible spatial scale. The definition of endowment factors in this way allows the potential for measuring endowment scores at two points in time as well as measuring change between our two moments in time (Step 2 in Fig. 2).

After a through process of verification of sources and existing data, and especially after the publication of a new and more complete version of the ESPON 2013 database (November 2010), it was possible to pin down with more exactness the aspects that will be taken into consideration and measured within each class (see Table 2 at p. 4 - more details about the state of data collection and regional cover will be offered in Ch. 3.1 of this Interim Report and in Annex A). This step in the analysis yields a descriptive cartography providing an outlook of the distribution of territorial capital of different types, once again a "plain" one type-by-type (in stock and changes), and more complex descriptions that classify regions according to "types of capital" that are over-or under-represented.

The next step of our analysis brings us to relate "territorial capital" to effective attractiveness for each group.

2.4 Relating territorial capital to attraction

Endowments of different sources of territorial capital, measured by the individual indicators or groups of them, determine an attractive location; different audiences are likely respond differently to each of them, displacing into well-endowed regions or to regions where the endowments have grown over time (see Table i in our Inception Report, p.4). Using data from Step 1 and Step 2, Step 3 deploys statistical techniques to measure how much of the attraction of each group in Block A (changes over time) can be related to stocks or changes in the endowment with variables in Block B. Specifically, we expect multivariate regression analysis to generate predictive equations of a dependent variable (changes in the mobility audience number) and our independent variables of attraction (the territorial assets). Analysis of the residuals associated with these functions will enable the team to explore the regions where mobilisation either has or has not appeared to have happened.

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² For instance: Camagni R., & Capello R., (2005), ICTs and territorial competitiveness in the era of internet. The Annals of Regional Science 39(3): 421-438.

In the Inception Report we also hypothesised that the attractiveness of a place was likely to demonstrate some characteristics that needed to be taken into consideration in the definition and specification of variables in this work:

- Path dependency. Previous success is likely to attract people of the same or of other groups, making the attraction process to some extent path-dependent. Immigrants go where a large foreign population is present, facilitating their integration; top workers tend to cluster in "top locations" for business and quality of cultural life, which in turn depends on the presence of people of the same collective; etcetera; mass tourists flock to "branded" resort location where they meet many of their cohort, while to some extent "new forms of tourism" will tend to travel to less visited regions, looking for exclusiveness, and so on.
- Spatial "leakage" or "overspill". We expect that vantage points of a region may "leak out" to regions close-by, making them also relatively attractive independently from their own territorial capital endowments especially for some categories of regional users who may become commuters (both among resident workers and tourists).
- Be a relative matter. The attractiveness of a place is likely to be a result of a difference between an "origin" area and a "destination" area. This is an assumption used in existing gravity models of migration³.

The analysis of our variables is therefore developed in four stages (Steps 1-4 in our Fig. 2):

- The exploration of the inter-correlation of variables/indicators within the types of mobility/types of endowment factors;
- The exploration of significant relationships between our outcomes and our endowment factors;
- The production of territorial indicators of assets and outcomes and regional typologies;
- The analytic matching of ATTREG typologies with other ESPON territorial indicators and typologies.

Stage 1: identifying a short list of variables

The aim of this stage is to reduce the number of variables being taken into consideration. This is to be achieved through cross-correlating variables within each type of endowment factor. Where there is a high degree of inter-correlation, variables will be removed leaving one variable to represent groups of highly-inter-correlated ones. In addition simple factor analysis (principal component analysis) will be applied within each bundle of endowment variables to explore whether easily interpretable "factors" can be identified (and subsequently used in the analysis).

Stage 2: multivariate analysis between factors and mobility outcomes

Multivariate analysis will also reveal the nature of the relationships between individual variables that link endowment factors to mobility outcomes. We expect multivariate regression analysis to generate predictive equations of a dependent variable (changes in the mobility outcome) and our endowment factors. Where variables retain significant Global Moran's I scores (i.e. they display spatial autocorrelation), the multivariate analysis will in spatial auto-correlated variables.

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³ See for instance Bodvarsson, O.B., J. Lewer, and H. F. Van den Berg (2007), Measuring Immigration's Effects on Labor Demand: A Reexamination of the Mariel Boatlift, *IZA Working Paper* 2919.

Analysis of the residuals associated with these functions will enable the team to explore the regions where mobilisation either has or has not appeared to have happened. It is through the analysis of residuals that the research team will start to identify locations where "mobilisation factors" (embedded in specific governance processes involving public decision-makers, sectoral stakeholders, association categories and third sector organisations) might have been important either in terms of their presence or absence⁴. The analysis of residuals will allow the identification of places where the endowment factors were high but where the mobility outcomes were lower than expected and it will also be able to identify the converse case (where endowment factors are low but observed mobility was high).

Stage 3: create (and map) territorial indicators and typologies

Having identified a set of key indicators and regression models for spatial attractiveness outlined in the previous Step 3, Step 4 combines the derived variables and indicators in order to generate territorial typologies. This step will be informed through the results (and coefficient values) of Step 3 but will work with clustering techniques that will create typologies grouping regions with similar characteristics. There are two potential ways to do this; the ultimate choice of method will depend on the number of significant variable retained after the regression analysis:

- Multivariate cluster analysis where many variables are used to create groups of regions with similar bundles of characteristics.
- Bivariate cross-tabulations on the variables or factors pair-wise can generate sets of records (e.g. high numbers of visitors, high concentration of cultural assets, low numbers of visitors, high concentration of cultural assets, etc). Once mapped, these Bivariate typologies generate the area typologies. The resulting typologies will be mapped, yielding:
- a visual description of the estimations performed in Step 3, classifying regions according
 to whether the expected relations hold or don't, will disclose a number of cases where
 "mobilisation factors" and "threshold effects" may be at work, to explain why greater
 endowments of territorial capital do not correspond to greater attractiveness, or
 conversely, where not so exceptional endowments of territorial capital have been
 properly "mobilised" to achieve a greater attractiveness.
- A visual description of how regions falling into similar typologies tend to "cluster" spatially in specific areas of Europe, to be achieved with advanced cartographic techniques.

Stage 4: cross typology analysis and mapping

The indicators, typologies and their cartographic representation will also provide visual and analytic insights on causal relations and factors that have not been taken explicitly into account in our analysis. For this purpose, ATTREG typologies with be matched (through 2-dimensional maps) with:

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⁴ A point was raised by the reviewers of our Inception Report, and deserves further clarification. Although "institutional capital", also involving governance aspects, was already present in our list of explanatory variables, it is likely that intangible, qualitative aspects related with governance and "policy events" that cannot be captured by simple data series may explain such differential outcomes. The exploration of the influence of these mobilisation factors, thus, eschews statistical analysis and is left to a case study—based analysis of "anomalies" found at this step of the research.

- spatial typologies established in other ESPON projects (e.g. Functional Urban Areas ESPON 1.1.1, typologies of accessibility, urban-rural ESPON 1.1.2, typology of migratory balances by age cohort ESPON 1.1.4, TeDi, DEMIFER, EDORA, typologies),
- "geographical specificities" as classified by ESPON project and EU regional cohesion documents

This cartography will be accompanied by texts providing an insight on methods used, the illustration of specific facts and emerging trends, and setting the agenda for further and more detailed research on specific issues through the use of qualitative and qualitative methods, as explained in the next section.

2.5 Progressing from static analysis to project outputs

In Steps 1-4, the ATTREG project will have:

- 1. Measured "flows" of different audiences and provided descriptive maps, also classifying and mapping regions according to the relative "specialisation" (and change over time) in attracting specific groups
- 2. Measured endowments (in stocks and changes) of different sources of territorial capital, also classifying and mapping regions according to the relative endowment (and change over time) in specific territorial capital assets (or groups of them)
- 3. Related assets (or rather changes in assets) to flows through estimation techniques, thus obtaining a confirmation (or rebuttal) of the expected "signs" in these relationships, and a measure of the "elasticity" of flows to assets (or groups of flows to groups of assets)
- 4. Classified and mapped regions according to such relations, and according to the match between ATTREG typologies and other ESPON typologies and geographical specificities.

These steps are per se important results of our project: they may represent an important contribution to enrich the knowledge accumulated by the ESPON 2013 programme on spatial phenomena), and yield some ready-to-use information to policymakers in terms of "diagnostic" of specific situations and benchmarking or regions and cities according to their attractiveness in relation with the key spatial and socioeconomic phenomena with which they are confronted.

However, to all extents they should be considered *intermediate* results, which have to be extended in three directions in order to achieve the expected objectives of a full comprehension of the role played by territorial attractiveness in shaping the spatial development of Europe and of the potential role of attractiveness as an element of spatial policy, at all levels, to advance towards a more competitive and cohesive Europe.

- 1. Step 5 will achieve a more complete understanding of the factors at play in the translation of assets endowments to attraction of flows, thus the "mobilisation factors" (spatial phenomena, processes, policies) which can explain the relation found in our analysis according to different geographical specificities. These phenomena are to be studied through "look backwards" case studies, employing a mix of qualitative and comparative techniques and the use of micro-data at sub-regional scale, as will be illustrated in 2.6.
- 2. Step 6 will project this static analysis into the future, producing an analysis of the way in which territorial attractiveness matters for the main territorial scenarios of Europe as defined by various ESPON projects, and enriching the scenario perspective from the particular point of view of our study object. This step of the analysis will partly sue the

results of the Step 4 (the complete pictures of factors at play in "mobilising" assets as attraction drivers) and will also use case studies as a base to test model assumptions and generalise them at European scale, but they will be "look forward" cases conducted in regions where there is a rich availability of micro-data, according to the methodology illustrated in 2.1.7.

3. Step 7 will analyse the potential impact of EU cohesion policies in those scenarios, thus taking into account the effects produced by territorial "attractiveness" and the mobilisation of assets and yielding a "toolkit" for policy at all levels, where specific actions and policies are related with expected future impacts. This methodology will be illustrated in 2.1.8.

In both Step 5 and Step 6, the selection of case studies is a critical factor for the progress of our research. This selection is to some extent driven by results that are not known at the moment of submitting this report, that is, the estimated parameters in the relationships between territorial assets and flows of different audiences. Obviously to answer those questions requires studying different "types" of regions, stratifying the results of our analysis into:

- Different spatial scales: regions, specific sub-regional areas and groups of regions (at least one case for each)
- Different geographical locations, possibly covering the macro-areas of the ESPON space and beyond: pentagon, central-eastern Europe, northern Europe, Mediterranean ark, CEC countries (at least one case for each, combined with the previous one)
- Different geographical specificities (as included in the TeDi and GEOSPECS projects, along with the special consideration of this specific areas in the EU territorial cohesion documents): Mountain areas, Islands, Sparsely populated areas, Outermost regions, Border regions, Coastal areas, Inner peripheries, and densely populated areas within each of these types of areas. Obviously it won't be possible to cover all types but the largest possible number in combination with the previous two criteria.

Thus, upon completion of RA3 in our project (March-April 2011), the TPG will produce a grill of "candidate" regions for case studies that match these criteria, and submit it to the ESPON MC for a final choice.

2.6 Detailed analysis of regional attractiveness

For the detailed analysis of regional attractiveness (RA4 - Step 5) we will carry out seven case studies, that will serve to address questions such as address questions such as:

- Are the typologies identified in RA3 valid for practitioners/stakeholders?
- Do the relationships identified in RA3 make sense to practitioners within attractive/less attractive regions?
- Do the relationships work at smaller spatial scales?
- Do the relationships work where there are richer data-sets?

As part of this process, we will examine a number of possible factors and their impacts, for instance:

• the extent to which particular forms of Institutional Capital have a more or less positive impact on the capacity to attract

- if there are any particular combinations of forms of Territorial Capital that enhance the capacity to attract
- how different forms of Territorial Capital have been created (or destroyed)
- the presence of thresholds (between assets of territorial capital, between mobile populations ,etc.)
- the characteristics of specific successful mobilization strategies

In relation to the mobilization process, we will for instance be able to investigate:

- how the process combines different elements of Territorial Capital through policies/interventions
- attempts to enhance (or create) forms of Territorial Capital and their effectiveness
- whether particular institutional/governance structures are more or less conducive to an effective and inclusive mobilization process
- the role of leadership in governance
- the relationship, if any, between particular forms of governance and outcomes (in terms of successful mobilization of assets)
- the mixes of policy bundles developed to realise the potential of assets
- the selective strategy, if any, toward specific types of resident or visitors
- the management of different forms of mobile populations and the identification, if any, of specific thresholds and related critical aspects
- the management of critical situations and the way of tackling structural or rising problems

Based on this work we would expect to be able to identify what role the combination of territorial governance and territorial strategy (the mobilization processes) and/or the role of any other aspects of territorial capital, that is difficult to highlight with datasets, played in a city/regions "overperformance" or "underperformance'

As far as the case study methodology and selection criteria are concerned, a critical concept in comparative research using case study methodology is the *object of analysis*⁵. In our research the object of analysis is the attractiveness of specific cities and regions for residents and visitors. The objective of the case studies is to gain deeper understanding of what assets make regions attractive for particular groups of users and how governments on various levels and other stakeholders are able to influence attractiveness (mobilisation). Although it is likely that case studies will be selected on "a sub-regional level" (sub NUTS3), this is not a strict condition. The case studies should complement the data analysis in Steps 3-4 in two ways: 1) by gaining insight in relevant factors and (expected) outcomes that do not show up in the data analysis, and 2) by understanding how the attractiveness of a statically defined region is related to assets and policies developed by neighbouring regions and higher-level governments. Taking these objectives into account, statistical borders are less relevant. More relevant are economic definitions (e.g. based on commuter traffic), spatial-morphological definitions (e.g. the built-up area) and administrative definitions (in view of the governance aspects).

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⁵ Yin R.K. (2004). *The case study anthology*. Sage Publications, ltd.

Yin⁶ identified four criteria that rigorous case studies should meet: construct validity, internal validity, external validity and reliability. For the selection of the case studies, it is particularly relevant to pay attention to construct validity and external validity. The tactic of using multiple sources of evidence (triangulation) implies that data should be available and accessible. External validity can be secured by using replication logic. In our study we aim to strengthen the robustness of our theory by selecting different case studies. This will help us to generalise results from individual cases.

Our criteria for the case study selection can be divided into two groups: (i) conditions that individual cases should meet and (ii) conditions that apply to the entire set of case studies. Among the first set of criteria, are:

- Using an information-oriented case study selection strategy, thus aiming to maximise the utility of information. To that end, we prefer to select regions that show up as *outliers* in the data analysis (Steps 2-3). This implies that the selected regions are, for instance, either very successful or not successful at all in attracting (particular) groups considering the "assets" that they have.
- Another relevant condition is the *availability of data*. In contrast with Step 6, this Step is particularly interested in the richness of qualitative data, assuming that quantitative data for the selected regions will be generated by Steps 1- 3. In the more qualitative case studies of Step 4 we attach much value to the availability of policy reports and studies presenting good insights in the attractiveness of the region (assets, users, mobilisation).
- A more practical but not unimportant condition for case study selection is the *willingness* to cooperate. Our team needs to have good access to the relevant stakeholders since they are possible discussion partners or participants in expert panels. Ideally there is one committed representative on behalf of a local government or university who is willing to assist our team with identifying relevant stakeholders. This condition is particularly relevant if none of our project partners is located in the region, which brings us to the final condition:
- Another practical criterion is the accessibility for the members of the research team. Their geographic spread facilitates to some extent the condition that case studies should cover different parts of Europe. However, travel costs and language barriers do restrict the selection of case studies. If other conditions are met, we aim to select case studies in or near the countries in which the project partners are located. This is not only a practical argument, but also highly relevant in view of two other conditions: the availability of data and the willingness to cooperate.

The conditions that apply to the entire set of case studies are:

- Amplest cover of geographical specificities, regional locations, and spatial scales, as illustrated above.
- The set of seven case studies should cover as much as possible the typologies we defined
 in Step 4, based on data analysis. We expect that these typologies relate to the assets of
 regions and their attractiveness towards different groups, in particular the four tentative
 "blocks" of audiences we defined: highly/qualified workers (creative class), labour
 mobility in general (unskilled labour in particular), traditional mass tourists and new forms
 of tourism (e.g. foreign exchange students).

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⁶ Yin R.K. (1994)..*Case Study Research. Design and Methods*. Thousand Oaks: Sage; see also Voss, C., Tsikriktsis, N. and Frohlich, M. (2002) Case research in operations management. *International Journal of Operations and Production Management*, 22(2), 195-219.

• The seven case studies should also represent other ESPON typologies, as much as possible. One of the most relevant typologies is the urban-rural typology (ESPON 1.1.2, 2003) which categorises European regions into six types, considering urban influence and human intervention. Preferably our set of case studies includes both rural and urban regions. Furthermore we aim to include specific types of regions such as at least one mountainous region, one island, one coastal region and one cross-border region.

In view of triangulation, case studies consist of both desk research (possible sources: policy reports and/or databases) and field research (possible sources: interviews and/or panel discussions). In this way we use multiple sources to verify results. Panel discussions and interviews will be semi-structured by means of a list of issues to be addressed and an indication of questions to be asked and answered. For each case study we will identify key stakeholders and experts to be consulted. In the selection of discussion partners we take into account the following aspects: 1) they provide insight in the relevance of different elements of territorial capital; 2) they represent different stakeholders in the mobilisation process (public sector, business sector, knowledge institutions, NGOs, etc.); and 3) they provide insight in the attractiveness for residents and visitors and the specific audiences/mobility groups we identified in particular. We expect the list of discussion partners for each case study to include at least 15 people.

2.7 Exploring possible futures for territorial attractiveness

In Step 6, scenario analysis will illustrate possible futures for territorial attractiveness. The scenario analysis will be based on the results of Steps 3-4, which determined the quantitative relations between outcomes (migration and tourism activities) and (changes in) territorial capital and will be coordinated with the results from "backwards looking" case studies (Step 5).

Scenario analysis will include a quantitative and a qualitative component. The **quantitative component** will be a modelling exercise, based upon results of the DEMIFER model scenarios on future population development⁷ and based upon the results from Step 4. A model will be built and estimated (ATTREG-future) to analyse impacts from attraction developments trends and policies, including

- the DEMIFER-model forecasts
- adjustments in migration and tourism flows derived from Step 3 equations
- including the derived effects of Step 3 equation adjustments (economic base model setup) and taking into account capacity constraints.

The model will be tested in 2-3 data rich case studies and then applied to the whole ESPON space using the indicators and parameters estimated in Step 3. The *qualitative component* will focus on policy-oriented scenarios, focusing on the three policy approaches (smart growth, inclusive growth and sustainable growth) identified in the EU2020 strategy and drawing out their territorial consequences, in terms of the relationship between differential implementation and mobilization of territorial assets and forms of attractiveness. It will be

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⁷ See ESPON (2010a), DEMIFER Demographic and migratory flows affecting European regions and cities – Multilevel scenario model, project 3.1, Deliverable 4; and ESPON (2010b), DEMIFER Demographic and migratory flows affecting European regions and cities – Reference scenarios, project 3.1, Deliverable 5.

based on the identification of a set of key drivers within each policy approach and their implications for attractiveness-enhancing policies.

Despite being aware of the fact that the three approaches are not mutually exclusive, the intention is to utilise the specific policy focus to extrapolate each of them to their logical conclusion thereby emphasising the different potential trajectories in terms of different mobilization factors and enhancement of different territorial capitals.

The point of departure for the quantitative scenario analysis on impacts of attraction development and policies will be population forecast scenarios from the DEMIFER-project. In the DEMIFER project migration flows between European regions at the NUTS2-level have been forecasted and classified in three scenarios:

- Status quo simulation (all sex and age-specific rates characterizing the intensity of demographic events as well as the labor force participation rates remain constant over the projection time on the level observed in 2005)
- 2. No migration simulation: As Status quo scenario, but assuming no migration (=No migration simulation)
- No extra-Europe migration simulation (=No international migration from the outside of the ESPON countries while internal and international migration within the ESPON space remain constant as the Status quo simulation).

On the basis of the quantitative analysis of the relation between territorial capital and outcomes the DEMIFER forecast and contained in Europe 2020 will be adjusted to illustrate the consequences of different attraction policies (interpreted as changes in territorial capital). The attraction policies, which are going to be considered, will be in relation to the three "policy scenarios" devised by the ESPON programme: 1) "business as usual", 2) "cohesive Europe", and 3) "competitive Europe".

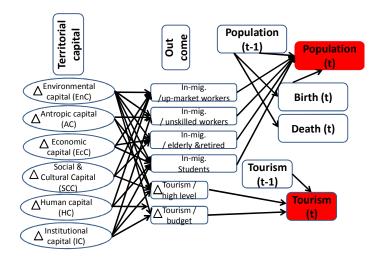


Figure 3: Quantitative analysis of the relation between territorial capital and outcomes

The scenario model is based on the projections already implemented by the DEMIFER project, and it is framed by an estimation of macro trends related to demography, climate change, macro economic path-dependencies, etc. It does not mean to be a forecast of the

future, but it measures the changes in demographic characteristics and mobile population fluxes according to different macro factors and policy approaches.

The model uses the results of the analysis of the relationships between territorial capital and outcomes (Step 3). From Fig. 3, changes in 6 different types of territorial capital have impacts on population involving changes in migration flows and tourism activities. Changes in attractions can be the result of natural development trends and / or implementation of attraction policies, where territorial capital is changed as an element in a policy to ensure cohesion or increased competitiveness in the European spatial development.

However, the direct effects on outcomes should be analysed within a broader regional economic development perspective, which are included and can be illustrated in the ATTREG-future model. Fig. 4 illustrates how outcomes (population and tourism) have an impact on basic jobs and income creation in each region: changes in population will generate basic jobs and income, which in turn will generate service jobs, which depends upon activities in the basic (or export) sectors. Similarly, tourism also will involve basic (export) jobs and income, which in turn create local service jobs. Secondly, the impacts will depend upon capacity constraints in the region: If the region is already close to capacity limits, congestion and price- and cost reactions to capacity constraints will set limits to changes in outcomes.

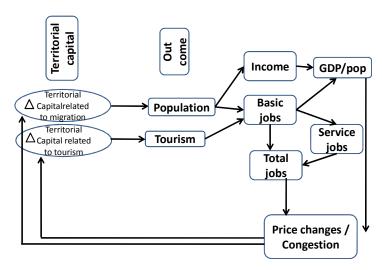


Figure 4: The ATTREG-future model – basic causal structure

The ATT-REG-future model can then be used to study the impacts of changes in territorial capital / attraction policies. Fig. 5 illustrates how changes in attraction factors are fed back into the model: changes in territorial capital (induced by changes in attraction) can be the results of exogenous given changes trends and / or of decisions in mobilization of territorial assets (governance processes), and specific development policies (e.g. the three strands of EU 2020). In the first step the direct effects are calculated by estimating the outcome changes and the direct jobs and income related to these changes. In the direct effects direct congestion effects might also occur in the regions, which already is at the limits of economic activities.

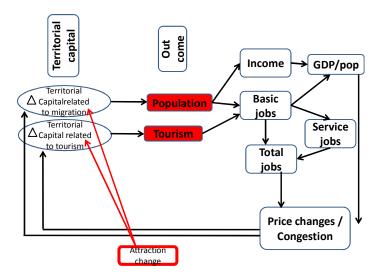


Figure 5: The ATTREG-future model: direct effects of trends in territorial capital and attraction policies

Now the derived effects can be illustrated (in Fig. 6) by introducing round by round impacts from changes in territorial attractions. It may be useful to indicate critical points between types of migration and/or tourists, and to extrapolate possible policy awareness. Moreover, policy recommendations will be considered from a "roll back scenario" point of view: which changes in attractions / attraction policies are needed to obtain a coherent and/or competitive development in European spatial development. This is illustrated in the following Fig. 7.

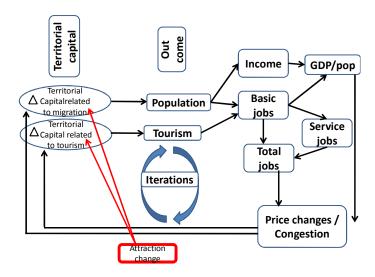


Figure 6: The ATTREG-future model: total effects of changes in trends in territorial capital and attraction policies

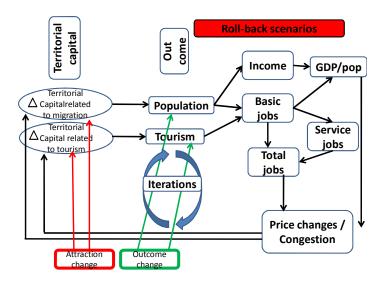


Figure 7: The ATTREG-future model: impacts of changes trends in territorial capital and attraction policies

2.8 Synthetic account of attractiveness in connection to spatial development and inputs for policy

The last Step of the ATTREG project is conceptually split in two parts (also from the point of view of our project management framework, where these two research activities are distinguished into RA6 and 7).

In the first (RA6), we will use the outputs from Steps 1-6 of the research (the characterisation and spatial distribution of "audiences" and "assets"; the analysis of their relationships; the typologies generated by this analysis and by a cross-analysis with other ESPON typologies; the "qualitative case studies" aimed at understanding in detail these relationships, their geographical diversity, and their determinants in terms of "mobilisation policies"; and the projection of this analysis into the future – and its impact on spatial trends – through the use of a roll-backwards scenario analysis methodology) to generate an exhaustive outlook of the main dimensions of territorial attractiveness as an element shaping Europe's future. It will be done integrating the results and insights achieved in these various stages into a comprehensive "narrative", easily communicated to policy makers, with various links to other dimensions of spatial development produced by the ESPON programme 2013, and will be correlated by synthetic maps employing sophisticated cartography techniques to highlight such main dimensions and their associations.

Secondly, in RA7 this output will be used as a driver to yield useful suggestions for policy, especially focusing on the "policy levers" that may be available at the various spatial scales to enhance territorial attractiveness through the mobilisation of assets and so achieve desired results in terms of territorial cohesion and other objectives that are mentioned in various EU policy documents, in the wider context of the knowledge built by the ESPON 2013 programme, such as the demographic and economic trends identified in various ESPON projects, the policy impacts, the role of stakeholders, etc.

The overall aims of this last step of our project will be:

- To develop a much clearer set of ideas about the relationships between the key endowment factors and different audiences as well as the "mobilisation process"
- To investigate the local, regional and EU policy conditions that might influence the mobilisation of assets that attract.

In particular, it will aim to be able to identify different "policy bundles" (or instruments) in association with mobilising processes that lead to different outcomes in given conditions that will provide guidance to policy makers at different levels.

There are two, somewhat different but related, types of policy guidelines that can be considered:

- 1. At the European level. As we stated in the IR we will develop a number of "policy-oriented, prescriptive conclusions linked to, and interrelating, the key ESPON issues (Gothenburg and Lisbon agendas, Territorial, Economic and Social Cohesion, Sustainable Development, etc.). In addition it will consider the project's implications for issues such as competitiveness, equity and balance and the spatial and area based approach, with particular emphasis on the new strategy EU2020.". We will also need to try to build our recommendations based on different assumptions for (economic) development. These would be more general in nature and would primarily be addressed to the European level and concern issues of regional competitiveness, cohesion, balance and equity at the pan-European scale with regard to the attractiveness of regions/cities i.e. the balance within/across the European territory.
- 2. At the "lower" level of city/regions. There the key issue is how different types of mobilisation processes, using different policy bundles and focussing on different mixtures of assets targeted at different audiences, could lead to a range of different outcomes. These would be primarily addressed to the city/regional level and suggest how within the different typologies attractiveness can be enhanced.

However, the primary focus of the project is about mobility of different types of population, and it will be necessary to discuss attractiveness vis-à-vis the different audiences, and on the crucial differentiation between resident and visitors. Moreover, we have to take into consideration the inapplicability of a rational approach according to which we can identify a direct relationship between a certain policy approach and a specific outcome in terms of different mobility forms. Here the presence of other driving forces that can be considered "external" or "global" is crucial, for example, the implications of issues such as climate change and demographic changes (e.g. aging population, shortage of people of "working age").

To this end, the project has to rely on previous ESPON elaborations on these specific factors, in particular the DEMIFER project on demographic changes at EU level, which has developed different scenarios taking into consideration different driving forces. The focus of RA7 in our project, thus, will be to explore the relationships between specific policy bundles and territorial characteristics within the framework of a variety of scenarios that are based on a combination of different global driving forces.

The crucial issue is how to achieve these aims drawing upon the outputs of previous RAs. The outputs from Steps 3, 4, 5 and 6 will provide the input for Step 7; drawing on this cumulative work this will identify, in relation to current policy documents and debates, the implications of our work for current and future European policies vis-à-vis attractiveness. In particular:

- Step 3-4 will have developed a number of territorial considerations in relation with regional typologies;
- These regional typologies and territorial analyses will be further investigated through the case studies in Step 5;
- Step 6 will be concerned with the relationships between assets and outcomes and how
 they might be mobilised in the future, indicating the potential trajectories and the
 strategies to be deployed by local and regional stakeholders and EU policy.

Building on this work in RA7 we will proceed to "critically interrogate" the assumptions underlying key European (Territorial) debates and policies and the extent to which the results of our project support or contradict these assumptions. On this basis, we can then begin to suggest future policy trajectories that may reinforce existing policies or suggest a need for their modification. Moreover, based on our typologies (RA3), case studies (RA4) and scenario analysis (RA5), we will be able to develop more finely tuned policy guidance related to specific types of regions and cities. This will also include the mobilisation process and how this can impact upon attractiveness, an aspect that will be of particular relevance to cities and regions. In these senses we will provide a current assessment of policy, future directions for policy and more specific guidance on how to bring about positive change(s) at European, regional and city levels.

By drawing upon the policy proposals contained in key European documents (e.g. the Green Paper on Territorial Cohesion, Territorial Agenda, Europe 2020 Strategy, the Barca Report, the Fifth Cohesion) and EU research projects (among which of particular relevance are DEMIFER, FOCI, GEOSPECS, EDORA) and the overall territorial considerations elaborated in the First Espon 2013 Synthesis Report, we will, in relation to our evidence from the analysis of regional typologies:

- draw out the overarching implications for Europe's development in relation to the main policy options and trajectories included in key policy documents (especially the new strategy EU2020);
- elaborate more fine-tuned policy implications for different types of regions/cities, taking into account different motivations and objectives;
- provide cartographical presentations of the above in terms of future scenarios under different policy trajectories;
- draft a summary of our conclusions/policy implications for dissemination.

This will entail a three-step process:

- Identification of the normative policy discourses and their underlying assumptions as found in key policy documents, (emphasizing the consequences of the three main streams of the EU 2020 strategy)
- Confront the different policy options with the territorial aspects emerging from the analysis of the relationship between territorial capital and forms of attractiveness
- 3. Produce policy guidelines and estimations of consequences in relation to the different policy scenarios

The process is summarised in the following diagram (Fig. 8):

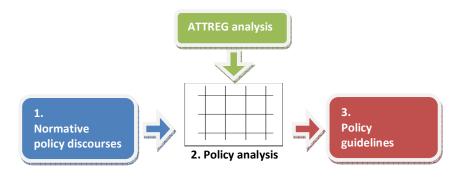


Figure 8: Policy analysis structure in ATTREG

In relation to the normative policy discourses this would entail a sequential **two-part procedure**:

- Re-adaptation of the basic distinction between different scenarios in DEMIFER projects, taking into consideration global driving forces and policy approaches that will affect directly demographic changes
- b) Definition of a set of variables and *alternative policy bundles* in terms of smart, cohesive and sustainable growth (EU2020 strategy)

Different policy approaches would be inserted in the competitiveness /cohesion opposite defined in terms of spatial scenarios by the DEMIFER project, expressed as relatively simple and basic statements:

- **Competitiveness.** The objective here is to achieve high levels of growth within an expanding European market by boosting the strongest places. In essence this means "backing winners" and would lead to a reinforcement of the Pentagon;
- Cohesion. Here the emphasis is on the search for greater territorial balance and equity.
 This involves not only supporting successful cities/regions but also supporting the
 weaker cities/regions to improve their position. This will necessarily entail a strong
 emphasis on (territorial) redistribution, in effect their will need to be a balance between
 growth and collective well being.

These could then be elaborated in a more complex manner to inform our thinking, for example:

- Competitiveness policy approach: focuses on places with the greatest potential for market-led growth (i.e. those places with the strongest territorial assets) by enhancing their capacity to attract. For example by: focusing on existing urban growth poles and their strengths; increasing mass tourism by expanding capacity in already favoured locations; expanding the second home market in already favoured locations; or expanding existing concentrations of regional intensive agricultural production for the global market. In essence this is a more market orientated approach supporting existing success and entails further concentrating growth whilst simultaneously enhancing existing disparities and peripheralities.
- **Cohesion policy approach:** focuses efforts to improve the places with the weakest assets and seeks to achieve a balanced and integrated territorial equilibrium between big urban centres and regional assets (a polycentric approach), between tourist facilities

and local residents, between endogenous investment and the encouragement of endogenous local development. This approach entails a strong redistributional element and seeks to boost the "weakest" and create a more "balanced" Europe, building upon and strengthening diversity.

Having carried out a cross referencing process the next stage will entail the identification of a set of key drivers within each normative policy discourse and their implications for attractiveness-enhancing policies. Details of this are given below in 3.4.

3 Presentation of main results achieved so far

3.1 Overview on statistical and geographical data

In this chapter we present the work done to evaluate both availability of data from different sources and their geographical coverage.

The project has built a data repository, called ATTREG database, to integrate the data and metadata information needed to build relevant indicators and spatial typologies, also to be included in this database at a later stage. In its final form, this database will be one of the key deliverables of the ATTREG project and will be integrated, according to the established procedure.

The main source for this project was naturally the ESPON database, and especially the new 2013 version that, apart from including the most recent rounds of ESPON 2013 project results, features important innovations in terms of metadata specification and querying. This database collects important information for the ESPON programme mainly derived from EUROSTAT and other regional sources and included indicators and typologies generated by the various ESPON projects. This database gives a detailed picture of a large number of statistical fields in the 27 Member States of the European Union, as well as in EFTA and in some cases in CEC countries. A broad set of regional indicators has been extracted from the 2013 DB covering aspects of demographics, labour market, gross domestic product, household accounts, structural business statistics, information society, science, technology and innovation, education, transport, tourism, health, agriculture, geographical specificities, and a study on a new urban-rural typology. All the information collected is already recorded with the NUTS 2006 classification, which is an important feature of the data to allow temporal comparability. We have thus used datasets produced by projects such as DEMIFER, RERISK, FOCI, EDORA, TipTap, climate, and others. In order to use the output of older ESPON 2006 projects, such as 3.2, 1.3.3, etc., we converted the variables originally collected with the NUTS 2003 codification to the more recent NUTS 2006. Changes between the codification used in 2003 and 2006 are minor and are often associated to codes/names changes at least at the NUTS2 level.

Yet, apart from the unfortunate timing (the online version, with the revised metadata sheets, will only be published in the next February), we could not use this source as much as we would have liked. We did have access, upon request, to datasets stored temporarily by the ESPON data group (internal and external dataflow) but upon direct investigation these datasets revealed a high degree of incompleteness, both for regional cover and metadata information (which we suppose will be enhanced in the next months before the publication).
⁸Also, we have been faced with the lack of harmonisation in the geographical coding of

⁸ Moreover, some data sets that were "promised" as included in the dataflow list apparently do not exist, as is the case with some of the DEMIFER outputs that are one of the basic inputs of our research on the

important data sets like those derived from the 2001 census (still showing the NUTS 1999 codes in the old ESPON database) or old versions of the LFS surveys. Another moot point is the possibility to get data from different EU sources. ⁹

In many cases we collected data directly from EUROSTAT, yet either because some required information were unavailable or to integrate the already available dataset with less recent observations for CEC countries, various variables were also collected using alterative, like the ICCA Statistical report (hosted congress events in Europe), the Touring Club Guidebooks series (tourism points of interest and attractions), Directorate General for Regional Policy (variables related to the number of universities and university students), European Commission education and training office (Erasmus programme statistics), plus the Croatian Bureau of Statistics, the State Statistical Office of Macedonia, the Turkish Statistical Institute and the Turkish Ministry of Culture and Tourism to integrate EUROSTAT-derived series with data for the three CEC countries.

Regarding this point, we have reached a satisfactory level of data coverage. While Croatian and Macedonian data were already sufficiently covered by ESPON and related sources, Turkish data have been especially the object of an extensive work of data collection and harmonisation. As a result we cover almost all the categories of data we are going to use in data analysis. Not all these data, though, have been used for the indicators discussed in 3.2 and the related maps in Annex B because of the need of further verification on the methodology of construction of certain variables (for instance certain "migration" indicators).

The ATTREG DB has been structured in thematic areas, subdivided in: audiences, environmental, antropic, economic, social-cultural, human and institutional capital endowments. The database collects both tables reporting information about raw data sourced from various sources, and tables reporting regional indicators of attractiveness constructed using the first set of information (see Annex A for a detailed classification of the indicators collected and calculated at this stage of the project and their main metadata and regional cover specifications)¹⁰. In the next stages of the project, in the database structure

determinants of migrations. Such adverse situation regarding data availability have been amended by our groups recurring to estimations and proxies; once these data will become available in the final form, it is very likely that we will be able to improve our data analysis sensibly.

Anyhow, metadata information is always associated to each variable, and they can be found in the database in a table that reports the variable code followed by the label "meta". In the previous example the metadata information for the table A1MN01 will be found in A1META, that lists all the information about the table title, missing data codification, source, territorial level, years, notes and variable overall reporting labels for each table.

⁹ It must be noted that these "weak points" in the main data source of our project could not be known at the time of submitting the Inception Report; the preliminary investigation on data sources that was part of RA1 could not access the new database that was not freely available at that time though some datasets had already been circulated.

¹⁰ The database is structured in tables that are labelled according to a method that facilitates data acquisition by researchers, by identifying the variable code (A1, A2, A3, ...), the territorial level at which the information is break down (N0, N1, N2, N3) and additional available categories that could be related to other characteristics of interest, like gender (M, F, T) or age bands (1, 2, 3, ...) and so on. If we consider the first variable, population at first January by gender and by age, we find that the table A1N0M01, identifies with the first digit the thematic area "audiences and flows", with the second digit(s) the variable number, population at first January in this example, while with the third and fourth digit the territorial level for which the information is provided, NUTS0 and with the fifth digit the first possible classification, in our case gender where M indicates Male, and with the last digit(s) instead the second possible classification for this variable, in our example the age band 0-14. To summarize: the table A1N0M01 reports information about that part of the population at first January (A1) at NUTS0 level (N0) which is male (M) and whose age is included in the age class 0-14.

we will keep only those variables/indicators that are more relevant and are not already available at other sources.

3.2 Final selection of indicators

Based on the availability of data from the sources mentioned above, the conceptual model defined time in terms of:

- A baseline time period (time T in Figure 1) of 2001-03 during which time measures of endowment factors was measured;
- A time-lagged period of 2007-09 (time T+1 in Figure 1) for which a second measure of endowment features was taken;
- A period of 2001-09 during which time measures of observed/derived mobility was taken.

In terms of territorial scale, the principal territorial unit for variable construction was the NUTS2 region. At this scale, it was possible to use survey based estimates of endowment factors (such as from the European Labour Force Survey or the European Social Survey) with some confidence. It has not been possible to create a parallel set of indicators at either NUTS3 level (problems with the robustness of survey estimates) nor at the level of individual cities (data coverage in urban audit not sufficient).

The research team has reviewed these variables in relation to their time period coverage (for the baseline and subsequent time period), for territorial coverage and for their "goodness of fit" with the literature on mobility. Where variables demonstrate a high level of "skewness" in the frequency distribution (with a skewness measure > 2.0), the variable has been standardised as a natural logarithm. This has been done in order to ensure that our variables maintain a statistically "normal" frequency distribution (a condition assumed for many statistical tests). In addition each of the variables has been tested for its spatial autocorrelation (Global Moran's I) to see to what degree the variable is spatially clustered.

The final list of indicators selected and calculated is displayed in detail in Annex A, with information regarding the regional cover, geographical scale, and metadata. The Tables in the Annex A are divided into six blocks, one (A.1) block of mobility indicators or indicators of "audiences" in our model, and five (A.2-A.6) blocks of indicators of territorial endowments (two capital asset categories have been for the moment integrated in one). What now follows is a brief presentation of the content of such tables. In the next section we will give some preliminary comments based on the mapping of such indicators.

Audiences. In the absence of migration data as a set of flows between an origin (NUTS2 area) and a destination (NUTS2 area) (which might be submitted at a later date by the DEMIFER team of re-estimated from original data), we have focused on considering net migration rates within NUTS2 areas. We have however been able to generate net migration rates for three key age groups in the working population (younger workers and students from 15 to 24 years old as cohort A, workers in the first half of their working career aged 25 to 49 years old as cohort B and an older group of workers who will be preparing for retirement aged between 50 and 64 years as cohort C). These estimations of net migration rates have been derived from DEMIFER population data and records of deaths by age (from EUROSTAT). Thus we have been able to segment migration by age. We have created various tourism indicators focusing in the relative dimension and qualitative aspects of the visitors' population of a region, and their changes over time. Finally we focused on Erasmus students as a "non-conventional"

form of temporary mobility and on university students as a segment of long-term "transient" population that clearly frame aspects of mobility for many younger people aged between 18 and 24 years. It has not been possible at the moment to include a convenient indicator for "retirement" tourism (for those aged over 65 years although as noted above we have calculated net migration rates for a "cohort C" who are approaching retirement). Identifying appropriate data to observe flows resulting from second homes (amenity led migration or second home tourism) has proven to be problematic because of the lack of a time series dataset on the number of second homes (we are currently looking at re-coding data from Censuses in 2001 to NUTS 2006) but we have no data on where the owners of these second homes live.

- **Environmental assets.** We have collected data and built indicators regarding geographical and landscape characteristics, landscape quality and attractiveness, settlement structures, and climate (using a "tourism climatic index").
- **Economic and human capital assets.** Economic endowments and human capital assets have been reunited in one group for the time being for the high level of association that there exist between the two. They were captured as variables relating to the nature of labour market demand, investment, labour supply (the magnitude of the "creative workforce"), and wealth indicators, partly derived from variables sources at ESPON database and EUROSTAT, partly estimated using various raw variables and geographical data ("pull potentials" based either on their relative rates of unemployment or related to differential levels of GDP per capita).
- Antropic assets. Among variable and indicators of the (quality) of the built environment
 we have included accessibility data (depending on the presence and quality of the
 transport infrastructure), some "urban areas" variables, the presence and number of
 universities, cultural heritage and other tourism attractions indicators using data from
 Touring Club guidebooks (we have decided not to use ESPON 1.3.3 data due to the large
 methodological inconsistencies between countries) and the number of congresses held
 in regions sourced from the ICCA database.
- Social and cultural assets. Here we included socio-attitudinal data derived from the ESS survey, social composition variables (proportion of the population by age bands), life expectancy and other social data, plus socio-cultural variables that have to do with the diversity of the local population along ethnic and cultural lines, the dimension of the student community and cultural infrastructure data.
- Institutional assets. We have included several variables and indicators that can be
 interpreted as the level and efficiency of public spending (recorded in terms of levels of
 service or levels of employment in the public sector) but also in terms of the potential
 impact of public policy on attractiveness (such as restrictions of labour market
 migration by nation states).

Most likely the process of estimation of the determinants of mobility for various audiences based on the asset endowment will lead us in a later stage to integrate or skim down this list, or even to reinterpret indicators originally included in one category as belonging to another block or even as being "transversal" to different blocks.

3.3 European maps with commentaries

While all the indicators mentioned above have been calculated (and some other will, as soon as the data will be made available), and will be used to estimate the relationship linking

assets to flows in our model, some of these indicators providing preliminary meaningful insight into the spatial distribution of endowments and assets, have also been mapped. This descriptive cartography provides a visual representation of both mobility (outcomes) and endowment factors. These cartographic representations have also been the first opportunity to visually classify regions according to "types of capital" that are over-or underrepresented.

At this stage of the project indications for policy following from these maps are limited (we expect policy considerations to become relevant after estimating the relationship linking assets to audiences), but we do highlight some interesting phenomena emerging from these representations. We now provide short commentaries on the main spatial trends emerging from this set of maps, which are collected in the Annex B.

Migration 2000-2007 for workers aged under 50 years

The research team has compiled data for net migration from two principal sources: the DEMIFER project that calculated net migration rates for the population as a whole for the period 2000-06 and our own calculations for net migration that worked on the period 2002-07 dividing the working age population into three age bands (see above). Figure B.1 outlines average net migration rates based on the DEMIFER project whilst Figures B.3, B.2 and B.12 map net migration rates for our three age cohorts.

The map of global net migration rates over the 2000-2006 period (Fig. B.1) reveals a strong tendency for net out-migration from northern and eastern Europe (Poland, northern Finland, Bulgaria) and net in-migration to a southern and western arc of Europe (in particular the Mediterranean arc of Spain, southern France and northern Italy). Main MEGAs areas, like Madrid, Amsterdam, Prague, also attract population as well as of some urbanised "intermediate" regions like Scania, Tuscany, Western Ireland and parts of England. The coastal regions of the Mediterranean that are popular tourist resorts, like the Spanish coasts, Algarve, Central-Eastern Italy, Cyprus are also particularly dynamic, showing a trend for which tourism can be an "agent of urbanisation" attracting workforce and new "lifestyle" residents. The strongest economic core regions of Europe have a moderate attraction capacity with the exception of Paris, London and Berlin, which are probably starting to suffer from dimension (and congestion) diseconomies.

The general trend however is of a relative increase of population of more densely populated areas also within national systems, and of a severe to very severe population loss in Eastern countries and peripheral regions, while Eastern European capital cities reinforce their position (Prague standing out as the most attractive place in the 2004 enlargement area). Even within the de-populating north and east generally net migration rates to the NUTS2 region with the capital city are relatively high in comparison to the rest the nation state in which they are based thus within countries there is still on-going processes of centralisation around the primary city.

The 25 to 49 year age group is the single largest cohort of the three we have considered. Thus it is not surprising that the map of net-migration for this age group over the period 2002-07 looks similar to Figure B.1. The countries that make up the ESPON space gained around 4.8 million adults in this age band over the period 2002-07 with the UK (around 530,000 net in-migration), Spain (around 1.7 million net increase) and Italy (around 1.2 million net increase) were the principal destinations. Our estimations for net migration in Ireland (Republic) and Cyprus at around 12% increase in the population in this age band due to net migration is an under-estimate because we do not have figures on how many people died in this age cohort over this period in the NUTS2 regions in these countries. The highest

level of net migration in a NUTS2 region in Spain is 18% change in population through net inmigration.

There is a tendency for economically stronger regions to score better, and in general all the strongest MEGA with Madrid, Barcelona, Milan, Dublin, Amsterdam, Brussels leading this trend, while in London, Paris, Berlin this growth is more moderate. Again, western Mediterranean coastal areas seem to strengthen their position using their natural and cultural features, rather than economic assets, as an attractor of this mobility flows. In the dim eastern-European panorama, cities like Bucharest, Sofia, Warsaw exhibit positive attraction rates consolidating their position and widening the population and skills breach in their national systems. Rural and intermediate regions in southern Scandinavia, central France, Spain, and Italy, central England (as well as Lincolnshire) and Scotland, Ireland, also score particularly well indicating a trend for skilled workers to be interested in medium sized cities and more sparsely populated regions.

By contrast Figure B.3 maps net migration rates for the age group who were 15 to 24 years old in 2007. Globally ESPON countries combined (excluding Turkey) gained 2.2 million adults in this age cohort over this period. Again the UK, Italy and Spain account for the largest numeric components to this increase (around 1.3 million net increase). Across Europe the average net migration rate for capital cities is around 8% increase in contrast to the mean of 2% for all other NUTS2 regions. Net migration rates for this age group correlate with net migration rates for adults aged 25 to 49 years in 2007 suggesting that in an aggregate sense these two age cohorts are finding similar types of area to be attractive.

Attraction of traditional tourists

EUROSTAT collects data on the number of arrivals by region and thus the research team has been able to assess flows in terms of visitor arrivals over the period 2001-09. Furthermore these statistics on visitors can be refined in relation to the origin of the visitor (resident/non-resident or foreign) and in relation to the type of accommodation visited (hotel/non-hotel forms of accommodation).

Fig. B.4 illustrates the magnitude of tourist flows in terms of arrivals in all types of accommodation and all visitor segments (averaged in the 2006-2009 period). The countries with the largest number of visitors per annum for 2007-09 were Germany (128 million arrivals), France (124 million arrivals), Spain (100 million arrivals) and Italy (94 million arrivals). Figure B.4 identifies the NUTS2 hotspots as located in southern Spain and Catalonia, Paris and the lower Rhone valley with northern central Italy (from Rome sweeping up to Veneto via Tuscany). The distribution of the numbers of arrivals however does correlate to some degree to Figure B.1 mapping the pattern of net migration rates across ESPON space. A simple scatterplot plotting the number of arrivals per head of population against net migration rates shows the general relationship of visitors against net migration (Fig. 9).

Classic destination regions in the Mediterranean Arc, including coastal resort areas, islands, as well as large urban regions like Istanbul and Barcelona, some metropolitan areas, with Paris, London, Amsterdam, Berlin, and Madrid on top, and a number of rural areas in Scotland, eastern France, central Italy, Sweden, receive the largest share of tourist flows. Anyway It is difficult to understand the significance of visitor numbers without giving some notion of their relative value either in terms of the number of visitors per resident (a measure of potential social impact used in the scatterplot above) or in terms of the numbers of visitors per area (a measure of spatial intensity).

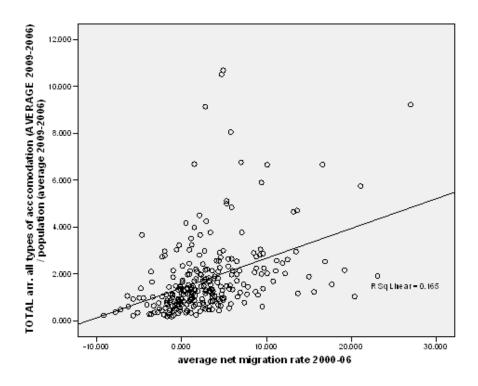


Figure 9: Scatterplot of net migration rates with tourist arrivals

Figure B.5 maps out the spatial intensity of visitor numbers that will bring into focus tourism in small or urbanised NUTS2 regions. Thus the map stresses high levels of tourism impact through Italy, Germany, the Netherlands and the UK, highlighting the prominent position of "classic destinations" mentioned above, coastal, rural, islands, and urban. The "blue banana" regions on the whole score very well, confirming our hypothesis that within mobility flows it is increasingly difficult to distinguish between a purely leisure-driven mobility (traditional tourism), driven by climate and natural and cultural attractions, and other forms of temporary mobility, like congress and business tourism, health tourism, educational tourism, which seem to follow the logic of "GDP plus accessibility". To this perspective, it will be interesting in our development of complex regional typologies (Step 4) to overlap this map to the one elaborated by FOCI on the accessibility of places (based on the possibility to spend 6 h of meeting and then going back home) and to a certain extent, also the map regarding "GDP per capita versus potential multimodal accessibility" (p. 39 of the FOCI Synthesis Report). Some regions are clearly underperforming given their location and endowments (e.g. Calabria, Sardinia). The Tallinn-Helsinki cross-border region area appears an interesting situation, possibly with an intense exchange of flows between them.

Fig. B.6 analyses the tourism phenomenon dynamically. Stress indicators have been compared between the 2001-04 and the 2006-09 periods, and a change rate has been calculated and mapped. With few exceptions (e.g. Spanish coasts, that strengthen their position) this map suggests that in general terms regions that were lagging behind from the tourist point of view seem to be catching up, offering their visitors "undiscovered" landscapes and possibly more favourable economic conditions for tourism. Iceland, Turkey, inland Croatia, Bulgaria, the Baltic countries have done very well to this respects during the last decade, while a few mature regions for domestic tourism, especially in France and southern England, seem to be dwindling in terms of tourism attractiveness. From this point of view tourism seems to be generating more territorial cohesion because it offers a

development opportunity to regions that that have been lagging behind in the EU context but also in terms of the national economies. However it needs to be borne in mind that the numeric change in the number of visitors in these countries is relatively small. For example the number of visitors recorded in Bulgaria rose from 2.9 million in 2001/04 to 4.6 million in 2006-09 whereas in Catalonia (a single NUTS2 region) visitor numbers rose from 14.7 million in 2001-04 to 18.0 million over the same period.

Finally, we analyse two changes in the "orientation" of local tourism markets. In Fig. B.7 we compare the specialisation in international tourism in the 2001-2004 and the 2006-2009 periods and calculate and map the trend in changes. To some extent, an orientation to international tourism, especially for backwards economies, is a much more powerful economic development driver than domestic and proximity tourism, and a re-orientation towards international tourism can be easily associated to a "requalification" of the tourist sector. We then see that while the general trend is of a greater attraction of international flows, a few regions over Europe have accomplished such reorientation during the last decade, notably in the south of Italy, inland areas of Greece, Scotland and rural regions in central-eastern Europe, while notably some mature regions in France and Spain seem to be following the opposite trend (with no serious consequences in these specific cases).

In Fig. B8 we similarly compare the specialisation in hotel tourism between the two periods, and calculate and map the trend in changes. Again, "hotel tourism" means in general more quality and higher economic impacts than tourism in other accommodation types like hostels, camping grounds and house rentals. Analysing this at the finer NUTS 3 level we see a general "push up" of tourism quality with a few exceptions that seem to be concentrated in Britain and Germany, where the visitor segment that does not use hotel accommodation seems to have grown faster.

Attraction of non-conventional forms of mobility

Mapping non-tradition forms of mobility across and within Europe is currently problematic. However the research team was able to compile some data and estimations that relate to student mobility and to pre-retirement migration by those who may still be in work.

Mapping the distribution of university students is a useful proxy for mapping one form of attractiveness for those seeking a university education (generally but not exclusively in the 18 to 24 year age group) for what might be considered a non-traditional mobility group. Thus Figure B.9 maps out the number of ERASMUS students (as an absolute number) in the academic year 2008/09 for the "top 500" universities in the ESPON space. Clearly the ability of a NUTS2 region to attract ERASMUS students is somewhat dependent upon a university being located within it.

With few exceptions (Paris, Lyon, the south of Sweden and Finland, Copenhagen) the general trend seem to favour exchanges in "amenable areas" rather than in places with the most famous and established universities; for instance the UK and Germany do not score particularly well (maybe due to language barriers), while the Mediterranean coasts and urban areas are very popular. Prague, Berlin, Budapest, Vienna also do very well in attracting Erasmus students. It would indeed be interesting to compare this map of destinations with other data related with the international ranking of universities or the change in the number of students, and to cross-analyse these data with some quality of life indicators, as well as distinguishing for typologies of university, for instance big traditional academic poles, as compared to specialised universities, and generally attractive areas. We may be able to do this at case study level in Step 5.

In Fig. B.10 we analyse the relative change in the attraction of Erasmus students from the academic year 2004/2005 (only "top 100" universities by incoming students), to note which

universities have been the most active in attracting students from abroad as short-stayers, which may involve more than a bit of "branding" by regional authorities during this decade. The picture is confused but we do notice that core areas, with a few exceptions in Scandinavia, Central Europe, Sardinia and Portugal, that made a considerable "scale jump" over this period, have been readier to improve their position, downplaying the opportunities for lagging and peripheral regions to use this form of temporary6 mobility to bring to a "reequilibrium" of population mobility.

To provide a broader picture of what could be described as a study-related form of temporary mobility, Fig. B.11 shows the spatial distribution of the total numbers of students enrolled at universities located within the NUTS2 region per 1000 head of population in 2007. Obviously a share of these students is non-local in origin, thus this map illustrates the pull of universities as regional attractors. In this case we have used the NUTS3 detail. The picture is confused but we do note a certain trend to over-represent students in regions with second rank cities (small and medium sized university cities), indicating that "studentification" could have been a key driver towards more balanced national urban systems.

Finally, Figure B.12 provides an insight into "silver migration", or the net migration rates of the 50-64 age cohort over the 2002-2007 period. Whereas the ESPON countries gained around 500,000 people over this period in this age cohort from outside of the ESPON area, the patterns of net in-migration vary slightly from the younger age cohorts. However the general pattern of net migration in this pre-retirement cohort correlates with that of the age cohort aged 25 to 49 years (in 2007) there is no correlation with net migration rates for the age cohort aged 15 to 24 years (in 2007). We can thus hypothesise that the types of areas that attract this age group of "silver migrants" do not consistently attract younger migrants.

The research team has not been able to generate an observation of net migration by those who are older than 65 years. The process becomes complicated with the increasing mortality rates in the population at this age. Equally it has been problematic to identify and re-code data on second home ownership and it is currently not possible to map primary residence location of second home owners through materials held either by EUROSTAT or by ESPON.

The "silver age drain" seems to be working from the north-east to the south west of Europe, also at the level of individual countries, towards regions offering higher place amenities, a better climate, and convenient properties, or inland regions well-known for their amenities like Dordogne. In numeric terms it is Spain, Italy and France that are net winners of population in this age cohort (posing important questions in terms of social security systems that may be analysed later in our project). Some NUTS2 areas in these countries are gaining as much as 6 to 10% of population in this age cohort as a result of net migration. Both the UK and capital cities become net losers of population in this age cohort. Peri-urban regions of large metropolitan areas also score very well to this respect (Flevoland in relation to Amsterdam, the Cornwall area, and the suburban rings of Prague, Vienna, and Castilla-La-Mancha in relation to Madrid. Scotland stands out as an interesting case that should be investigated further. Paris and London, conversely, seem to be places from where many workers are likely to flee from as soon as they retire.

Environmental assets

Figures B.13 and B.14 set out the potential attractiveness of NUTS2 regions based on differences in levels of sunshine (measured as radiation levels). A simplistic interpretation would lead one to propose that "sunnier" places would attract more potential visitors and migrants. Figure B.13 maps sunshine attractiveness assuming free circulation of people within and between EFTA countries (with limited mobility between countries outside the EU-

EFTA space). Figure B.13 shows an expected picture of the southern and Mediterranean regions recorded as attractive and closeness to populations of working age adults (aged 25 to 64 years). Figure B.14 shows the impact of accession since it portrays the difference in potential mobility arising from the opening up of mobility across the expanded territory of the European Union. Here the map picks out the important potential growth in attractiveness of Bulgaria and Romania with a decrease in the attractiveness of southern Poland (once Polish visitors can potentially visit sunnier parts of Romanian and Bulgaria).

We have calculated a Tourist Climatic Index (based on a methodology developed by Mieczkowski¹¹) based on a complex set of climatic properties that include temperatures, humidity, radiations, rainfall, etc. and we have used this index calculated by month and regions NUTS 2 and 3 to compare regions regarding the "attractiveness of their climate" for tourists, but obviously – increasingly – this criterion is also likely to affect the location choices of immigrants, and especially those of the "cohort B" in our study, or top –workers, as well as those of the "cohort C" – retirement migrants. In Fig. B.15 we map regions by their mean TCI index values for the warm period (April-September). It could be noted that in some cases (Spain, France) inland regions score better that coastal regions because they offer less weather variability and humidity, while Nordic coasts score as high as most Mediterranean coasts.

Fig. B.16 charts instead the mean TCI index values for the cold period (October-March), and clarifies the much better position of southern and coastal regions to this respect. The indication that could be derived from these last two maps is that while in the winter "warmer" regions are clearly preferred as holiday locations, other regions that are currently underperforming as tourist destination have good chances to reinforce their tourist position in the summer and shoulder months.

However migration choices are mainly driven by the average climate throughout the year and are sensible to the variability of the weather: stable weather conditions are generally preferred (and offer more convenient residential opportunities) over regions with hot summers and cold winters. From this point of view, Fig. B.17 maps the differences in the average TCI indexes between warm and cold periods, and reveals more favourable conditions in the classic Mediterranean arc as well as in some eastern European regions. Fig. B.18 instead looks at extremes, mapping the maximum differences in monthly TCI indexes between warm and cold periods, and reveals that while in general "warm" countries are to be preferred they are also those that are subject to extreme climatic conditions which may be a deterrent for stable residents.

Fig. B.19 looks at landscape diversity, an index developed in the landscape map of Europe. This map reveals spots that result particularly attractive for short-term mobility such as traditional tourism, but they become so also for longer term mobility forms. The extraordinary endowment to this respect of most Spanish regions certainly offers opportunities for a rich and diversified tourist activity (which in Spain is an issue: moving away from established mass tourism, "3S"-focused resort tourism towards other tourism types is taking a relatively long time). It must be noted though than many peripheral regions in Scandinavia, Ireland, Eastern Europe and Southern Italy also have a great potential to that respect.

Finally, the quality of the natural landscape can also be assessed in terms of the number of "natural attractions" that it includes. Fig. B.20 maps the share of classified 'Natura 2000' sites (from the European Environment Agency) at NUTS 3 level. Obviously the map over-

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 $^{^{11}}$ Mieczkowski, Z (1985), The tourism climatic index: a method of evaluating world climates for tourism. The Canadian Geographer 29: 220–233.

represents rural and peripheral regions but important urban regions (Madrid, Marseille, Rome), and intensely developed tourist region (the Venice province, the Canary Islands, the southern French coast) are also included among the first. This could be an interesting criterion to lower down the critical threshold of migration policies.

Economic and human capital assets

Figures B.21 to B.23 describe labour market demand in terms of the percentage of residents employed in one of three broad "service" sectors of the economy: employment within retail, wholesale, hospitality and transport sectors (NACE broad sectors – here labelled as consumption related employment), employment within private marketed services (financial intermediation and real estate) and employment within public administration and community services (public sector employment). Each of these broad sectors is taken as a proxy in turn for the vitality of the private sector (private marketed services), for the degree of dependence on visitor consumption activities (consumption-related services) and for the quality of public sector service provision in an area (level of employment in public administration).

The analysis of the period 2001-03 is important because of our hypothesis of the time lag between the asset (employment rates/unemployment rates) and the movement (migration, arrivals). The timing is problematic because mobility became slightly freed up after the accession of the EU12 in January 2004 but in practice (for the case of labour migration) most EU15 countries maintained limits on the movement of migrant workers for periods of between 2 and 7 years (Germany and Austria will continue to restrict the movement of workers from Poland up to 2011/12). Thus 2001/03 works for us in terms of analysing the conditions that pre-date any decision to move/travel. The data for 2007/09 can be used to make predictions/scenarios for movements in the period we currently are in – although clearly the economic downturn will dampen movements.

Figure B.21 picks out areas for which consumption-related sectors are important for employment. Thus England is still a nation of shop-keepers and the coastal NUTS2 regions in Spain and western Italy are high in this type of employment probably because of tourism-related activities. The Tyrol in Austria, the Algarve in Portugal and the Balearic Island of Mallorca record the highest levels of employment in consumption-related services by LFS estimates for the period 2007-08.

Figure B.22 shows areas for which private marketed services are important for employment. Private marketed services might be thought of as being associated with the command and control functions of the global economy. Thus the London and Paris regions (along with Brussels, Madrid and Scandinavian capitals) demonstrate high levels of employment in this part of the service sector economy. These are forms of employment that are probably the most "footloose" of the service sector and most responsive to the differential geography of available and high quality labour.

Employment in the public administration, mapped in Fig. B.23, might be considered as suggesting the quality of publicly maintained place. Work in public administration might be indicative of the level of public and community services available in an area (i.e. more people employed as teachers, doctors and street cleaners). As these are funded by taxation one might think that the level of employment in public administration as a percentage of all employment is a measure of national wealth (although clearly levels of public administration employment will also be related to the relative capacity of wealth and the capacity of private sector services to meet need). Given the very place-based nature of public administration, it also indicates the degree to which local earnings are anchored in a region. NUTS2 areas with very high levels of public sector employment include very peripheral areas such as Nord-

Norge (Norway) and northern Sweden as well as deprived and peripheral areas such as Northern Ireland and Merseyside in the UK (all these areas had more than 39% of employment in public administration in 2007/08). The lowest levels of employment in public administration were recorded in Turkey and Romania (around 11%).

In addition to plotting labour demand in NUTS2 areas by reference to the types of industry that are located in these areas, Figures B.24 and B.25 plot potential labour supply as levels of unemployment. Unemployment levels across the NUTS2 regions in 2007/09 are mapped in Figure B.24 for adults aged 15 to 24 years. Peripheral regions in southern Spain, northern Finland, eastern Scotland and Sardinia show the highest levels of unemployment (measured as a percentage of all adults in this age band). Surprisingly regions such as Madrid and Inner London (areas strong in private marketed service sector employment) also record high levels of youth unemployment. Levels of unemployment (those who are out of work but actively seeking employment) are complicated by levels of take up of educational opportunities and the age at which young adults are constrained to be in education (in around a third of ESPON countries education is mandatory up to the age of 18 years). However it is one of our propositions that migration is driven by differential employment opportunities for adults in this age band.

Figure B.25 sets out levels of unemployment for those who are aged 25 to 64 years old for the period 2007-09. For this age group unemployment levels tend to be higher in southern Spain (as with youth unemployment) but also in part of the former GDR and Slovakia. In terms of considering labour migration rates these are the kind of areas from which one would expect to see higher levels of out-migration.

Figures B.26 to B.27 capture the potential quality of human capital in our NUTS2 regions. Both Figures plot levels of educational attainment amongst working age adults aged 15 years or more (based on LFS estimates). Specifically the maps plot the proportion of working age adults with a tertiary level education (ISCED level 5 or 6) in 2001/03 (Figure B.26) and in 2007/09 (Figure B.27). The general trend is for the proportion of working age adults with a degree to be on the rise in Europe as more people go through university thus the levels plotted in Figure B.27 are generally higher than in B.26. The general distribution of people with a tertiary education is one that is biased towards Western Europe and Scandinavia. It is also a distribution that is biased towards capital cities.

Figure B.28 sets out the proportion of workers who might be labelled as having a creative occupation. This is a definition that is narrower than the one used by Florida as it mainly relates to artistic and creative occupations (rather than some of the more managerial and technical occupations identified by Florida and others). There is a strong association with between the presence of creative occupations and human capital. The scatterplot below (Fig. 10) plots the proportion of creative workers and the level of educational attainment in the workforce more generally. It is thus not a surprise to see that the distribution of creative workers is broadly similar to that of the distribution of working age adults with a degree (see Figure B.26 or B.27). The map highlights the importance of cultural employment in large cities, especially in Central-Northern Europe (but also in Madrid, Vienna, Rome), but also in countries which have characterised themselves with the high degree of "creativity" – or the capacity to elaborate cultural values into knowledge-based industries, like Finland (telecom), Sweden (design, electronics), the Netherlands (media, publishing), Switzerland (design, architecture).

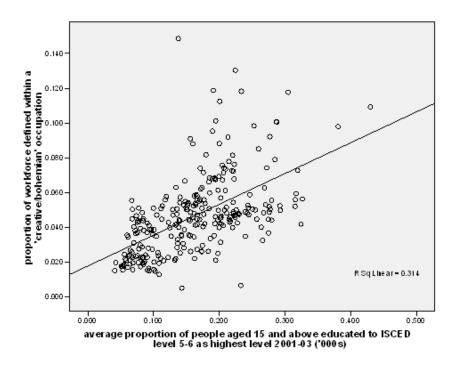


Figure 10: Scatterplot of highly educated workforce and creative class

Figures B.29 to B.32 are the research team's first attempt to translate economic and labour market variables into a form that may start to explain mobility patterns across the ESPON space. Each of these figures set out a variable calculated on the basis of differences in the economic variables across the ESPON space mediated by direct distances and also by the potential population of migrants in the origin NUTS2 area. Figures B.29 and B.30 deal with unemployment as a potential driver of migrant mobility whilst Figures B.31 and B.32 deal with attractiveness that may arise through differences in wealth (either as GDP or as disposable income).

Given that employment opportunity is often proposed as a driver for migration, Figure B.29 sets out the attractiveness of NUTS2 regions based on differences in unemployment levels for the 15 to 24 year age group assuming free mobility of labour across boundaries across all ESPON area countries (mediated by a gravity model of direct line distance between areas). Based on this calculation NUTS2 regions in dark green are those that are theoretically more attractive and those in dark brown are theoretically unattractive. Thus Poland, Slovakia, southern Italy and Sardinia are presenting a "push" force (of being unattractive to workers in this age group) whilst a European central area of the Netherlands, western and southern Germany, Austria the Czech Republic and Hungary are attractive with relatively low levels of youth unemployment.

Figure B.30 repeats the analysis of the previous map but repeats the analysis for working aged adults between 25 and 64 years. Here the broad band of "attractive" Europe becomes confined to a north-western cluster of southern and eastern England and the low countries at one end and north-eastern Italy, Switzerland, Austria and western Hungary at the other. NUTS2 that look less appealing on this measure become restricted to western Poland (along the German border), parts of the former GDR and the eastern part of Slovakia.

Income levels are generally tightly linked to GDP levels at the scale of NUTS2 regions (relatively self-contained labour markets), thus it is not surprising that Figure B.31 and B.32

tell a similar story. Figure B.31 is based on attraction generated by differences in primary income per inhabitant whilst Figure B.32 plots potential attraction based on differences in GDP per capita both for the same time period. Fig. B.32 takes GDP per capita as a basic measure of economic wealth in a region (at the least it is a measure of economic value that may or may not be evenly distributed within that region). Both figures show that there would be a strong potential for migration from eastern and eastern-central Europe to the EU15 countries. With the exception of the capital regions in the EU12 countries (Warsaw, Prague, Budapest and Bucharest), GDP per capita levels were significantly lower than was the case in the EU15 area. Thus a band of EU15 countries stretching from northern Italy through Austria and western and southern Germany look very attractive under this measure. However EU15 capital regions such as London, Paris or Madrid also look very attractive even though they are further geographically from the accession populations.

Antropic assets

For antropic assets we have looked into measures of the intensity and quality of the build or "urban" environment. Obviously such features to not restrict to urban area but invest all "urbanised" environments underlining the differential advantage in terms of attractiveness that urban areas have compared to non-urbanised or sparsely populated settlements, and mirroring the situation with "environmental" assets for which the latter regions are likely to be stronger.

Fig. B.33 maps hectares of green space in urban area per 1000 inhabitants, providing an overall picture of "how green are our cities" across the ESPON space. The trend is clear, with northern and central urban areas generally resulting greener than southern cities (which, nevertheless, are compensated by more attractive "environmental" and climatic assets as seen above), and rural or more sparsely populated regions and those characterised by a polycentric urban system with many medium-sized cities emerging as greener than the polarised urban settlements. Also note the generally greener situation of British, German and Dutch urban regions, even in areas of high density, than the rest. Within the bleak Spanish panorama Madrid enjoys a relatively greener metropolitan region (Autonomous community of Madrid); also note that tourist resort areas, with the exception of the south of France, are not necessarily greener than other areas.

The number of international congresses held in a region per year have been derived from a database provided by the International Congress and Convention association, but only including large congresses (with more than 1,000 attendants), over the period 2000-2009. This variable proxies the capacity of cities to host congresses and it is a good measure of its infrastructure for tourism and the economic environment. Fig. B.34 maps the number of congresses held in regions in the year 2009; obviously the map returns many urban hotspots of Europe, with Brussels and Barcelona leading the list, but also with interesting runners-up in Eastern Europe (especially the Baltic countries), Scandinavia, and Southern Ireland, contradicting at least in part the idea that congress organisations favour the most accessible places in favour of amenable locations and that there may be some explicit attraction policy at work by local and regional policymakers to offer favourable conditions to them. Fig. B.35 maps the change in congresses held in region from 2000 to 2009 (using the variation of an indicator of the share of congresses held in a region over the European total. This map identifies the Vienna, Athens, Barcelona, Zurich, Istanbul urban regions as the most dynamic in this period in attracting and hosting international congresses, together with the aforementioned Baltic countries.

Regarding the cultural heritage and other tourist attractions and sights, we decided not to use the series produced by the ESPON 1.3.3 project, which according to the authors have methodological inconsistencies across countries, and we built our own data series using a

consistent source that is the guidebook series of the Touring Club Italy, which covers all the ESPON space and CEC countries, returning places and individual monuments and sites with a certain number of "stars" measuring the tourist interest (not always a match for historical or artistic importance but the closer you can get). Our data team picked only "2 stars" items and classified it as individual object or place with more attributes. Fig. B.36 maps the sum of all "stars" in a region per square km., that is their spatial density, a good measure of how attractive a place is for tourists but also for specific groups of immigrants whose choice of destinations is driven to some extent by the "status" of locations. The map shows the overall advantage enjoyed by Mediterranean regions, and especially Italy (which concentrated the largest part of the European cultural heritage, including UNESCO world heritage sites), but also France, Germany, the UK and large parts of Eastern Europe. However the largest values are obtained by large historical metropolitan cities like Brussels, Inner London, Prague, Vienna. To eliminate the "urban effect" (large cities are more likely to have more monuments) we have created an index that assigns more value to sites than to individual monuments and objects. This index is mapped (in relation to size) in Fig. B.37. This map smoothes down the distribution; Italian, German, French, Belgian, and Polish regions emerge as consistently strong, though Brussels, Inner London, Prague, Vienna still lead the list.

Universities are important pieces of urban infrastructure as far as attractiveness is concerned. Fig. B.38 maps the presence of universities in regions using a 2007 database supplied by DG Regio. The supply of universities is spread uniformly all over Europe; Sweden and Turkey stand out as countries with the most even distribution of universities across their NUTS 2 regions, while France and the UK seem the most "polarised" to that respect.

Social and cultural assets

Among our social and cultural endowments we included first indicators of life expectancy which returns a good picture of "quality of life" factors for specific age bands. Fig. B.39 illustrates life expectancy of new born children (in 2001-03): unsurprisingly economically advanced central and the whole western Mediterranean arc regions exhibit the highest rates, while peripheral and economically lagging regions are unsurprisingly under-endowed in this respect and we expect this basic variation to have determined to a large extent destination choices for immigrants of all types. Fig. B.40 illustrates life expectancy rates of 65 year old people in the same period, which we expect to matter for migration choices of the "retired" age bands, and differences with the previous map, though minor, point at an even higher advantage for the "sunny belt" of Europe: northern-central Spain, Italy, France, but also the Alpine regions are standing out. A map of average disposable income per inhabitant in 2000-03 (Fig. B.41) returns "blue banana" regions, which obviously represent favourite destinations for opportunity-driven migration, and slightly downplays the position of the sunny belt.

A set of "socio-attitudinal" indicators (elaborated on the basis of ESS data, calculated and averaged over the 2002-2006 period) are used to derive the next two maps: Fig. B.42 maps the share of respondents who reported being happier than the EU median, while Fig. B.43 maps the share of respondent in the area who were "satisfied with life as a whole" relative to the EU median score. If any message can be derived from these two maps, is that regions that score high in this respect are those who are less likely to generate "lifestyle" migration – people from these areas could decide to move away for economic or health reasons but it is unlikelier that they would move purely to find a better socio-cultural environment. On the other hands the maps disclose a "dissatisfaction" which is clustered in Eastern and North-Eastern European regions (but note the "unhappy" situation of Italians, whose younger generations are indeed among the first fleeing their country in search for better socio-

cultural environment according to recent surveys, thus necessarily not in search for better jobs but of a better living climate).

Fig. B.44 maps a Shannon index of population diversity by proportion of individuals born in different EU countries, using 2001 census data. This indicator, derived from ESPON 1.3.3, yields a picture of "social diversity" which according to Richard Florida's works (quoted in our Inception Report) has been seen to be driver of mobility for the "creative class" and top skilled workers in the US. The more diverse a society is, the more tolerant and socially open it is likely to be, thus - together with other factors related with technology and good educational facilities - the higher the chances of attracting and integrating people with talent and new ideas. The map returns the advantage of "historical" immigration areas to this respect, to some extent being a good representation of postcolonial and post-cold war Europe, and the privileged position of MEGAs and other urban regions. We expect this situation to have changed over the last decade (though no new census data are yet available to this respect), with a higher diversity produced by internal (within EU countries) and external (from outside to inside the EU) migration flows especially towards the most competitive tourist regions. Surprising levels of diversity are found in Western Ireland, Latvia (probably because of the Russian nationals who kept their nationality after the dissolution of the USSR) and some intensive tourist regions like Corsica, the Balearic Islands, Algarve, Cyprus, where am early round of tourism-driven immigration may already be present.

Fig. B.45 returns the number of students at universities in the region as a proportion of 15-24 year cohort in 2007, showing areas which have been particularly successful in attracting young talents because of their higher education facilities, with national systems but possibly also in the European context. The map shows high percentage of students at universities in Central Italy, Northern Spain, Northern Greece, Poland and Scandinavia, and surprisingly lower rates in core regions in Europe (possibly indicating that areas with higher unemployment are those that push a larger share of young people to obtain higher education diplomas). In any case it also shows the "cultural vivacity" of areas that host a large student population.

Data about "cultural infrastructure" elaborated by ESPON 1.3.3 will be considered in assets-flows estimations; though we are currently in the process of recoding the NUTS data, the 1.3.3. project measured the provision of theatres and public libraries per 1,000 inhabitants These services are generally population-related: the number of facilities provided depends on local demand (though a more complex analysis should consider area-based services to reflect the capacity of government to expose peripheral, scarcely populated areas to abundant cultural provisions). The relative maps appear in Fig. 31 and 31 of the 1.3.3 final report. The distribution of theatres (p. 123) is rather uneven, and relatively concentrated in the more densely populated areas, with notable exceptions (Spain, France, Sweden, Finland). Public libraries appear to be distributed independently from the city rank at p. 124, as expected. Availability of public libraries shows high values in Scandinavia and East Europe, and in Spain, France and United Kingdom (where libraries are considered an essential part since great importance is seen on an educated and literate population), average in Germany and Greece and very low in Italy and Ireland.

The large per capita provision of library services in Eastern European countries should also be noted, arguably a legacy of the socialist regimes (and the same may hold for social-democrat Scandinavian countries). A twofold interpretation of high scores presents again: few users (a high score of G.23) per library means that people have better access (but then the dimension of the libraries or of the collections should also be considered in this calculus), or may indicate "inefficiency" in the provision of library services. It should however be remembered that the data reflect the availability of a physical asset and not its physical or

organisational dimension; it is reasonable to expect that in large cities, libraries would be larger and much more endowed than peripheral libraries.

Institutional assets

As detailed above, institutional assets that public service agencies and policy frameworks that might influence patterns of mobility. Figure B.46 maps the level of Structural Funding invested across the EU15 and accession countries over the period 2000-06. The data has been standardised as a logarithm and calculated as an investment per 1000 inhabitants. Overall Structural Funding investments are greatest in the peripheral areas of the ESPON space with high levels of investment in the Iberian Peninsula and in Greece.

Figures B.47 and B.48 use the provision of doctors and the number of hospital beds each per 100,000 inhabitants as a proxy for public sector investment in services. There is not a particularly close correlation between the two measures of health service provision. In the case of doctors, Italy stands out as the place where there are most doctors per head of population whilst in the case of hospital beds there is a general north-south pattern where NUTS2 regions from France and the Alps heading north have more hospital beds per head of population of southern European countries around the Mediterranean.

Figure B.49 sets out the potential attractiveness of NUTS2 areas based on differences in levels (for those aged 15 to 24 years old), distance between NUTS areas and the population of young adults (aged 15 to 24 years). This map assumes that attractiveness is permitted between and within EU15 and EFTA countries but not permitted from EU12 accession countries and the EU15 block. This suggests that within the EU15 and EFTA block lower levels of youth unemployment in the Netherlands, Germany and Austria made NUTS2 areas across these countries potentially attractive for younger workers. At the other end of the scale, Nord Pas de Calais and Wallonia in Belgium, Corsica, Sardinia and parts of southern Italy come out unattractive on this measure.

Figure B.50 illustrates the change in potential attractiveness arising from the accession of EU12 countries and free circulation of labour for young adults, based on differences in unemployment rates for 15-24 year olds (2001-03 assuming free circulation of labour across ESPON space). The potential impact of accession in 2004 when making assumptions about migration driven by levels of unemployment in the 15 to 24 year age group point to the big impact on Poland and Slovakia where unemployment levels were high for this age band and point to the relative increase in attractiveness of the Czech Republic and for Hungary where recorded levels of unemployment for this age band (in the European Labour Force Survey) were markedly lower. Given the levels of youth unemployment in Poland (based on the LFS) were 15% in this period 2001-03 in contrast to 4% in Germany or 4% in Hungary, it is clear how Poland appears to be unattractive when considering differences in unemployment levels across the NUTS2 regions.

Figure B.51 assumes that attractiveness for working age adults between 25 and 64 years of age is driven by differences in unemployment levels (i.e. workers seek to more from places with high levels of unemployment to areas with lower levels of unemployment mediated by directly measured distance). This was based on levels of unemployment registered in the period 2001-03. In this map, it is assumed that there is free potential circulation of labour between and within EU15 and EFTA countries but that there is zero attractiveness to workers resident outside of these countries (for these countries attractiveness potentials are only calculated within each nation-state). This mapping of attractiveness picks out the problematic high levels of unemployment in former East Germany as extremely unattractive generating a potential "push" factor for workers in these areas to migrate elsewhere where the prospects are better. By contrast areas of North-East Italy, Austria and South East

England look attractive by reason of low levels of unemployment and proximity to large population centres.

Figure B.52 sets out the difference in potential attractiveness in the period 2001-03 between a scenario of free labour market circulation during this period over the whole of the current EU27 European space and the more restricted case of labour market mobility only within and between the EU15 and EFTA countries. Thus it sets out the potential attractiveness of NUTS2 areas assuming accession of the 12 accession countries in January 2004 assuming no restrictions on migrating workers. Based on differences in the level of unemployment amongst the 25 to 64 year old age band, the biggest changes in attractiveness are seen in Switzerland, the Czech Republic and in Hungary. However this calculation makes Slovakia and the western border of Poland appear to be particularly unattractive for those aged 25 to 64 years. Clearly this is by the assumptions in the analysis a result of big differences in unemployment levels across boundaries such that in Slovakia 11% of 25 to 64 year olds are recorded as unemployed in this period in contrast to 3.5% of 25 to 64 year olds in Hungary.

Finally, Fig. B.53 picks the change in potential attractiveness arising from accession of EU12 nations and free circulation of labour of differences in disposable income per capita for adults aged 25 to 64 years old, assuming free circulation of labour across ESPON space (2001-03). Calculating the impact of accession in terms of attractiveness driven by differences in disposable income leads to a different and perhaps more predictable map across the EU27 area. Given that our gravity model calculation is based on straight line distances and not multi-modal accessibility, the impact of accession makes large parts of Germany (even the former GDR), Austria and northern Italy particular attractive for the working age adults of the accession countries. Thus in Austria where average disposable incomes per inhabitant are recorded as 15,200 Euros per annum are in marked contrast to the 6,400 Euros per annum average in Slovakia. High disposable incomes recorded in both the Paris (Ile de France) and Greater London regions also see these areas record changes in their attractiveness resulting from accession.

3.4 First indications on the conclusions and policy relevant options that could be the outcome of the project

We have clarified in 2.8 how our project will emphasize the three policy approaches (smart growth, inclusive growth and sustainable growth) mentioned in the EU2020 strategy and draw out their territorial consequences. Despite being aware on the fact that the three streams are not mutually exclusive alternatives, the idea is to extrapolate each of them to their logical conclusion thereby emphasising the different potential trajectories; furthermore we will utilise a specific political focus.

Going through the policy document and EU research projects, and using a form of discourse analysis, some specific interlinked categories can be identified:

- Policy options
- Territorial evidences
- Key mobilization factors
- Spatial mobility trends

These would then be considered in relation to the following dimensions:

- (geography) urban / regional
- (audience) resident / tourist

In the smart-growth policy approach we forecast a concentration of resources and efforts in hi-tech investments, and in particular in the NBIC sectors (Nanotechnology, biotechnology, information technology and cognitive science). The enhancement of Europe's research and enterprise networks and their connections to global networks, together with strong investments in higher education institutions that support private high-qualified companies. This will strengthen the role of big metropolitan areas and specific centres of specializations. Moreover, this trend will be enhanced by investments in infrastructure networks and accessibility among European metropolitan places, combining public and private transport (highways and high-speed train connections). The metropolitan areas, thus, are the main drivers of territorial attractiveness. At the same time, innovative and high-tech companies, engaged in global trading networks, in innovative rural regions are promoted. These close links between rural areas and territorial hubs will be facilitated by ICT systems and network relationships that will favour advanced systems of agricultural production. Clusters of excellence in smaller towns are supported in order to achieve the critical mass necessary to operate in the global market. Moreover, the unique characteristics of different rural areas are promoted to be used as tourist attraction factors, enhancing rural regions as consumption countryside regions with a strong role for private sector services.

The inclusive-growth policy approach will be characterized by strong investments in social capital with a particular focus on deprived areas, on overcoming internal and external borders, building cross-border metropolitan regions, and on balancing development capacities between EU core area and peripheral areas. The demographic structure of Europe and its challenges (aging, declining labour force, etc), together with neighbouring countries" opposite trends, represent a crucial issue for a cohesive-growth policy approach. We forecast that accessibility to the nearest urban centres, good secondary networks and levels of service provision (entailing a stronger focus on local accessibility rather than at the European scale) will be enhanced in this perspective, reinforcing the polycentric structure based on small and medium-sized towns. At the same time attention will be paid to policies on immigration and to accessibility to services of general interests in small towns for rural residents. This will be accompanied by increases in accessibility to job opportunities and services, along with the growth of local public transport and public networks among small and medium-sized towns. Investments to sustain services of general interest in risk-ofdeprivation areas (accessibility to the nearest urban centre, good secondary networks and levels of service provision) will be key factors for maintaining population in difficult areas. Policies supporting the localization or the re-localization of traditional firms in lagging regions in order to gain from the competitive labour-force costs will be a way to boost economic growth and employment strategies in peripheral areas.

The sustainable-growth policy approach will be characterized by a strong emphasis on improving the resource efficiency in Europe especially in peripheral locations. This will be achieved by a proactive approach of regions and cities toward greener economic development strategies along with supporting measures of adaptation to climate change and regional resilience. Special attention will be directed to the diversification of an area's economic resources, including the exploitation of environmental capital (mass tourism along coastal areas, or mountain areas with snow-based winter tourism) and a call for a new profiling of a region's natural and ecological assets. As there is a strong urban dimension to climate vulnerability considerable several investment will be focused on the drastic reduction of traditional polluting economic sectors, and more resources directed to supporting the "green economy" through the development of innovative ecological approaches. Large-scale investments will be directed to public infrastructures, together with policy and taxation to deter private forms of transportation. Traditional economic sectors such as intensive agriculture, forestry and mass tourism will be penalized, while the

protection of existing landscapes and natural resources will favour selective forms of tourism and integrated local community-based approaches.

The results from the combination of the above mentioned steps and the outcome of our previous research activity (Step 5), will be organised in the following "scenario matrix" (Table 3). The combination of the previous phase can be schematized in the first column, where the three policy options are distinguished. They will be cross-combined with the scenarios indicated by DEMIFER project, where several global driving forces are considered, e.g. climate change, together with main policy approaches and their consequences in demographic main policies, e.g. openness of EU border, etc. In this way, we will have a perspective of how direct policy bundles characterized by specific approaches can be framed by a more general policy approach and demographic trends.

Table 3 ATTREG scenario matrix for policy analysis

	Business as usual	Cohesive Europe (Demifer scenario)	Competitive Europe (Demifer scenario)
High Tech / innovative economic development			
(Smart growth)			
equity and social balance			
social innovation strategies			
(inclusive growth)			
Land protections, climate change measures, environmental policies			
(sustainable growth)			

Cartographical representations characterising these combinations in terms of the forecasted spatial impact of policies will be produced.

As a following step, we will bring together the policy scenarios and the territorial considerations about the different regional typologies, which will be defined, based on the outputs from Steps 3 and 4, supplemented by the scenario work (Step 5), and then all synthesised in Step 6. Each regional typology will be characterized by a combination of a set of potentialities and a set of performances in terms of attractiveness capacity. It will show how mobilization strategies can affect their attractiveness, highlighting improvement capacity and thresholds, e.g. in terms of compatibility between visitors and residents.

Having completed this process of comparing and analysing the scenario matrix, the outcomes will provide the data that will be assessed in relation to different policy mixes and policy guidelines identified in relation to each regional typology and the associated scenarios. The final outcome of this process will be:

- Elaborate policy guidelines
- Share findings, methodologies and strategies within the same typology of regions
- Indications of the spatial implications of policy choices.

 Define a tool to assist cities and regions to position themselves among different typologies

Concerning the last point, we will seek to provide a web based assessment tool that will build on the typologies developed in RA3 and the results of the case studies in RA4 and RA5. It may be possible to adapt the assessment tool currently being developed as part of the Reference Framework on Sustainable Development. The aim of an assessment tool would be to create something that can be used relatively quickly and easily by decision makers to baseline their existing situation and monitor their progress over time towards a more "attractive city/region". RA3 will produce indicators to do this and in combination with the regional typologies allow places to compare themselves to similar places in the same typology allowing users to compare their situation and to network with other cities for examples of best practice.

4 Description of further proceeding towards the Draft Final Report

This section will present the present position of the project in relation to its planned lifecycle (3.1), and, in the next two chapters, at request of the Inception Report evaluators and the Sounding Board, details of the dissemination strategy that our TPG plans to carry out (3.2) and the links that it will establish with key ESPON projects (3.3).

4.1 Timeline, current stage of the project and next steps also in terms of deliverables

The ATTREG project is in its 8th month of life (see Fig. 11 in the next page) at the moment of submitting this report, and there have been no major changes in the development of the research activities foreseen by the plan. The project has thus gone through all of the research tasks foreseen in RA 1, whose results were already illustrated in the Inception Report; has deal with almost all the tasks of RA2, which, nevertheless, will stay active as a research task for the remainder of the project in order to account for new results and inputs from other ESPON projects and sources that will be made available at a later stage; and with the initial tasks of RA 3 ("Data analysis") missing specifically the completion of 3.3 'Crossanalysis of spatial phenomena and testing of models', and undertaking of 3.4 'Typology of regions', and 3.5 'Analytic cartography', which are scheduled for February-April 2011, upon completion of 3.3, and will be followed by RA4-5 (already started as far as the methodological preparation is concerned).

The 2nd TPG meeting held in Leuven, 18-20 November 2010 has allowed this TPG to evaluate thoroughly the work done so far and set the stage for the successive research tasks; the meeting with the Sounding Board held in that occasion has been an important opportunity for reflection upon required adjustment specifically in the dissemination strategy and for a stronger policy orientation of the project results. Moreover, the participation of various members of the TPG to the ESPON Internal Seminar in Liège, 17-18 November, and the organisation of the 1st ATTREG International Workshop in Leuven, 19 November, have also been important occasions to discuss the foundations of our research topic and the possible "outreach" that our project may have with key representatives of the ESPON research community, and namely with the invited lecturers at the international workshop like M. Lennert (FOCI and 3.2), R. Camagni and R. Capello (TipTap and many other past and ongoing applied research and targeted analysis projects), M. Kupiszewski (DEMIFER) plus other important researchers in our study field.

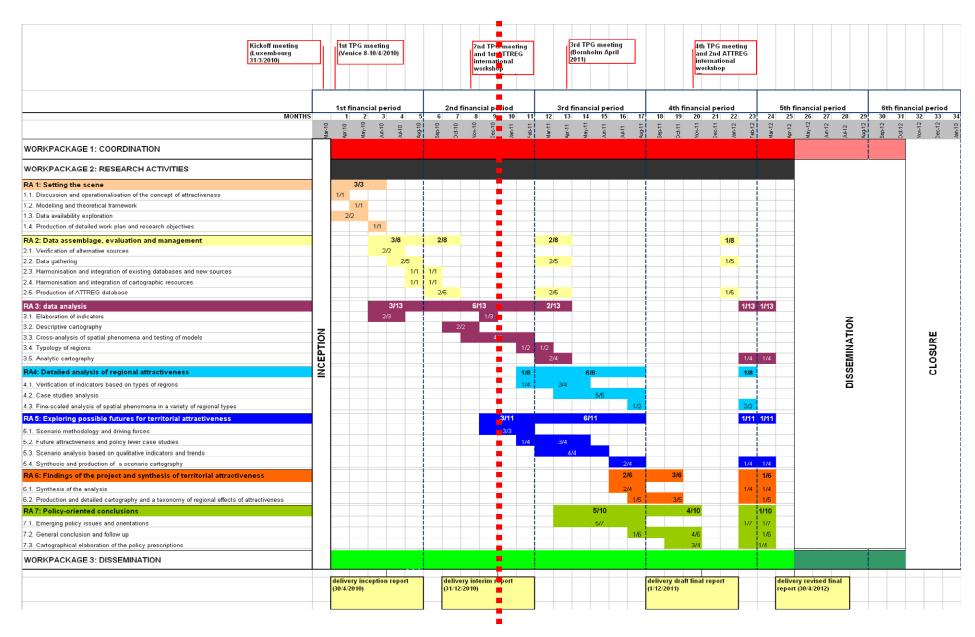


Figure 11: ATTREG project timeline and present situation

As a general evaluation of the work done so far that after the successful completion of RA1 and the development of a conceptual and methodological framework that has been found exhaustive, scientifically sound and in line with the expected results of the project by the ESPON MC, the data collection and integration effort is also on the whole satisfactory though we expected to get much more (and better) information from the ESPON 2013 database, with some problems of data acquisition from this source that were detailed in 3.1.

Unfortunately the timing of delivery of this Interim Report does not allow to include the final and more significant results of the data analysis and the consequent construction of regional typologies based on attractiveness, though we do illustrate in this section the main results in terms of the asset endowments and audiences that have been measured and mapped also in terms of their geographical distribution. In any case it is this TPG's intention to use such final results, as soon as they will be available, to write a first "policy brief" to be circulated among the policy stakeholders to raise awareness about the potential relevance of this project's final outputs and familiarise them with its main dimensions, as will be argued below. We also expect such outputs, and especially the cross-analysis of regional typologies, to constitute interesting material for "Sounding Tips" to be exchanged with other ESPON 2013 TPGs as suggested by one of our reviewers.

The next steps of the project according to the project timeline will be the following:

- January-April 2011: completion of RA3 (data analysis, production of ATTREG regional typology, cross-analysis of other ESPON typologies). In this lapse of time we also will refine our dataset with the possible inclusion of variables and indicators that were not available at the time of submitting this report (as some of the DEMIFER data-series) or that are currently in the process of verification and re-coding (as with some data series from ESPON 2006 projects or from CEC countries). The results of RA3, which will inform the subsequent research activities, are going to be compiled in a technical document in view of the third TPG meeting, scheduled for the end of May at the seat of PP6 (Island of Bornholm, Denmark), and included in the draft final report to be delivered on December 1st, 2011. This document will also be issued in a special "sounding tip" edition to disseminate these early results to the policymakers' communities.
- Early February 2011: at this stage it will already be possible, having conducted data analysis, to have a first selection of potential interesting case studies, which will be submitted to the ESPON MC at the earliest convenience.
- April-August 2011: after receiving a feedback from the ESPON MC about case studies to be preferentially selected, and having arranged the necessary contacts in the places to be studied, the qualitative case studies of RA4 will be carried out. Preliminary "raw" results will be presented at the 3rd TPG meeting. In the summer months we will test the relevance of typologies identified in RA3 when applied to a more fine-grained and qualitative analysis; at the end of this process we expect to deliver the final versions of the case study reports (including executive summaries for dissemination), and a synthesis which includes policy recommendations based on the findings from a comparative reading of the case studies (e.g. the development of finer and more comprehensive data sets to measure and monitor territorial attractiveness in the ESPON space).
- February-August 2011: after having established the main elements of the "ATTREG-future" model, the quantitative case studies scenario analysis will be carried out on the basis of a selection of cases (driven mainly by data availability). Results will be presented at the 3rd TPG meeting, and the summer months will be dedicated to the application of the estimated model to the definition of European scenarios of attractiveness.

• September-November 2011: the results from the previous activities will be combined in the "synthesis" research activity (RA6) and in the policy analysis and output activity (RA7). The early results from this final research steps are going to be discussed in the 4th TPG meeting (to be held in early November 2011 in the seat of the LP, in Tarragona, Spain), and included in the draft final report. The 4th TPG meeting will also include a Second ATTREG International Workshop which, contrarily to the first, which was directed at the scientific community and at the sharing of knowledge with parallel or previous ESPON projects, will be more decidedly oriented to the policymakers' community. In this workshop selected policymakers from the case study regions will be presented with the results from our project (and specific findings in their regions), and invited to discuss the relevance of our work and the "outreach" that it can have at EU level.

4.2 Detailed overview of dissemination strategy and outputs

In this section we will propose a fine-grained detail of what the dissemination strategy for ATTREG will be in order to achieve the most effective transfer of the results that are obtained during and after the completion of the project in relation to various "target groups". We so do addressing the observation and suggestions raised by the ESPON MC through the Sounding Board reports, which this TPG met during the second TPG meeting in Leuven (18-20 November), also giving us the possibility to discuss their operationalisation.

The main objective of the dissemination strategy in relation to the target group of policymakers is the stimulation of a debate on policy issues regarding the attractiveness of regions and cities, by:

- raising awareness for the different issues regarding the attractiveness of regions within the ESPON programme community of interest and within other important European policy networks;
- enabling researchers to share the objectives of the projects with regional and European stakeholders;
- critically addressing the consistency of policy agendas at local, regional, national and European levels with our project intermediate and final results;
- providing a forum in which a variety of stakeholders can participate, share knowledge and acquire information produced by our project.

To do that, we intend to use different means and channels.

First, we will produce short, readable, summaries of our key research findings that can be disseminated through policy networks and other appropriate web sites. These will be supplemented by short reports summarising the policy implications of our work. However, this can only be seen as an initial step. Moreover, it is equally important that our outputs target policymakers across Europe. Thus as part of our communications and dissemination strategy we will identify a set of target groups we wish to reach. The ESPON National Contact Points will be a key means of communication and dissemination, but it is important to go beyond these to include other groups. Schematically these can be represented as follows:

 Policy makers and Politicians at European Level – a) the European Commission (particularly DG Regional Policy but also other relevant DGs including DG for Agriculture and Rural Development, DG Environment); b) the European Parliament – particularly

Committees such as that Committee of the Regions, Economic and Social Committee. We can state that we will send copies of short reports to these (as well as longer reports) and attend events organised by them where relevant.

- European organisations: two types 1) those responsible for dissemination of knowledge such as EUKN and 2) representative organisations such as EUROCITIES and Council of European Municipalities and Regions (CEMR). These will be sent copies of the short reports. Where possible we would include National Policy Makers and Politicians (assuming we can identify the relevant ones across Europe)
- The national representatives of local government and regions clearly it is impossible
 to access them directly, CEMR would be the logical access point as it is the European
 representative organisation of the national associations. In addition the ATTREG
 partners will disseminate within their own countries (alongside and in association with
 the ESPON National Contact Points).

We will seek to produce different types of recommendations in terms of what constitutes attractiveness (e.g. the six forms of territorial capital and how they might be built up and enhanced) and what could be mobilised to improve attractiveness. Such recommendations will take into account not only factors such as the prevailing economic conditions, the geographical specificities, the spatial scale at which policies are carried out, but also the potential policy instruments available and the potential policy combinations. We will also take into account issues such as a population/demographic change, decline in tourism caused by increasing costs associated with climate change (for instance will Mediterranean areas have the water resources to support mass tourism), etc. These will take different forms reflecting the EU territorial diversity, hence be of two types:

- 1. Directed to the European level and taking into account documents such as those related to Gothenburg and Lisbon agendas, Territorial, Regional and Social Cohesion, Sustainable Development and EU 2020.
- Recommendations/implications related to each of the regional typologies utilising the scenario work.

These can be disseminated through a variety of means such as written reports placed on the web site and distributed electronically to target groups identified above, this will include sending copies of these to the EUKN to place on their web site. Furthermore, as we produce more maps, these, along with short policy relevant commentaries, can be put onto CD-ROM and distributed.

Secondly, and drawing on the experience of the Reference Framework on Sustainable Development, we plan to create an advanced web-based "support tool" that can be used relatively quickly and easily by decision makers to baseline their existing situation and monitor their progress over time towards being a more attractive city/region. Here we can. Schematically this would include:

- A set of suggested indicators and visualisation tools (accessible through our project website) to monitor the progress of a city/region, which can help cities/regions to:
 - characterise their current situation in relation to our typologies and indicators and identify the key information and development issues;
 - identify their most significant endowment factors;
 - o benchmark their situation and identify comparable cases or reference places;
 - o develop an integrated development approach.

- A "tailor made" FAQ section that, on the basis of the self-diagnostic exercise and profile information, could suggest potential policy levers to mobilise assets
- A users' guide providing instructions and recommendations on how use the tool

In a first stage, this web-based tool would utilise the indicators of attractiveness developed in RA3 and the associated regional typologies, allowing cities/regions to compare themselves to similar places in the same typology. We will have data, at NUTS 2 and possibly NUTS 3 level, on endowment factors for 2001-2003 and for 2007-2009 which will provide a baseline from which users can see how they have changed over the period. This will also allow for the identification of potential mobility flows resulting from a place's endowments and to estimate whether they are over-performing or underperforming what they are achieving in terms of attracting flows in relation to the relevant average performance. Having determined the relative importance of different endowment factors we would also be able to suggest potential policy levers to mobilise assets. Not only would this allow them to assess their relative performance, but also allow them to network with other cities and regions as examples of best practice.

Ideally in a second stage (after the completion of the project and the validation of its results) we would like to enhance this a tool using the complete project results, thus also the scenario modelling and policy analysis, enabling policymakers to assess options and explore the impact of a new developments or sets of policies, however, given the complexity of providing reliable simulations of the impacts of particular policies (or policy bundles), and the resources available this is likely to be too ambitious. In over view it would be more sensible, and realistic, to provide "policy guidance', based on the case studies, about what has worked in particular places - for instance how to bundle together particular forms of territorial capital to achieve certain goals related to our more general scenarios (e.g. those suggested in the ESPON Synthesis Report) or perhaps to achieve a balance between tourists and residents, or between endogenous and exogenous growth.

Thirdly, we will organise at least two dissemination events to transfer and discuss the project results with policy stakeholders. The first, as mentioned above, will be the Second ATTREG International Workshop, to be held in Tarragona in November 2010, thus in the final stages of our project life before the delivery of the draft final report. This meeting will present the results of case studies and the general development of our project to a "test group" of policymakers in case study regions. The objective is manifold:

- Assess the relevance of our scientific output for the regions concerned
- Discuss the consequences of our results for their policy fields
- Discuss the expectations that they place on EU policy in the light of our findings

On the basis of this first dissemination event we will be able to refine our dissemination strategy so as to maximise its impact in relation to the previous two points. To this regard our second dissemination event will be a "policy seminar" organised presumably in Brussels or Rotterdam after the delivery of the final report during the "dissemination period" (May-November 2012), and open to various policy networks as well as to the wider ESPON community. More details on this event will be discussed during the 3rd TPG meeting and included in the draft final report.

Dissemination to the policy markers community is critically linked to the structure and the timing of our "policy-oriented research" detailed above in 2.1.8. The most important policy tips will be available once the research will be completed and validated, thus in the dissemination period May-November 2012, but as mentioned above, intermediate results,

like the development of a regional typology of reference and, especially, the results from case study analysis, will be disseminated in an earlier period so as to familiarise key policy actors and organisations with our work and create a "community of interest" increasing the chances that will endorse our complete results once the project is over. To sum up, Table v provides a temporisation scheme for the various dissemination outputs foreseen:

Table 4 ATTREG policy-oriented dissemination deliverables

Item #	Content and format	Targets	Time of delivery
1. policy oriented report based on findings from RA3	Production and dissemination of a max 10-page report, including a 1-page summary, introducing our research objectives and presenting the main intermediate results	ESPON MC, ESPON CPs, other policy networks (mailing, using e-channels); download from project website (to be promoted)	May 2011
2. policy oriented report based on findings from RA4	Production and dissemination of a max 10-page report, including a 1-page summary, illustrating the main results from case studies and discussing their potential general relevance	Policy stakeholders from case studies regions (through direct contacts established during RA4); ESPON MC, ESPON CPs, other policy networks (mailing, using e-channels); download from project website (to be promoted)	September 2011
3. policy oriented report based on overall project results	Production and dissemination of a max 10-page report, including a 1-page summary, illustrating the main general results from the project and especially the policy analysis developed in RA7	ESPON MC, ESPON CPs, other policy networks (mailing, using e-channels); download from project website (to be promoted)	April 2012
4. web-based support tool (phase I)	Publishing (and maintenance) of a web-based benchmarking, self-diagnostic, assessment and auditing tool based on RA3 (indicators and typologies)	Free access from project website (to be promoted among ESPON MC, ESPON CPs, other policy networks	September 2011
5. web-based support tool (phase II)	Publishing (and maintenance) of a web-based benchmarking, self-diagnostic, assessment and auditing tool based on RA6-7 (scenario modelling and policy analysis)	Free access from project website (to be promoted among ESPON MC, ESPON CPs, other policy networks	May 2012
6. 2 nd ATTREG international Workshop	Presentation and discussion of the case study results with selected stakeholders and policymakers from case study regions	Workshop to be held in Tarragona in November 2011, with invited participants from case study regions	November 2011

7. ATTREG policy seminar	Presentation and discussion	Workshop to be held in	Autumn 2012
	of the project results with	Brussels or Rotterdam with	
	ESPON stakeholders and	a open call for participation	
	policy networks	through the ESPON network	
		and selected invited	
		participants	

The second main target of our dissemination is the scientific community, both inside and outside ESPON. Our Inception Report gave excessive emphasis to this audience - and has been downplayed it in this Interim Report in favour of the policymakers' community in line with the suggestions received by the Sounding Board – but we still think that validating our project assumptions and results with scientists is fundamental, first to build cohesion and knowledge-sharing within ESPON, and secondly, to make sure that our project results matter for the capacity (and the interest) of the wider scientific community to address the issue of territorial attractiveness with a stronger policy focus. Obviously both the channels and the timing for dissemination to this community are different from policy-focused dissemination. Through details of this aspect of dissemination were given in our Inception Report and we intend to stick to that programme. Concretely, upcoming events that seem suitable to host one or more communications from the ATTREG project are: the Regional Science Association (RSA) congress on 'What Future for Cohesion Policy? An Academic and Policy Debate', Bled (Slovenia), March 2011, and its Annual Conference, Newcastle, April 2011; the European Regional Science Association (ERSA) Nordic Winter Conference on 'Regions: Sustainability, Growth, and Policy', Hemavan (Sweden), April 2011, and its Annual Conference, Barcelona, August 2011; the ICURPT International Conference on Urban, Regional Planning and Transportation, in Paris, June 2011; the Association of European Schools of Planning (AESOP) International Conference "Territory and Environment: from representations to action", Tours, France, December 2011; plus many other local events in planning, regional science, geography, urban studies, tourism.

Thirdly, there is an important aspect of dissemination that regards the knowledge sharing and collaboration with other ESPON projects and other important European research networks. The next section 4.3 will provide details.

As a last detail of the ATTREG project dissemination strategy, the ATTREG project website (www.attreg.net) is going to be opened in the beginning of the new year. The website will link to the page dedicated to our project in the www.espon.eu site and will include several sections for dissemination of our project's results, information on ongoing and planned activities and meetings, and a download section, as well as detailed information on the TPG partners and their activities that are related to the project. This website accompanies the already operational ATTREG intranet platform which has been set up at the start of our project as a powerful coordination tool for the partners in research and administration, also including as a data repository and an activity organiser https://attreg.basecamphq.com/.

4.3 Detailed overview of links with other ESPON projects

In relation to the ESPON community, dissemination activities are principally dictated by the specifications to this project. The TPG indeed believes in a strong interaction throughout the project with the ESPON research network and structures as the means to ensure the maximum validity and relevance of the project outcomes. Special care to involve all those responsible of transversal scientific tools delivered to the networks (database managers and scenario analysts) is needed. Thereto, open and internal ESPON 2013 seminars as well as

individual project workshops will be attended by the TPG representatives on invitation. Not only these constitute important occasions to liaise throughout the network and integrate preliminary and final results within the wider ESPON scientific framework, aligning methods and concepts, and establishing platforms for collaboration. Also, these will function as important stages to disseminate the ATTREG project findings through the ESPON network and achieve precious feedback. In the Inception Report we identified a number of ESPON 2006 and 2013 projects we have drawn upon for the framing of our research issue and methodology. Here we will further specify ESPON 2013 projects that are of particular relevance to ATTREG.

DEMIFER (Demographic and Migratory Flows affecting European Regions and Cities) is a key source of data for ATTREG particular in relation to migration data, population data and the typologies generated by the project. Ongoing contacts have already been established with this project, that is currently delivering the final report. Marek Kupiszewski, a key member of the team, gave a presentation on "Demographic Changes and Mobility in the DEMIFER ESPON project" at the ATTREG International Workshop in Leuven on 19th November 2010. This allowed us to develop personal links on which to build an ongoing relationship between the two projects and to facilitate data sharing.

EDORA (European Development Opportunities in Rural Areas) is in its final stages. As part of its focus on development opportunities in rural areas this project shares with ATTREG an interest in how "local potential" is often defined by regional capacities and "soft factors". The project provides analyses on what determines an area's ability to respond to opportunities and what factors determine a region's capacity to utilise such opportunities. Of particular is the identification of different types of rural areas based on several aspects, among which are: what economic sector appear prominent, accessibility to services, and the relationship with urban areas, distinguishing for all of them the critical aspects and the opportunities they have. This project has concluded and published a wide range of material; where necessary contact will be made to acquire any data not available in the ESPON data base or the project's publications.

FOCI (Future Orientations for Cities), also in its final stages, provides important analyses and information on the current state, trends and development perspectives for the largest cities and urban agglomerations within the European territory. It provides information on the forces driving urban development in Europe and scenarios for the development of Europe's cities and generates associated policy options. A key member of the FOCI team Moritz Lennert gave two presentations on "Urban poles, attractiveness and spatial effects in the FOCI ESPON project" and on "Scenario analysis at the EU level in the 3.2 ESPON project at the ATTREG International Workshop in Leuven on 19th November 2010. Professor Lennert was able to explain key elements of the FOCI project and its implications for ATTREG as well as establishing the basis for further exchanges.

SGPTD (Secondary growth poles in territorial development) has a parallel lifetime to ATTREG and recently produced its Inception Report. Its focus is on the opportunities and prospects for the territorial development of secondary cities with the aim of providing policy recommendations about the challenges and opportunities facing such cities in Europe. The project will identify, measure and explain: (1) the role of secondary cities; (2) their actual and potential contribution to growth at European, national and regional level and (3) the European, national, regional and local policies that currently exist, and could be developed in future, to maximise their potential. Contacts have already been established with the leader of the project – Professor Michael Parkinson (European Institute for Urban Affairs) – with intention of developing further relations to share findings and thoughts. We will invite Professor Parkinson (or another member of the team) to a future ATTREG event and/or attend SGPTD events.

GEOSPECS (Geographic Specificities and Development Potentials in Europe) is also running in parallel to ATTREG. This project shares with ATTREG an interest in territorial diversity, the role of local and regional stakeholders formulate development targets, strategies and needs in terms of public policy interventions as well as a concern for the role of institutional arrangements. Our TPG plans to establish contacts with the lead partner – University of Geneva – to facilitate exchange of information and thinking.

In the next stages of the ATTREG project we plan to strengthen the contacts with projects running in parallel to ours and to pool resources and produce joint "sounding bids", or short policy-oriented reports highlighting common research issues which could be of specific interest to policymakers.

Other potential sources of information and "research partners" could be found in the URBACT research network, that covers themes of particular interest for urban and metropolitan areas on "qualitative aspects" which may receive lesser attention in the ESPON 2013 research framework, such as various aspects of governance, particularly with regard to the mobilization process and how to present policy advice/guidelines in a format aimed at local policy makers. They will provide useful additional supporting evidence, for instance in relation to our case study work in RA4. Among the most relevant URBACT projects are the following:

CityRegion.Net. (The role of cities in integrated regional development), dealing with urban sprawl as a persisting trend in European spatial development. Cities function as motors for social and economic development and are vital for common integrated planning. They are also basic service providers for the whole region. It is essential that urban development and planning goes hand in hand with integrated development of the hinterland. Discussions and moderated processes need to take place about duties and functions that could be shared between towns and their surrounding municipalities. Cooperative relationships should be formed to guarantee the best use of public and private investments. By identifying best practices and by adapting these models to particular local needs the network aims to improve multilevel governance and counteract urban sprawl.

RegGov (Regional Governance of Sustainable Integrated Development of Deprived Urban Areas), addressing regional governance structures. Many European cities and regions have lengthy experiences of developing long-lasting trust-based and efficient co-operation with their regional authorities, while for other such co-operation constitutes a new challenge. The RegGov Network brings together both types of partners, involving cities from Northern, Western, Southern and Eastern Europe. It draws on the expertise and know-how available amongst the RegGov Network-partners to support the development of new and improved forms of co-operation on the local level as well as between the local and the regional level.

Joining Forces. (Metropolitan Governance and Competitiveness of European Cities), explorig how strategy-making and governance arrangements at the city-region level can help to effectively address the main challenges faced by urban Europe: competitiveness, cohesion and sustainability. The project has described and analysed partners" concrete situations in order to propose conclusions and suitable recommendations to the local / regional / national / European authorities on why and how to develop metropolitan governance mechanisms. JF has produced some key recommendations for successful metropolitan governance, addressing issues such as mutual trust building and solidarity, continuity, citizens' and stakeholders involvement, vertical integration and multi-level governance, and the recognition of the role of metropolitan governance by European and National governance and greater involvement of the metropolitan level in policy-making and delivery.

Open Cities. (Openness and the competitive advantage of diversity), examining how cities that attract migrants can be responsible towards cities that are losing population and how the successful integration of international populations can impact on attractiveness and competitiveness over the long term. The arrival of large numbers of new residents to cities can create great opportunities for innovation and progress in social, economic and cultural development. OPENCities explores how cities can attract and retain migrant populations and what initiatives cities can employ to make themselves a popular choice with international workers.

ESIMeC (Economic Strategies and Innovation in Medium Size Cities) defends that capitalising on the assets and specificities of medium sized cities (better quality of life, quality leisure and cultural facilities, higher flexibility to implement new projects and initiatives, etc.) is the key to ensuring sustainable growth and better resilience during economic and financial downturns. Placing their main asset, their people, at the heart of their strategies, the ESIMeC partners will explore how workforce development and demand-led skills initiatives can ensure sustainable economic recovery, growth and resilience in medium sized cities. The key questions ESIMeC addresses are:

- Who should be involved in demand-led skills strategies? How to engage key stakeholders?
- How to forecast new and evolving employer skills needs?
- How can a skilled workforce help the positioning of medium sized cities?
- How can medium sized cities help their citizens value higher education and skills and raise aspirations?
- How can medium sized cities fund workforce development in a context of public sector budget restrictions?
- How can medium sized cities ensure that workforce development is progressed alongside major urban redevelopment projects?

Finally, the ATTREG team has established a link with the **Framework Programme 7 SECOA project** (2009-13), a major 6 million euro project involving partners from 5 EU and 3 non EU countries, that aims to study the impacts of human mobility and urbanization on natural environmental systems, and specifically with Prof. Allan Williams who heads up the London Metropolitan research team.

www.espon.eu

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.