TPM
Territorial Performance Monitoring

Targeted Analysis 2013/02/13

Draft Final Report | Version 27/February/2012

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This report presents the draft final results a Targeted Analysis conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

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

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

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This basic report exists only in an electronic version.

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A Executive summary

The ESPON Territorial Performance Monitoring (TPM) project addressed to main lines of work:

- a general assessment and development of tools for regional monitoring of four global challenges defined at other scales (demographic changes, climate change, a new energy paradigm, globalisation)
- the practical application of the tools and ideas for monitoring the five stakeholder regions involved in the project (Catalonia, Flanders, Greater Dublin Area, Navarre, North-Rhine Westfalia)

The second elements is dealt with extensively in individual regional reports. Concerning the first element, the report focuses on a series of questions that policy makers have to answer when they wish to elaborate a monitoring system within their region. The answers to these questions are based on the experience gathered in this project, and notably within the five stakeholder regions.

- Which aspects of the identified challenges are relevant for my region ? Which are relevant for my policies ?

Using the **ESPON 5-level approach**, a general overview of how the challenges play out at different scales is provided, looking at both the issues and the policy levers. General, the fundamental driving forces behind all challenges are largely outside the scope of regional governments. The way challenges play out in regions thus very much depends on the scale of action that is looked upon.

Looking in more detail at how each of the stakeholder region perceives the challenges, the following general conclusions can be drawn.

Concerning **climate change**, the stakeholder regions particularly feel concerned about the necessity to implement policies aimed at managing the impacts of climate changes through promoting technical measures.

To the regions the **new energy paradigm** appears as depending above all on objectives determined at European level and on policies implemented at national level. At regional level, the possible ways to relay those national sectoral policies vary considerably.

The two basic aspects of **demography** mentioned by the stakeholders are immigration and the ageing of population in a context of low fertility, if not a population decline in some cases. Both issues are always seen as

external factors by regional decision-makers, who feel practically powerless in this respect. They may wish to manage the impacts, but they do not have many tools at disposal.

Globalisation by its nature imposes itself upon the regions. However, regions, at least those with sufficiently large competences compared to the state level – such as Flanders, the German Länder or the Spanish Autonomies – have largely included policies to answer this challenge in their planning and prospective tools.

- Is the general framework of governance capable of responding efficiently to new challenges ?

In order to respond successfully to challenges, it is not enough to observe phenomena linked to these challenges and to devises policies in response. It is also necessary to ensure that the general system of governance in the region is capable of such responses. Several criteria are important to evaluate in that context.

The flexibility of the planning system is defined by a specific combination of vision capacity and further elaboration of operative measures for the coherent implementation of the vision. Continuity of the visioning process and its updating phases together with a regular monitoring system that helps in the definition of appropriate policy measures, may have positive implications in the coordinative capacity of the planning system. Availability of resources is an important criteria also for horizontal coordination.

A difficulty for many regions seems to be the capacity to embed a monitoring tool in the planning system in tight relation with its main planning instruments. The effectiveness of monitoring will be dependent on the resources available during the life time of the plan and the constancy of the assessment.

- How can I measure the performance of my region in comparison to other regions or to given policy objectives ?

Benchmarking can be a useful and necessary exercise for regions, but it has to be done with care and reflection, as some forms of benchmarking might even be counter-productive. The necessary steps for elaborating a monitoring system based on quantitative indicators are: choosing elements to be monitored and monitoring criteria, choosing relevant indicators and their regional meaning (we provide a typology of indicators allowing to understand what exactly different indicators show for a region), choosing reference criteria against which to benchmark, defining "good and bad", i.e. the desirable direction an indicator should take.

We present a core dataset of indicators that can be used to benchmarking European regions in the four different challenges. Many of these indicators can be used in the ESPON HyperAtlas, and for those that cannot, the project has elaborated a simple spreadsheet-based benchmarking tool that regions can use as an example. However, many regions already have existing tools and it is highly preferable to integrate any new topics or indicators into such existing systems.

- How can I analyse internal differentiations within my region ?

Contrary to initial plans, the project has not developed local datasets, as it appeared much more useful and efficient to integrate the reflections and ideas provided by the project into existing datasets and tools at regional level. The system put in place for the Greater Dublin Area provides an interesting example of such practice.

- How can I get access to information for which no official quantitative statistics exists ?

Lessons learned during the project include:

  - ✔ Do not neglect existing, non-official sources of data and information in other institutions (administrative or other, such as academic)
  - ✔ Interviews (and focus groups) can be very helpful as a first approach to understanding the ways challenges play out in a region. Even though such encounters can be time-consuming, making them recurrent can, however, establish a systematic involvement of experts in a monitoring process.
  - ✔ Special care has to be taken to ensure success of surveys, for example amongst lower levels of governance. Having a fixed group of persons that perceive an advantage of these surveys even for them can greatly enhance response rates.

- How can we translate the monitoring results into policy ?

A series of conditions should be met to ensure that any monitoring of European challenges actually proves useful and sustainable in a regional policy-making context. These include: integration of the monitoring system into a clear vision of the region concerning its goals and objectives, clearly defined procedures on how to react to findings of the monitoring system, sufficient resources for continuous update and maintenance, shared ownership, a continuous "surveillance" of European policy discussions and documents, relative political "neutrality" of the monitoring system as such, long-term commitment to the monitoring process, permanent fora of contact with relevant experts

B Main Report

1 Introduction

The ESPON Territorial Performance Monitoring (TPM) project addressed to main lines of work:

- a general assessment and development of tools for regional monitoring of challenges defined at other scales
- the practical application of the tools and ideas for monitoring the five stakeholder regions involved in the project (Catalonia, Flanders, Greater Dublin Area, Navarre, North Rhine-Westphalia)

It is the first aspect which is the red thread throughout this main report, using examples and reflections from the stakeholder regions when appropriate to illustrate the arguments. The second aspect is treated in detail in each of the regional reports.

The main body of this report is a "Handbook of monitoring territorial performance", which leads the reader through all the different aspects of territorial monitoring of global challenges. This handbook is organised around five fundamental questions that regional policy makers have to answer for themselves in order to construct a useful and sustainable regional monitoring system. The answers to these questions are based on the experience gathered in this project, and notably within the five stakeholder regions.

We finish the report with a reflection on the policy-relevant conclusions of the project (although many are integrated in the handbook) and an outlook on dissemination activities and future research and action that the ESPON programme could envisage as a follow-up.

2 Handbook of monitoring of territorial performance : a catalogue of questions

2.1 Introduction

Many regions have some forms of monitoring, often sectoral, not always in relation to European challenges, but nevertheless a basic form of knowledge and know-how does exist. The aim of this project, and *a fortiori* of this "handbook", is thus not to provide some form of "Dummy's guide to monitoring", but rather to serve as

- a reflection on the issue of translating European challenges into regional realities
- a means to assess the current monitoring practices in regions in order to provide insights on how they could be adapted and improved to better take into account the European challenges
- an exchange of best practices between stakeholder regions based on their monitoring experience
- a laboratory to elaborate and test different techniques and tools for monitoring

A particular issue brought forward by the stakeholders was the integration of qualitative information into a fields generally dominated by quantitative measurement.

In the following chapters we provide those responses that the project has gathered during its lifetime, illustrating them as much as possible through the specific examples of our five stakeholder regions. We present these responses in a form reminiscent of "Frequently Asked Questions".

2.2 Which aspects of the identified challenges are relevant for my region ? Which are relevant for my policies ?

Ever since the ESPON 2006 Scenarios Project, ESPON has highlighted the main challenges faced by European regions: Climate change, a new energy paradigm, demographic transformations and globalisation. These themes have been taken aboard many European documents, and notably the Europe 2020 strategy and the Territorial Agenda 2020.

However, even if all agree that these challenges are important for Europe's regions it is not always clear in which ways they impact precisely at regional level and what regions can do about them. And working with the stakeholder administrations in this project which are all regional development and spatial planning administrations has shown that even

within regions those who take interest in territorial issues do not always have the competences necessary to act directly themselves.

All of the four challenges play out at global level. With the possible exception of the new energy paradigm which some regions and local authorities have interpreted as calling for complete regional/local self-sufficiency based on renewable energy (and it is not obvious that this is the most efficient solution for everyone in the long run, centralised energy production potentially having its own advantages such as economies of scale), the fundamental driving forces behind all challenges are largely outside the scope of regional governments, unless one considers options such as complete isolation of regions from trade, migration, etc.

Regions are, thus, called upon to react to these challenges, to position their region in the best way possible, to respond to policy obligations imposed from higher levels and to provide local solutions to problems generally caused at other scales.

In this chapter we provide three perspectives on the challenges and possible policy levers at regional level: an analysis of the challenges through the ESPON 5-level approach from the global to the local, a reflection on the fundamental nature of regional responses to global challenges (reactive vs proactive) and an extensive summary of how the stakeholder regions perceive the challenges in their specific policy context.

2.2.1 The ESPON 5-level approach and the challenges

The ESPON programme has developed multi-scalar approach to territorial analysis, recognizing the need to understand the roles of different scales in the formation of territorial patterns and evolutions. The three-scale approach in the ESPON 2006 programme was augmented to now include five scales, from the global to the local.

Table 1 is an attempt to give a broad overview of how each of the four challenges potentially act out at each scale and what possible levers are at that scale. As sizes of units at each scale, as well as repartition of competencies vary immensely within Europe, this should be seen as a broad approximation, not a definitive assignment of issues to scales.

This table highlights the fact that the way challenges play out in regions very much depends on the scale of action that is looked upon. In the following chapter we present a typology of regional manifestations of challenges which allows to understand the levers and types of actions regional authorities might have at hand to respond to them.

Challenges	Climate change		Energy		Demography		Globalisation	
Levels	Issues	Policy levers	Issues	Policy levers	Issues	Policy levers	Issues	Policy levers
Global	Evolution of global climate; Unacceptable living conditions in parts of the world;	International treaties; Management of climate change refugees	Reduction of fossil fuel availability; Conflicts for energy resources	Management of conflicts for energy resources ; International trade in energy; International cooperation in energy production	Global "carrying capacity" of the Earth; Unequal spatial repartition of people and wealth	Management of international migratory movements	Global economic power relationships; global governance of the world-wide economy ; Interlinkages and interdependencies of economic actors across the globe; Unequal spatial repartition wealth and well-being	International trade agreements; Organisation and control of international shipping and communication lines; International legal agreements; International standards

Challenges	Climate change		Energy		Demography		Globalisation	
European	Climate change in Europe; Moral responsibility for climate change elsewhere; Arrival of climate refugees;	European climate strategy; European position in international negotiations; Policies on climate refugees;	European energy security; Energy efficiency ; Transformations towards post-carbon society and economy;	European energy strategy; European energy infrastructures (e.g. European grid); Research;	Reversing the aging processes, but at the same time controlling a massive immigration of young but low qualified people	European immigration and border control policy; European targets for active population;	Reinforcing the European competitivity ; development of the knowledge economy	European position in international negotiations; Monetary policy; European economic (budget) rules and policies; Research; European transport networks;
Transnational/National	Natural catastrophes (including transnational) ; National adaptation and implementation of European climate strategy; Health impacts	National mitigation programmes; National and transnational (functional areas, e.g. river basins) adaptation programmes;	Transformations towards post-carbon society and economy	National energy strategies; Reduction of fossil fuels; Energy taxation policies; Energy efficiency programmes; Research	Management of immigration; Sustaining of pension schemes; Ensuring sufficient labour force;	Policies towards sustainable fertility; National immigration rules; Social security system; Health system; Unemployment policies;	Ensuring adequate labour force ; Attracting investment ; Ensuring international connectivity ; National industrial choices ;	National economic policies; Fiscal polices; Education; Research; Transport policies;

Challenges	Climate change		Energy		Demography		Globalisation	
Regional	Local natural catastrophes; Regional adaptation and implementation of national climate strategies;	Adaptation policies: land use, infrastructures, more energy-efficient location of activities and human settlements ; etc;	Favouring the emergence of new low energetical intensity productive structures	Localisation of (renewable) energy production; Energy efficiency programmes; Efficiency of land use and spatial structure (coordination of local interests and issues);	Struggle against human settlement dispersal ; avoiding the emergence of shrinking areas; Ensuring sufficient labour force	Regional economic development for avoiding emigration out of shrinking regions; Land use; Housing; Service provision; Investment in infrastructures	Ensuring adequate labour force ; Attracting investment ; Ensuring international connectivity ;	Regional economic policies; Education; Research; Transport policies and infrastructures for international connectivity; Land use; Regional fiscal policies; Quality of life
Local	Local natural catastrophes;	Adaptation (land use, infrastructures, etc);	Avoiding human settlements dispersal	Localisation of energy production; Energy efficiency programmes; Efficiency of land use and spatial structure;	Avoiding human settlements dispersal	Land use; Housing; Service provision; Investment in infrastructures	Attracting investment ;	Land use; Local fiscal policies; Quality of life;

Table 1: 5-level approach to issues and policy levers in the four global challenges

2.2.2 Two fundamental aspects of regional responses to the challenges

As all challenges play out at global scale, at regional level responses generally do not focus on the fundamental driving forces behind the challenges unless they contribute to efforts defined at higher scales. One can, thus, distinguish between two types of regional responses to the challenges. This distinction will also help in assessing which monitoring indicators and tools regions need to develop in order to support them in their decision making.

Adaptation / reactive

- driven by region (although some national / European programmes and incitations exist)
- need to understand how challenges impact region now and how they will impact in the future
- need to monitor indicators of resilience / adaptation and indicators of policy implementation
- examples: ageing, international migration, climate change, international trade and investment

Mitigation / proactive

- driven by higher level policy objectives (or possibly by feeling of "moral responsibility" in region towards others or other generations)
- example: Kyoto agreement goals, EU2020 goals, National objectives

2.2.3 What can regions do about these challenges : Regional perception of and responses to the challenges in the five stakeholder regions

This section provides an overview of how the regions involved in the project perceive the challenges, their levers and competencies related to them and which possible responses they might be able to oppose to the challenges.

Climate change

All stakeholder regions are aware of the crucial character of the climate change issue, even if it might not affect them all to a similar extent. Indeed, the Mediterranean area is more affected than North-Western Europe where some impacts can actually be considered positive from certain points of view (extension of the tourist season, increased agricultural productivity in Ireland, opportunity to develop clean technologies for North Rhine-Westphalia).

The stakeholder regions share the idea that, even if they can take part in the monitoring of climate evolution and some of its consequences (the evolution of forests for example), the main decisions in the implementation of policies aimed at tackling the causes of this phenomenon (reduction of greenhouse gas emissions, energy savings, etc.) belong to national authorities within the scope of agreements at European or world level (such as the Kyoto Protocol objectives). Sometimes, there is still a lack of binding national plans to reduce emission standards, as in Ireland.

At regional level, the stakeholder regions particularly feel concerned by technical adaptation measures: management of high water levels and floods, improvement of water availability and of drainage and purification systems, etc.

The potential contribution of territorial planning to a reduction of the causes of climate change is not so much discussed and, in this respect, stakeholders admit that when measures against global warming are helpful at regional level, they essentially are for reasons that do not reflect first and foremost a will to fight climate change: development of Natura 2000 sites, limitation of scattered housing and soil artificialization, location of activities, etc.

Overall, it appears that in the field of territorial planning and development a proactive contribution of regional policies to the struggle against climate change remains insufficient or secondary in comparison with other

objectives, even if regional stakeholder regions seem aware of the size of the problem.

New energy paradigm

Just like the climate challenge, to which it is closely linked, the energy challenge is also recognized as essential by regional stakeholders. Regions which, like North Rhine-Westphalia, make a large use of fossil fuels, are particularly sensitive to this challenge. But to the regions it appears as depending above all on objectives determined at European level (e.g. the European 20-20-20 objectives) and on policies implemented at national level.

At regional level, the possible ways to relay those national sectoral policies vary considerably, from exclusively national policies whose results are not even observable at the region's level by lack of monitoring and reliable regional statistics (as in Ireland), to situations in which certain aspects of the implementation of European policies fall within the competence of the regions, as in Flanders, while others remain the competence of the State. This of course does not facilitate the articulation of the different dimensions for a coherent policy. Even when they are competent in sectoral energy policy, the regions still lack sufficiently powerful fiscal measures.

Some regions have developed, sometimes already for a long time, specific measures that appear as good practices and could be applied to other regions as well: renewable energies development plan, as in Navarre; promotion of the development and production of green technologies, as in North Rhine-Westphalia or Navarre; designation of areas for wind parks and encouragement to local authorities to operate them in North Rhine-Westphalia, etc.

Regions also have competences to undertake occasional actions to reduce energy consumption. Those competences have been more or less developed: introduction of home energy standards and incentives for insulation; development of ecodistricts; promotion of car sharing, of use of smaller cars, etc.

Two major problems remain unsolved at regional scale :

- The overall coherence and contradictions between the different national or regional measures remain difficult to comprehend transversely;
- Energy policies are not or not satisfactorily transcribed into territorial planning (in this way, the reduction of mobility needs does not appear as a major determinant of the location of settlement areas and activities, the less so because location choices

are often transferred to sub-regional or local levels) or into other sectoral policies (mobility, agriculture, etc.). However, a better transversal taking into account those aspects seems to be emerging (in Ireland with the National Spatial Strategy, or in Flanders with the forthcoming Structure Plan).

Demography

The two basic aspects of the challenge mentioned by the stakeholders are immigration and the ageing of population in a context of low fertility, or even a population decline in some cases. Both issues are always seen as external factors by regional decision-makers, who possess almost no levers in this field. They may wish to manage the impacts, but they do not have many tools at disposal.

In Ireland immigration is seen positively. Mostly from European origin, it is considered one of the intrinsic factors of the strong population growth, and to stakeholders it is rather a pity that the crisis results in emigration. In Catalonia and in Navarre, the phenomenon is also considered fairly positive and likely to provide the necessary manpower, especially in low technology sectors. In North Rhine-Westphalia the emphasis is rather put on the necessity to pursue integration policies, though less than in Flanders where this emphasis is the highest. The demographic future is less problematic here than it is in North Rhine-Westphalia, which fears a possible demographic decline. However, stakeholders appear rather powerless to really conduct integration policies outside their competences. In North Rhine-Westphalia, such policies are the competence of other authorities, at federal or *Länder* level, while the situations should be monitored on a subregional scale. In Flanders, stakeholders refer to the necessity to deal with immigration at European level.

As regards the ageing of population, stakeholders also appear quite helpless to directly tackle a phenomenon of which they can only observe the consequences. Here again, in North Rhine-Westphalia, monitoring is organized at sub-regional level.

Consequently, how do stakeholders of territorial planning and regional development tackle these issues ?

Overall, they believe that acting on the impacts of population ageing and immigration involves a spatial policy of infrastructures and services, with a special attention given to older people but also to low-income immigrants' needs. This also implies to control housing and suburbanisation, so as to avoid scattering and the need for public transport that badly serve underprivileged populations. But the Spanish stakeholders indicate that those policies aimed at monitoring locations are largely out of the regions' control since decisions belong to municipal authorities. This is also true in

Germany and in Flanders, where land use is predominantly organized at sub-regional level and where regional authorities rather play a monitoring role or offer integration (Germany) or structuration (Flanders) frameworks. In Ireland, scattered location is an issue as well, although here it is due to dynamic growth which needs to be regulated, and land use is the competence of the central State. In total, the available levers for regional stakeholders involved in this project rather appear as connected to the monitoring of the evolution of situations, with, at the very best, indicative coordination capacities or the provision of a structural framework (as in Flanders).

In some cases regional stakeholders also use the implementation of infrastructures and services to respond to specific issues such as the struggle against depopulation in the recycled mountainous areas in Navarre, or the management of demographically shrinking urban areas in North Rhine-Westphalia.

In conclusion, regional stakeholder regions appear as having little or no control over the fundamental demographic challenges, and this is probably also the case for other levels of governance. Indeed, one can doubt the national states' capacity to efficiently boost birth rates (as proposed by Navarre's stakeholder) or the EU's capacity to closely control immigration at the European level (as suggested by the Flemish stakeholder). Regional stakeholder regions also seem unable to ensure a strong territorial regulation of the impacts of demographic phenomena, because the regulation tools are in the hands of various sub-regional authorities, if not of the central State. Therefore, indicators appear first and foremost as monitoring tools.

Globalisation

Globalisation by its nature imposes itself upon the regions. In this respect the regions, the States, or even Europe are far from being in control of all possible levers for action. However, the regions, at least those with sufficiently large competences compared to the national level – such as Flanders, the German Länder or the Spanish Autonomies – have largely included policies to respond to this challenge in their planning and prospective tools.

We shall mainly focus here on economic globalisation, although it is obvious that globalisation interferes with other challenges such as environment, energy policies, etc.

On the regional scale, three levels of involvement can be distinguished, each of which implying ranges of specific indicators:

- the first consists in measuring the level of globalisation of regional economies;
- the second concerns policies aimed at better including the region in the dominant trends of globalisation with associated indicators partly corresponding to a regional translation of the aims of Lisbon and EU2020 strategies;
- the third aims at defining a more global and comprehensive regional strategy to deal with globalisation. This level seems best comprehended by the Flemish stakeholder.

The first level implies above all the elaboration of a monitoring that allows regional benchmarking, based for example on indicators such as:

- the region's position in exports;

  share of the labour force in the major globalised sectors (technical and scientific activities, information and communication, etc.);
- complex indicators of competitiveness (regional productivity, attraction of foreign investors, etc.);
- the assessment of cities' participation in international networks, the urban image, etc.

The second level implies the implementation of specific regional policies, at least where the regions have the required competences (and the use of indicators associated to the assessment of corresponding situations and the results of such policies), as for example:

- reinforcement of the education level of the labour force;
- policies to promote foreign investments;
- appropriate adjustment of transport networks so as to avoid congestion (though this might be in contradiction with the response to other challenges);
- development of broadband information networks;
- promotion of cities' participation in city networks and alliances.

Implementing this second level can imply referring to policies within national competences (decrease in labour costs, as in Ireland or Germany; attractive tax system, etc.), whose negative impacts are not or not much evoked.

Moreover, a range of negative effects of globalisation need to be taken into account as well: housing bubble; overexposure of banks to toxic loans; etc. But those issues fall essentially under the competence of the national level. Attention should thus be paid to centralizing trends in

connection to the concentration of multinationals investments in and around the major poles.

The third level, mainly developed by the Flemish stakeholder, intends, without neglecting the above-mentioned aspects, to go beyond the regions' traditional attitudes toward globalisation, i.e. the complete compliance with its logics and attempts to attract a maximum of foreign investors through incentive policies including the provision of developed land and the improvement of infrastructures. The Flemish stakeholder points out in particular:

- that the regions have to acquire instruments to better resist the growing weight of property promoters, who stand between investors in the production sector and the authorities, and whose interests are frequently opposed to local authorities' perspectives or to the planning requirements that reduce mobility demands and improve sustainability (as regards commercial establishment for example);
- that, in parallel with the globalised competitive economy, the regions should include measures in their structural patterns to promote tourism-related and social economy, local business and personal services, the residential economy, in order to reduce regional economies' vulnerability to international economic fluctuations and to external decisions and to provide jobs for under-skilled populations;
- that regional planning should articulate globalisation with more qualitative policies aimed at a rediscovery of functional mix and local specificities instead of a spatial homogenisation of potentials;
- that territorial planning needs to acquire appropriate tools to fight the homogenisation of rural landscapes and the McDonaldisation of urban landscapes and commerce.

2.3 Is the general framework of governance capable of responding efficiently to new challenges ?

While measuring performance in specific issues is an important brick in the construction of a regional response to global challenges, another very important, but often neglected aspect is the general organisation of governance and, linked to that, the resilience of regions to current or future challenges. This is obviously very difficult to measure in quantitative terms and rather has to be analysed based on policy documents and interviews with relevant stakeholders. As institutional structure do not change very rapidly and radically, such an analysis does not have to be repeated annually, but it is important for a region to step

back from time to time and observe its own institutional and organisational capacities to respond to the challenges it faces.

In the ESPON TPM project a set of guidelines for a qualitative analysis of regional governance systems was developed, with a specific focus on meeting specific challenges. These guidelines have proven useful in the context of the five stakeholder regions, although adaptations of the framework, procedure and questionnaire were necessary in order to fit the analysis more adequately into the local context and the target audience of the analysis. The complete guidelines are presented as an annex. The results of the analyses were presented extensively in the interim report and again for each region in the regional reports. In the following we present some of the main conclusions.

The **flexibility of the planning system** is defined by a specific combination of vision capacity and further elaboration of operative measures for the coherent implementation of the vision. Each region has shown different strategic potentialities, with some specific characteristics due to their planning tradition in which they are embedded. The regions differ in the implementation of their vision, with different degrees of integrative capacities for sectoral approaches. This aspect is relevant also because the budgeting of the interventions is rarely at the spatial-planning level, but is often articulated in the sectoral actions.

When there are no formal obligations in **updating a vision** and renewing it regularly, the decision of starting a new process needs a combination of political intentions and a favourable socio-economic conjuncture. In general terms, the preparation of a new vision or a new structure plan can be considered as one of the moments of more intensive cooperation among different stakeholders. The **continuity of the process** and its updating phases together with a regular monitoring system that helps in the definition of appropriate policy measures, may have positive implications in the coordinative capacity of the planning system.

In order to make **horizontal coordination** more effective, resources often matter. While a coordinative role is helpful in encouraging a cross-sectoral approach in directing appropriate development and investment strategy, it may lack in key governance capacity by not having direct control of resources for both decision-making and investments. **Vertical coordination** generally seems to function quite well towards lower levels, while the coordination with higher levels, notably EU institutions, is often limited to a pragmatic and often opportunistic relationship, generally linked to funding opportunities.

Wider Cooperation and participation are important aspects, in order to have a wider agreement on policies and to facilitate their

implementation. Most of rigidities of the system are due to a **lack of capacity to promote shared cooperation** with both public and private actors, as well as a limited involvement of citizen in the decision-making phases.

Impact analyses based on ex-ante and ex-post assessment are generalized practices. Nevertheless, **a real monitoring tool associated to the regional planning system is rather rare**. In the cases where some attempts have been made (Flanders, Navarre, at regional level in NRW) or it is under-preparation (GDA), the **main difficulty seems to be the capacity to embed the tool in the planning system** in tight relation with its main planning instruments.

The effectiveness of monitoring will be dependent on the **resources available** during the life time of the plan and the **constancy of the assessment**.

2.4 How can I measure the performance of my region in comparison to other regions or to given policy objectives ?

2.4.1 Intro : use and abuse of benchmarking

"Evidence-based" policy making has forced policy makers to not only respond to these questions according to their intuition, but to develop systems of quantitative measurement. Such measurements should position the evolution of the region, and possibly of policies in that region, in a manner to allow an evaluation of the progress (or not) towards a "better" future. This has also been the main objective within the TPM project, i.e. to assess "how regions perform in relation to macro-challenges (climate change, energy supply, demographic development and globalisation). "

Constructing such an assessment implies a series of difficulties that can seriously hamper the usefulness of the analysis. A main aim of this report is thus to provide regions with a series of guidelines and tools to avoid these difficulties and to be able to make the choices that are most adequate for their situation.

An important issue in European regional policy making is the frequent attempt at European level to downscale indicators used at national scale to regional scales, in order to understand different regions' contribution to the overall phenomenon under study. When it comes to understanding the structure and geography of a particular question, this can be a very helpful approach. However, when it comes to policy making, an indicator which has a specific meaning at one scale, might be more or less meaningless at another. An example would be the debate about ageing

and what is seen by some as a need to raise activity rates in order to ensure the sustainability of social security programs, and notably pension schemes. Indicators such as the activity rate or the old-age dependency rate are used to illustrate and measure the issue. While this may make sense at national level, which is the level at which social security systems currently function in Europe, the meaning of these indicators becomes quite different when used at regional level as they give more a vision of residential preferences of different age and population groups, more than an idea of the sustainability of social security systems. Unless the political objective is to create absolutely identical regions across Europe, such indicators thus have to be handled with care in a regional monitoring context.

2.4.2 Steps for quantitative monitoring

Choosing elements to be monitored and monitoring criteria

This project targets the monitoring of the four global challenges identified at EU-level: globalisation, demography, climate change and change of energy paradigm. During the project, we elaborated different quantitative and the qualitative analyses in which we proposed a series of elements to analyse and measure in order to understand regional performances in these fields. However, other analyses certainly are possible, and each region will have its own priorities concerning the choice of relevant elements to monitor and how to interpret them. Debating this choice is already an important part of regional monitoring as it forces regional stakeholders to be explicit about their priorities and thus to already start the elaboration of a common framework of understanding and a common postulate of cause-and-effect relationships.

As a basis for this debate, the project has elaborated a mind map which attempts to depict in a simple manner the different ramifications of the global challenges within regions. This mind map should be seen as the beginning, not the result, of the reflection process. For example, during the TPM project, each stakeholder region revised this mind map in order to adapt it to regional realities and to identify which of the branches in the map are actually relevant for the region and for the specific stakeholder in the region.

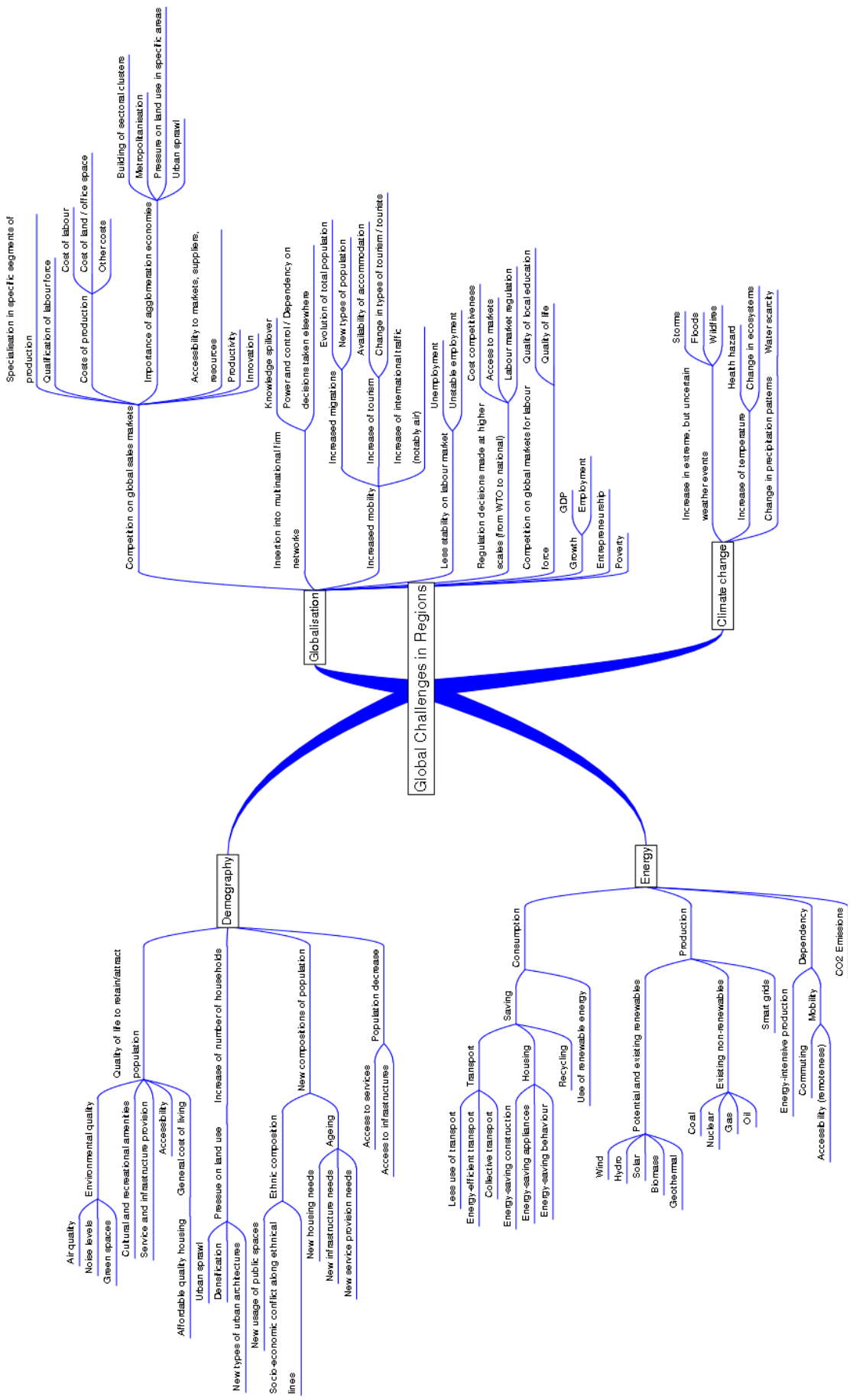


Figure 1: Mind map translating challenges into regional issues

Regional Highlight 1: Revision of the mind map – The case of Flanders

Through a series of interviews and discussions, the mind map was revised for Flanders, while also serving as an entry point to defining a core set of necessary indicators.

The proposed revisions included the following:

- For climate change, a reorganisation was proposed in order to group those phenomena related to heat and those related to water issues and additional issues were added, such as heat islands and ground water levels
- For energy a series of new general topics a reorganisation was proposed creating new general topics such as distribution, storage, affordability.
- For globalisation, two new themes were proposed: social cohesion and homogenisation/disneyfication of landscapes
- For demography, a more explicit treatment of migration was suggested.

See the regional report for more details.

Choice of relevant indicators and their regional meaning

The elements identified as relevant in the mind map above have to be translated into measurable quantitative or qualitative indicators in order to allow a permanent monitoring process. Before focus on what can be measured, i.e. by verifying the availability and/or feasibility of specific data, regions should first reflect on what they would like to monitor. As we will show below, numerical data is not the only way to proceed to such monitoring and it is important for regions to open the horizon of desirables before restricting that by the possibles.

It is obvious that knowledge, policy and perception will change over time. Any list of indicators will quite certainly evolve constantly and should, therefore, not be seen as neither exhaustive, nor static. Regional monitoring processes will thus have to constantly survey new needs and new datasets and possibly amend their list of monitoring indicators. At the same time regions should, however, be careful about ensuring continuity of indicators in order to be able to develop time series.

A first step for the regional monitoring system will be the choice, amongst the existing data, selecting a limited amount of indicators that are considered most informative for the specific regional questions. This also entails a discussion about the meaning of these indicators, including their political meaning, and the link between on the one hand both political options and ideological orientation and on the other hand the means to express these in quantitative terms. In the next section, we propose a typology of indicators according to their relation to the types of phenomena and the role regions can play. Which indicator belongs to which type is region-specific, but should be made explicit in the choices of indicators for a regional system.

A typology of indicators

A difficulty that emerges from the synthetic reading of the regional reports is the fact that the status of the proposed indicators are quite different from each other, and possibly differ according to the scale on which they are used (also between regional scale and sub-regional scales). It is imperative to distinguish, at each level, between:

- **indicators reflecting a situation and its evolution, but on which the territorial level considered – here mostly the regions – has no influence**. Those indicators are thus indicators of constraint and they can sometimes give at local level a possibility to conduct preventive or corrective policies. An indicator related to the multiplication of unusual rainfall events or drought periods will thus only be useful for a region as an encouragement to develop

policies with a view to prevent floods, build reservoirs or irrigation systems. But in no way a regional policy can impact the causes of such phenomena resulting from the operating logics of the world-system and on which only world – or at least European- policies can impact, especially since any mitigation policy now will not effect global climates before at least 50 years time.

- **indicators reflecting supra-regional constraints for which the latter may have to implement policies established on a larger scale, sometimes even at the expense of their own short-term interests**. If we consider climate change again, an indicator of greenhouse gas emission or industrial pollutants can reflect the region's contribution to a policy determined at EU level, whereas a positive evolution of this indicator may result in (or at least reflect) negative developments (or even the collapse) of the local industrial system, as in some Central-Eastern European countries in the nineties.
- **another version of the previous type consists in indicators reflecting constraints and policies present on supra-regional scales, for which a measurement on the regional scale is not necessarily relevant, but which can, at this level, reflect the pursuit of other objectives**. Let us consider the part of the territory classified in Natura 2000 sites (the most often proposed indicator of biodiversity performance). If an objective of classifying a certain part of national territory as Natura 2000 sites, is it obvious that this very percentage must be an objective at the level of each NUTS 2 region? By contrast, if the indicator may lack full validity at this level with respect to the aim to which it has been built, its evolutionary trend may prove valid for other purposes, such as the preservation of natural spaces open to local populations indicating quality of life (under the condition in this case that the Natura 2000 status does not restrict access to those spaces for local habitants).
- **indicators reflecting regional situations on which regional authorities can actually have some influence through their own policies.** The problem here consists in interpreting benchmarks since these regional policies can pursue divergent objectives according to the various regional specificities. What is more, an improvement of the indicator is not yet necessarily the result of the policies implemented. Another issue important to reflect at higher governance levels is whether the success of a region in one field, might actually mean the decline of another region in that same field.

- **indicators that do not reflect regional realities, but rather the implementation of policies**, without providing indications as to their real efficiency regarding the objectives to be achieved.

Choice of reference criteria

The notion of monitoring encompasses two concepts: 1) the value-free observation of trends in order to be well-informed, and 2) the observation of trends in order to compare these trends with expectations or objectives. The former implies the collection and treatment of data or information and its regular reporting. The latter (which we will mainly deal with here) builds upon the former, but adds a benchmarking dimension. When trying to determine where a regions stands in terms of its development, reference points are needed. This is where benchmarking comes in. It helps evaluate how well a region is performing. However, the "how well" obviously is a relative concept. The target can be defined by absolute values (a certain amount of CO2 reduction, for example) or relative to other entities or groups of entities (better or worse than the national or the EU average, than the neighbours, than other regions of similar type, etc). There is no one good solution, it obviously depends on the political necessities of the monitoring process.

Part of the elaboration of a monitoring tool that is to include some form of benchmarking it is important to go through a conscious and explicit phase of selection of the relevant thresholds or reference points, in order to provide results that are meaningful in the particular policy context of the region. This is thus something for which we cannot provide a one-size-fits-all answer, but only some elements of reflection that should help each region find its own "best" solution.

- Other spaces as references

Comparing a region's evolution to other spaces means using the evolution of other regions or of other scales as reference point. This could mean comparing a region to the neighbouring regions or to similar regions, or it can mean comparing the region to the national or European average or to some other higher-scale combination of regions. It is important, however, to avoid the fallacy of trying to compare a region's performance with regions of completely different characteristics. In other words, while it makes sense to compare the region to national or European averages in order to get a very rough understanding of where a region stands, it seems nonsensical to compare the share of financial services in the regional economy between a global city region and a remote agricultural region. Depending on the subject and indicator, attaining the average of a supra-regional spatial delineation might or might not be a relevant objective.

It is, thus, important to chose the reference spaces which have a particular meaning and usefulness for the region to be monitored. Mostly, as all policy-monitoring processes are politically driven, each region has to identify those regions it would like to compare itself with. Even amongst our five stakeholder regions opinions vary about the useful of comparing their performance to the rest of the EU regions and each thus has to make their own choice.

Another often forgotten issue is which value to calculate for the space of reference: should it be the average, the median, or some other value. The classic choice is the average, but this might be strongly influenced by some outliers. The median is generally a more robust measure of "average" behaviour (another option would be the average of everything between the 10th and the 90th percentile in order to exclude outliers), but again, the choice is more a political one, than one related to a clear scientific "best" answer.

- Policy goals as references

The second big family of threshold values in benchmarking exercises contains values derived from policy objectives. This can vary from Europe-wide policies to regional policies and from loosely-defined targets to targets imposed by treaties or even legislation.

These values are not based on any current reality, and not linked to any other spatial levels (unless the policy option is something like "be part of the top 10 NUTS 3 level units in the country"), but rather represent the political wishes at a given time. These values thus have to be known and entered into the benchmarking system as they cannot be calculated automatically. They also, therefore, vary from region to region depending on the political priorities.

Defining "good and bad"

In order to allow rapid understanding of benchmarking results, indicator levels are often classified into good, neutral, bad, or some similar scheme. However, it is not always easy to determine whether a given indicator should be consider as "good" when high, and "bad" when low, or vice versa. For example, the share of foreign-born in the total population can be consider good when high as it might indicate the openness of the region and the capacity to attract new residents, but it may also be considered bad as it might indicate potential socio-ethnic conflicts and spatial concentration of immigration. Another example are sectoral wages which might be considered good when high, especially when compared to the national average as this might indicate particularly high qualification rates within the given sector, but it might also be considered bad when high as high salaries might hamper international competitiveness. It is

necessary to explicitly take this question into account when choosing indicators and reference levels.

2.4.3 A core set of EU-wide quantitative indicators for monitoring

In order to support regions in their attempt to compare their performances to other regions in Europe, we have elaborated a core dataset for EU-wide quantitative monitoring at NUTS 2 / 3 scale. We included in this dataset a series of prospective indicators, notably concerning demography and climate change in order to allow regions to also evaluate their possible future performances. This core dataset is a compromise between desirability of information and availability of data, which is the single most limiting factor for EU-wide regional quantitative analyses. Through ongoing work by Eurostat, DG Regio and obviously ESPON, this list will certainly evolve in the future.

For those indicators where this is possible, this core set is available as an input file to the ESPON HyperAtlas, thus allowing all regions in Europe to use these indicators for benchmarking purposes. For a complete description of this core data set, see the relevant annex.

For some of the indicators, EU-wide objectives exist, notably defined in by EU2020 strategy. For others, other European documents define objectives. The following table lists some of the numbers. As mentioned in the introduction to this chapter, it is important, however, to verify whether a given indicator makes sense at the regional scale, given the national policy context and the competencies regions have within that context. Similarly, each region might want to use their own quantitative objectives, for example based on national policies. This is very easy to do within the ESPON HyperAtlas.

Indicator	*Policy reference value*	*Source*
Employment	75% of the 20-64 year olds	EU2020 Strategy
Expenditure in R&D	3% of GDP	EU2020 Strategy
School drop out	below 10%	EU2020 Strategy
Third level education	40% of 30-34 year-olds completing third level education	EU2020 Strategy
Greenhouse gas emissions	8% reduction by 2008-2012 (compared with 1990 levels)	6th Environment Action Program (EAP), 2002
Greenhouse gas emissions	20% reduction	20-20-20 targets in EU2020 Strategy
Renewable energies	20% on renewable energies	20-20-20 targets in EU2020 Strategy
Energy efficiency	20% increase	20-20-20 targets in EU2020 Strategy

Table 2: Quantified European policy objectives

Europe-wide data does not exist on regional level for all objectives. However, as illustration, we provide below two maps which position regions relative to two objectives, school drop-out rate and research and development expenditures. Those regions that are in green have attained the objective, those in yellow are close to attaining it, and those in red are furthest away from attaining it.

The map on school drop-out rates shows a differentiated picture amongst our stakeholder regions, with Flanders and the NUTS2 region containing the Greater Dublin Area attaining (or almost attaining) the objective. The other three regions not, however.

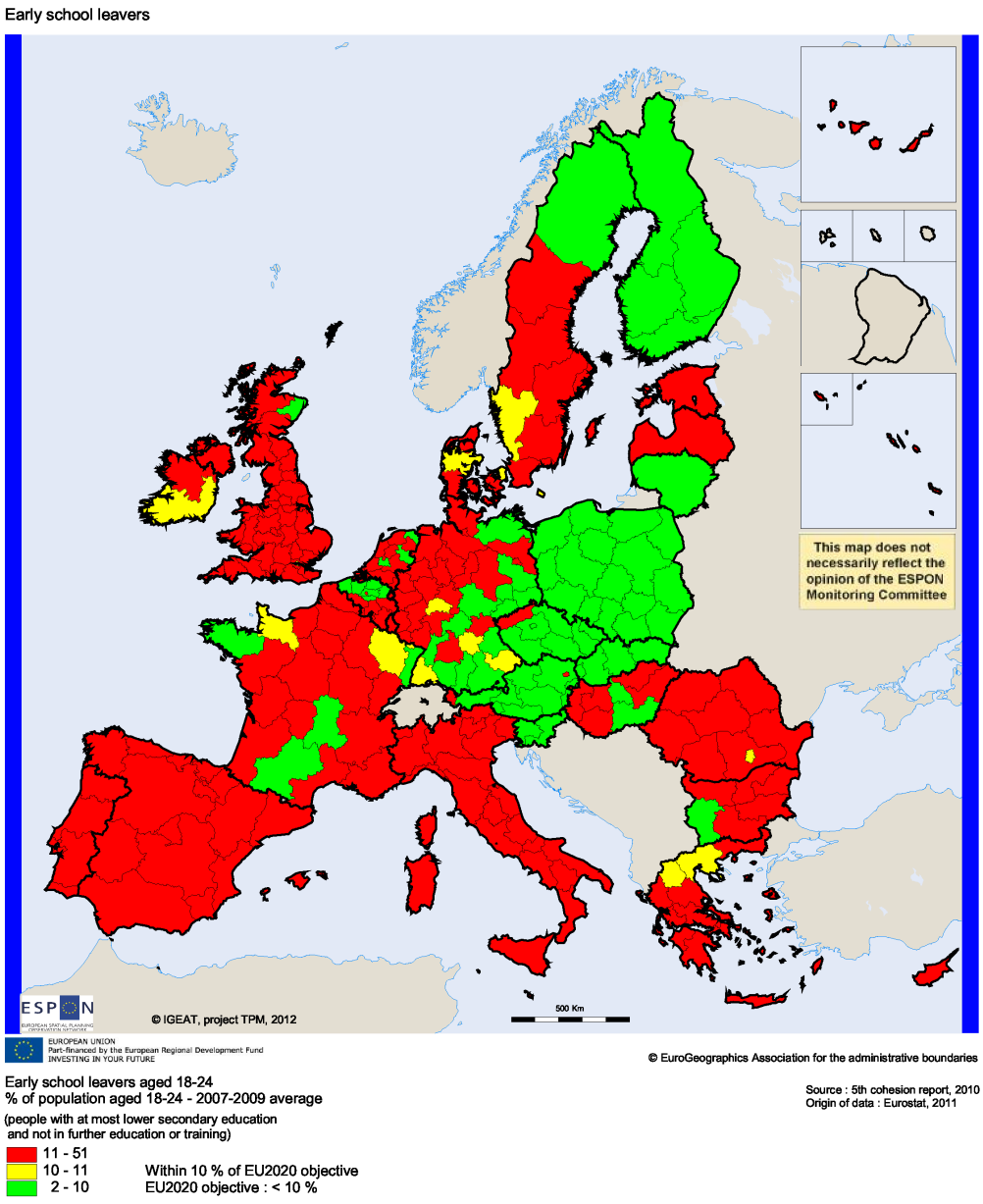
The map on R&D expenditure shows all stakeholder regions in red, except for parts of North Rhine-Westphalia which reaches yellow.

Note, however, that no official limits between the yellow and red classes exist. In the two maps below two approaches have been used, either 10% or 25% from the objective.

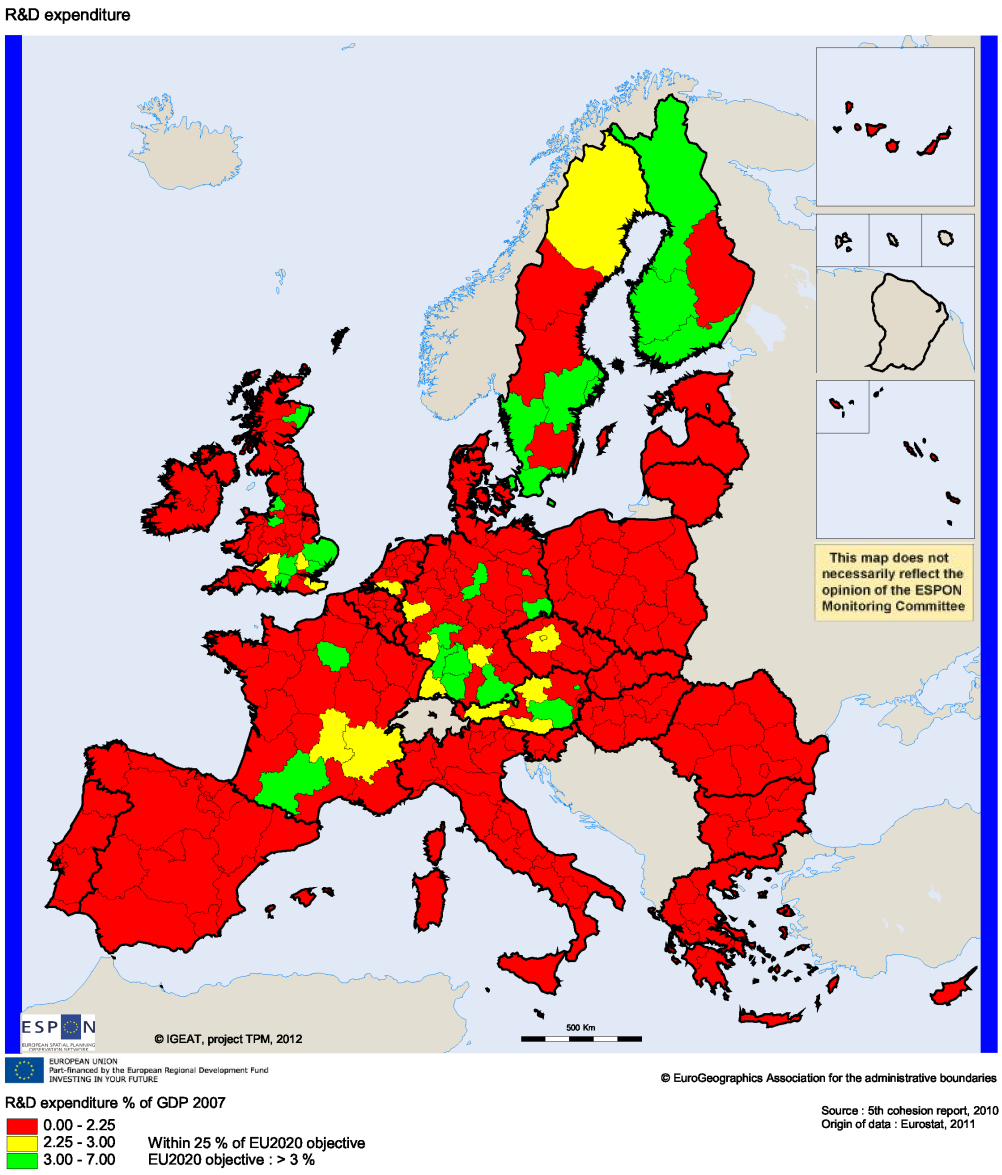
It is important to note that a position of a region in these benchmarking examples does not necessarily mean that it is within the responsibility or competence of that region to change that position. Education, for example, is often not a regional competency. This obviously depends, however, on the division of tasks between different levels of governance within the respective country and the specific situation of the region.

Also, the example of the R&D indicator highlights the question of whether the regional level is adequate for measuring success or no, or whether

concentration of R&D investments in some regions might not be more efficient, thus profiting of agglomeration economies. This would mean that the EU2020 objective would only make sense as a benchmark at EU level, not below.



Map 1: School drop-out rate compared to EU2020 objective



Map 2: R&D expenditure rate compared to EU2020 objective

Some data do not easily fit into the administrative regional boundaries, notably data about flows between cities. The information contained in these indicators can, however, be very important for regional policy making. The map 3 shows the results from the ESPON FOCI project of a contactability analysis between 400 cities in Europe. It provides an insight into how many cities can be reached in one day return-trip for a 6-hour meeting in the other city, and the share of the different modes (taking for each city the mode which allows the longest meeting in the other city). The big disadvantage of such information is the extreme difficulty in collecting it. The FOCI project used actual flight and train timetables for this analysis and could only provide the data for one moment in time.

Regions can use such information in order to measure the performance of parts of their territories, in this case cities, and determine what type of policies, in this case transport and infrastructure policies, might be needed to enhance the position of the selected areas. However, such data is generally difficult to integrate into the classical regional benchmarking format proposed above. Figure 2 shows another example of such city-level analysis, from the Irish All-Island Research Observatory (see below for more information) where cities are compared for their cost of office space.

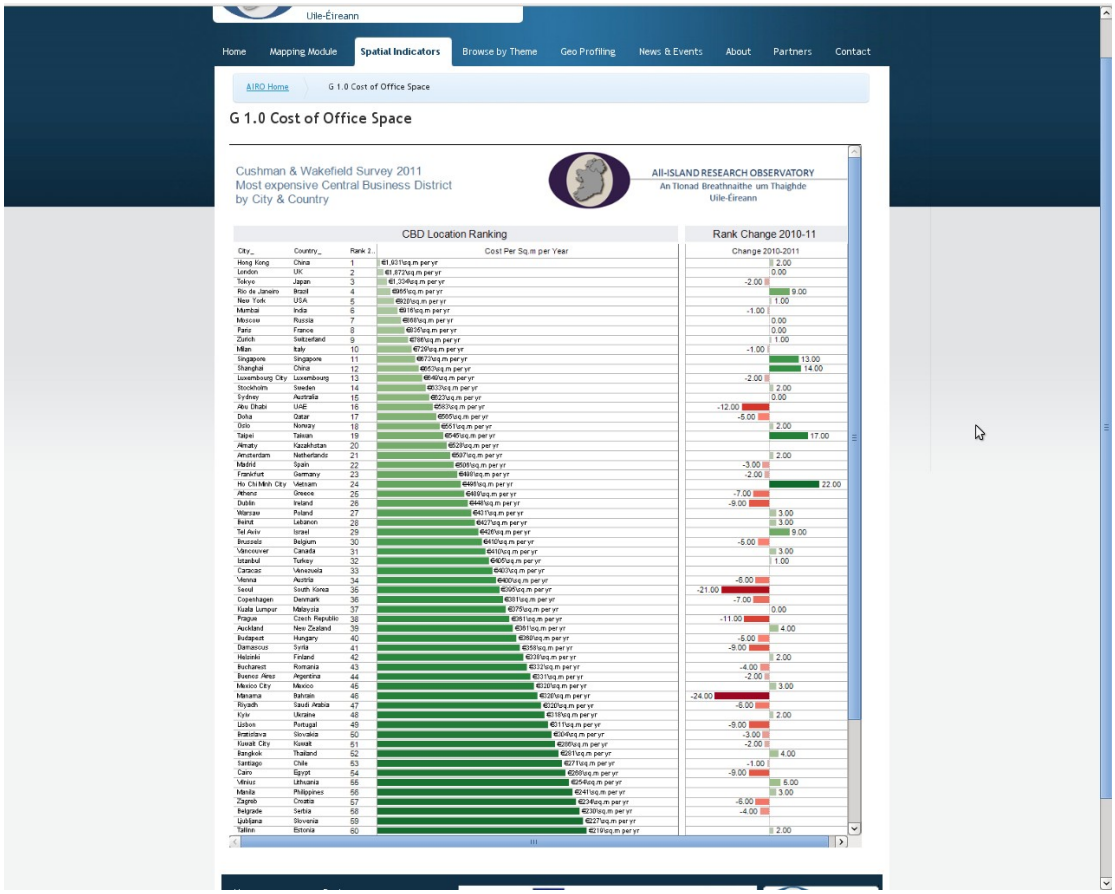
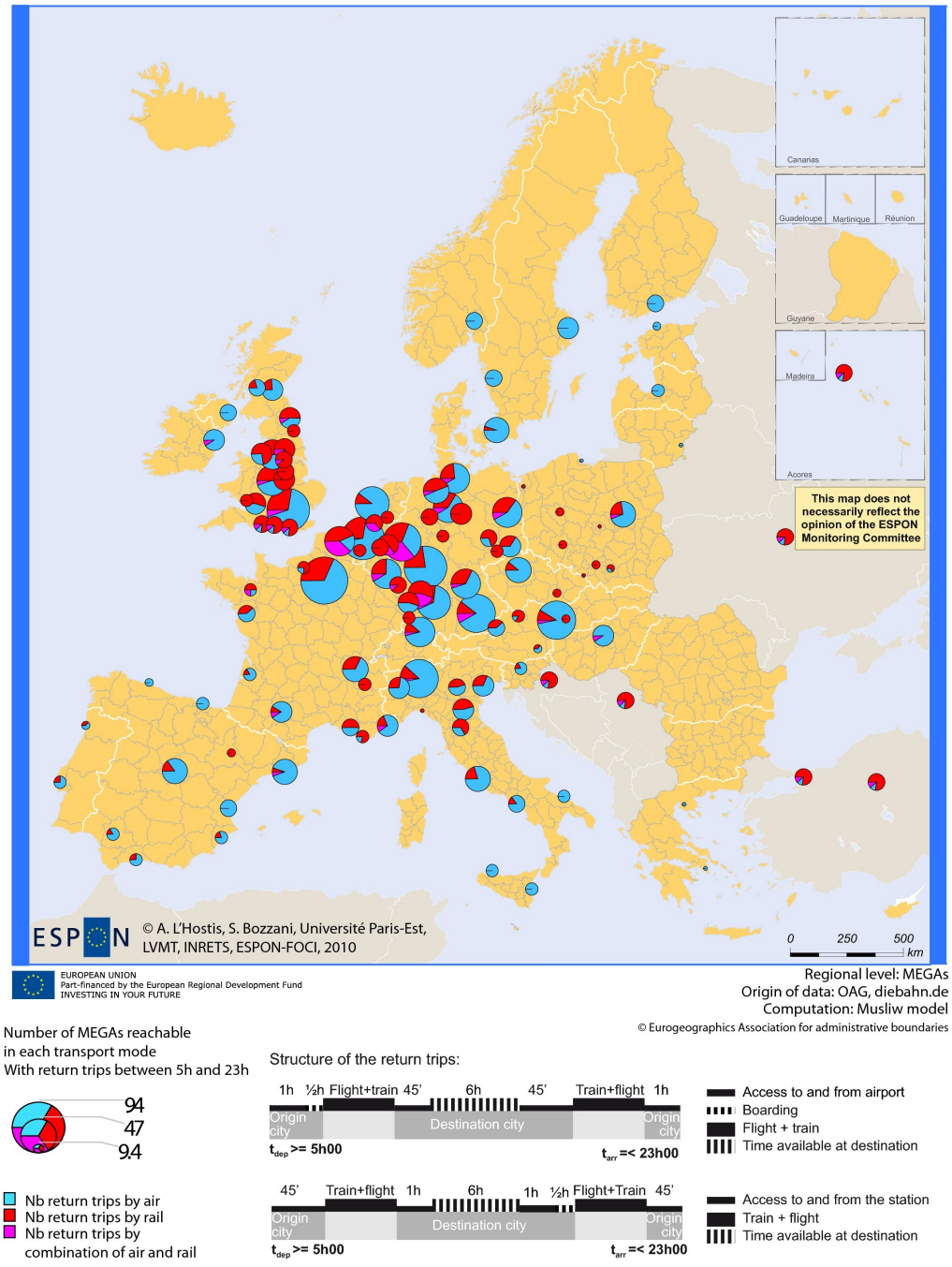


Figure 2: Example of urban benchmarking - the case of cost of office space

Map A2: Number of MEGAs contactable by rail and/or air, return trips between 5h and 23h



Map 3: Contactability by mode for 400 European cities (FOCI project)

One of the issues with flows is obviously their rather complex representation. The above example shows one way of synthesizing flow information for specific territories.

2.4.4 Tools for benchmarking

This project did not have as objective to develop new (software) tools for benchmarking or monitoring, but rather to provide regions with the necessary guidelines towards successful monitoring of the regional performance in the identified global challenges. However, practical aspects can be important and not all regions have the resources and know-how to develop their own systems.

We, therefore, tested two tools and provide necessary files and information for these tools so that regions can use them as they see fit. One of these tools is an ESPON product, the ESPON HyperAtlas, which provides an interesting multi-scalar analysis opportunity. The second is a prototype for a simple, spreadsheet-based tool which should be seen more as proof of concept than as a finalised tool, even though it can be used in production settings.

We briefly present each of these tools in the following section. Experience with the five stakeholder regions has shown that whenever possible integration of the necessary analyses into existing tools already in use within a policy-making context is preferable. However, these tools might be useful to some, or serve as an inspiration to others.

ESPON HyperAtlas

The ESPON HyperAtlas is a publicly accessible online analysis and mapping tool which allows users to provide customized data files for different territorial levels and areas (NUTS 2 – NUTS3, EU27 – EU31)[1]. As mentioned on the ESPON web page, "it is a highly sophisticated analytical tool based on the multi-scalar territorial analysis concept. This concept is supporting the assumption that the situation of a given region/territory should take into account its relative situation and localization. With the HyperAtlas, a local decision maker in a convergence region can, for example, easily compare and analyse its region's relative position at European, national and local scale for a whole set of criteria, such as GDP/inhabitant, unemployment, accessibility, ageing, etc."

As a result of this project, we provide two customized datasets for monitoring the four challenges, one at NUTS 2 and the other at NUTS 3 level. The indicators contained in these datasets are described above.

The big advantage of the use of the HyperAtlas is that its maintenance is centralized in the ESPON project. It is highly desirable that such maintenance be also applied in future to the core monitoring dataset.

[1]The ESPON HyperAtlas is at http://www.espon.eu/main/Menu_ScientificTools/ESPONHyperAtlas/.

Regional Highlight 2: The issue of maintenance of data and tools – An extract from the regional report on North Rhine-Westphalia

"Whereas regional monitoring systems normally focus on NRW or Germany, the TPM benchmarking tool as well as the ESPON HyperAtlas provide European-wide data. Therefore, these tools enable European-wide benchmarking, which is useful for the NRW stakeholder. The current usefulness of the TPM benchmarking opportunities, however, may be restricted by personnel resources. Similar to the initial compilation of indicators and data, their update and maintenance will be very time-consuming. After the end of this project, the update of data will be the stakeholder´s task and it is doubted that state spatial planning will have enough resources to keep the tools up to date."

The TPM prototype benchmarking spreadsheet

We developed the prototype of a complementary tool to the ESPON HyperAtlas, the ESPON TPM Benchmarking Tool. This is a simple to use system which can easily be fed with customised dataset, irrespective of the scale, as long as certain rules are respected. The tool is in a prototype state, meant to show what is possible, but is already usable, although definitely not optimised (notably in terms of speed optimisation). The prototype is thus to be understood as an invitation to regions to think about their current infrastructure and needs and to implement a more efficient tool within the framework of their existing systems.

2.5 How can I analyse differentiations within my region ?

Comparing a region's performance to global policy objectives or to other regions can be very useful for policy makers in order to relativise and put into context the regional issues. Territorial policy makers and spatial planners, however, are also particularly interested in the internal spatial differentiation within their region in order to understand the spatial patterns of the phenomena in question, but also in order to understand how these spatial patterns might actually be part of the issue. For example, the spatial distribution of housing and employment influences transport needs and behaviours and thus influences the region's performance in terms of climate change mitigation and adoption of a new post-carbon energy paradigm. Analysing the spatial distribution of R&D activities might give a hint at how successfully agglomeration economies are leveraged within a region.

Initially it was planned to develop within the project local datasets for each region allowing them to analyse and visualise the internal spatial differentiation of different phenomena. The team worked in collaboration with the ESPON Database project in order to develop tailor-made local input files for the ESPON HyperAtlas. This would have provided regions with a ready-made tool for their analyses, but it had two disadvantages:

1. At the current stage of development, specific local files for the HyperAtlas cannot be developed by any user, but only by the HyperAtlas development team. Even though we did develop local files for each of the five stakeholder regions, these files would soon become obsolete as the stakeholders could not update them on their own. Additionally, other regions would not have been able to reproduce such files.
2. Each of the stakeholder regions has its own realities in terms of existing monitoring tools and levels. A new tool set alongside the already existing ones would probably have less chances for adoption, than working within the existing environment.

After careful evaluation of the situation in each region, it was, thus, decided, that such local analysis should be integrated into existing regional indicator systems and tools. Two of the stakeholder regions have proceeded during the project to the elaboration or improvement of regional tools based on ESPON TPM findings.

Regional Highlight 3: Example of the integration of the global challenges into a regional monitoring tool – The case of the Greater Dublin Area

The NIRSA research team in the Greater Dublin Area have developed a quantitative toolkit for the Dublin Rergional Authority containing 41 multiple indicators that were collated based on the revised ESPON TPM Mind Map. This toolkit is based on all indicators where data was available and could be linked to policies and objectives with the RPGs. Indicators are available for all four macro challenges.

In the interest of developing a more sustainable monitoring tool it was decided to integrate the collated indicators into an existing web tool, the All-Island Research Observatory (AIRO) (www.airo.ie), developed by NIRSA over the past number of years with the aim of making spatial and statistical data more accessible to users such as planners, policy makers and the general public.

The tool provides users with access to data in an interactive and accessible manner and allows the view, selection and downloading of data to suit needs, this can done be at the regional, local authority or LAU2 level. The interactive nature of the tool also allows users to download, export or embed the data and visualisation if and when required.

The data integrated combines quantitative indicators with qualitative information collected, for example, from local or regional authorities. It provides views of internal differentiation when possible, while for other indicators it benchmarks the whole region in comparison to the rest of Europe or even the world.

The figure below shows two examples from that application. On the left an example of a qualitative assessment of climate change plans at county level and on the right a LAU2-level quantitative analysis of ageing.

For further details see http://www.airo.ie/spatial-indicators and click on *GDA Territorial Performance Monitoring (ESPON TPM)*.

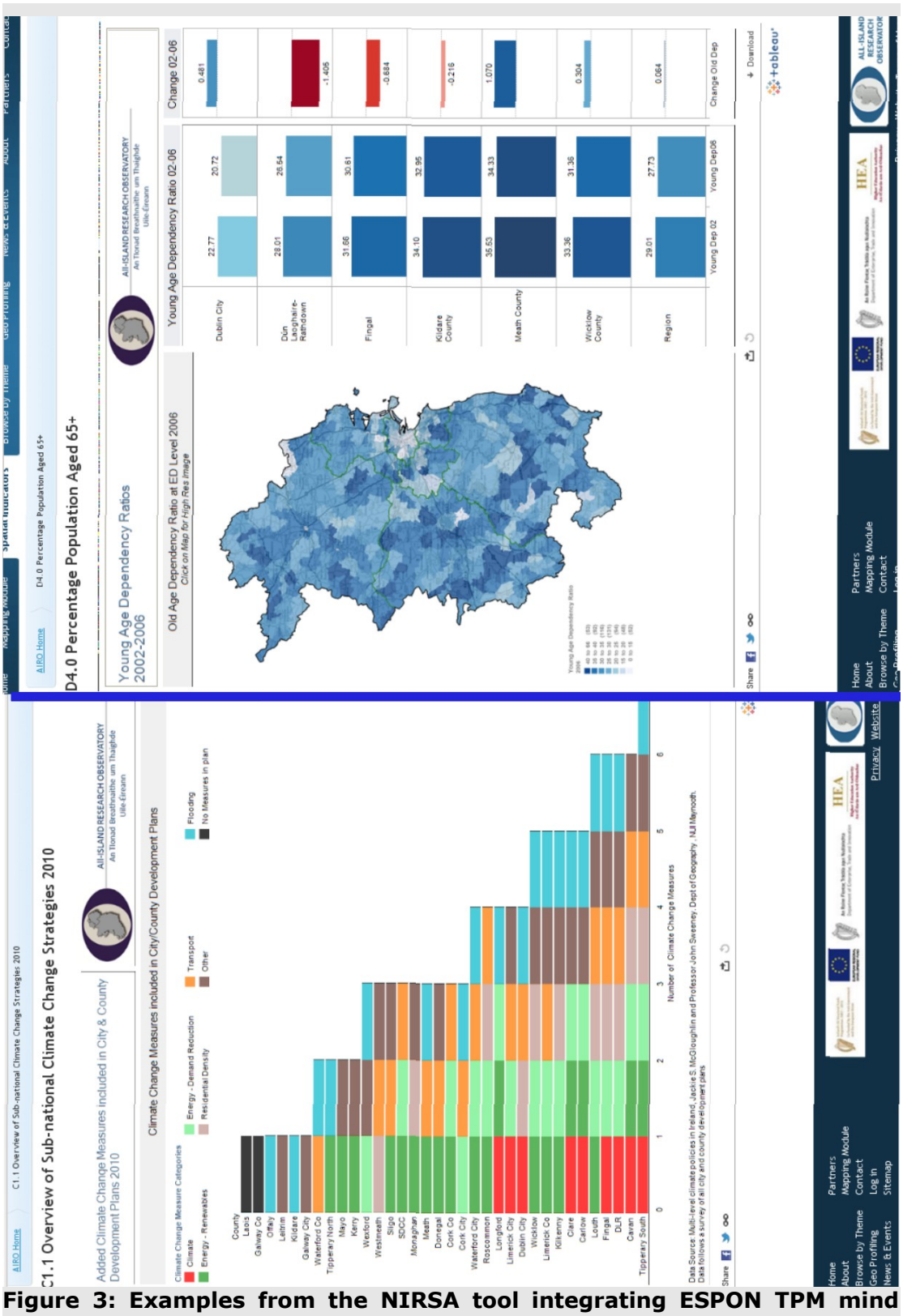


Figure 3: Examples from the NIRSA tool integrating ESPON TPM mind map indicators

2.6 How can I get access to information for which no official quantitative statistics exists ?

Much of the relevant information for monitoring either cannot be translated into quantitative information, or, even if theoretically possible, such quantitative information does not exist. One option would then be to just use qualitative assessments in the form of interviews or qualitative reports. However, it might sometimes be desirable to structure qualitative information in a form providing a quick and easy to read access to the main content of that information. This is especially true when experts are asked to assess planning systems or to evaluate the relevance of specific issues for their region.

In the last phase of the projects attempts were made in each of the stakeholder regions to fill gaps in necessary information which was not available in a quantitative form. The needs were defined based on the mind map presented above.

The several lessons can be drawn from that experience:

1. Much information already exists in a semi-structured form (analyses, studies, planning documents, databases) in different institutions, but is not well-known, and sometimes not easily available. A special attempt should be made by administrations to inventory, assess and access that information. Sources can include: other administrations, other scales, universities and research centres, etc.
2. Interviews or focus groups with relevant stakeholders and experts can be very useful both for providing the persons' perception and knowledge of particular issues, but also to receive information about existing studies, documents and data. The difficulty with interviews is their time-intensive character and they should, therefore, more be used as a first approach to an issue to monitor, in order to understand the underlying parameters that need to be measured and possible ways to do so, instead of as a final source of monitoring information. Making them recurrent can, however, establish a systematic involvement of experts in a monitoring process.

Regional Highlight 4: The use of information from other institutions – The cases of Navarre and the Greater Dublin Area

The Navarre research team and stakeholder identified several fields where information was lacking:

- Ageing (new housing needs, new infrastructures needs, new service provision needs)
- Unstable employment (Temporary contracts)
- Insertion into multinational firm networks (knowledge spillover, power and control/ dependency on decisions taken elsewhere)

No quantitative data existed easily available for these themes. For that reason, it was decided to proceed with a documentary analysis of the plans and strategies of the Government of Navarre and hold meetings with high-level agents from different administrations to try to obtain qualitative information about these issues. The attempt was quite successful as some information was gathered for all desired topics:

- New housing needs. Quantitative information was obtained from internal statistics and studies that the Service of Housing of the Government of Navarre elaborates.
- New infrastructures needs and new service provision needs. Qualitative information was obtained through documents accompanying the Regional Spatial Planning Programmes (POT).
- Temporary contracts. Quantitative information was obtained through the Public Employment Service of the Government of Spain.
- Insertion into multinational firm networks. Quantitative information was obtained through the Service of International Projection of the Government of Navarre.

In the Greater Dublin Area, use was made of a university study by ICARUS, NUI Maynooth on the "Multi-level climate policies in Ireland". Following a review and analysis of the ICARUS research it was possible for the research partner to extract the results from the survey and embed within the monitoring tool that has been developed for the stakeholder.

For more detailed information on these examples, see the respective regional reports.

3. A more structured form of harvesting expert opinion is through surveys, delphi exercises, etc. In that case, the question then becomes whether the survey should provide a representative sample, or whether it is just a gathering of information without the ambition of providing statistically usable data. It is important to note that in order to get a notion of important evolutions, statistical representativity is not always necessary and a collection of expert opinions can be a very valuable source of guidance.
   An issue encountered in the stakeholder regions was the lack of response to surveys, thus making the results less useful. A successful survey demands a minimum level of investment in order to identify the most adequate respondents, contact them in order to inform them of the nature and purpose of the survey, provide them with the survey, follow the response rate and relaunch participants and then treat the results.
   A recommendation coming out of the experience of the stakeholder regions is to possibly transform this kind of survey into a continuous process, possibly involving a fixed group of people who show their willingness and availability to answer the questions on a regular basis. Response rates can further be increased by: more intensive follow-up of the respondents; a clear, known structure; more frequent, but very short surveys; and possibly small funding or other compensation for those institutions that respond. More generally, involved stakeholders will respond more willingly if they can see their own interest in doing so. For example, embedding such a survey to lower levels of governance within a more larger context of accompaniment of these levels in the policy field can raise the willingness to respond.

Regional Highlight 5: Organising a survey for gathering new information – The cases of North Rhine-Westphalia and the Greater Dublin Area

In North Rhine-Westphalia, it was felt that not enough was known concerning the impact of demographic changes on the regional level. To fill that gap, a questionnaire combining ranking exercises as well as open questions was elaborated. Due to their expert knowledge in the field of regional development, the questionnaire was aimed at the staff working in the six regional planning authorities in NRW. As the main aim was to create a deeper knowledge about the impact of demographic changes, the questionnaire was concentrated not only on the main spatial effects of demographic change, but also on the awareness of the topic as well as on strategies of the regional planning authorities for dealing with the consequences of demographic change. Unfortunately, the response rate was not satisfactory. There were only eight respondents from six regional planning authorities who filled in the questionnaire. The small number of cases must be taken into account while analysing, interpreting and assessing the data. This applies to both types of questions (closed and open questions), which should be interpreted carefully.

In the Greater Dublin Area, it was decided to develop a detailed questionnaire on the service infrastructure in key settlements across the GDA. The survey focused on five categories and can be linked to the main challenges set out within the Demography section of this research. The survey, an attempt at capturing both quantitative information about the services within each settlement and also qualitative information on the quality of each service and potential threats to future service provision, was a valuable exercise for the stakeholder and allowed the development of a template that could be used on an on-going basis. Unfortunately, the timing of this project and recent staffing reductions within local authorities resulted in a very poor response rate to the survey. Reduced staffing resources and the lack of readily available information due to its non-strategic nature for statutory land use planning requirements were the main reasons for local authorities opting out of the survey.

See the regional report for more details about these questionnaires.

2.7 How can we translate the monitoring results into policy ?

Being able to find, analyse, visualise and interpret information is one part of a monitoring process. An important part is obviously whether regions are capable and willing to integrate monitoring into their overall policy-making procedures. A figure 4 illustrates, monitoring does not make any sense if it is not embedded in a continuous process with policy-making and guided by a vision of policy objectives.

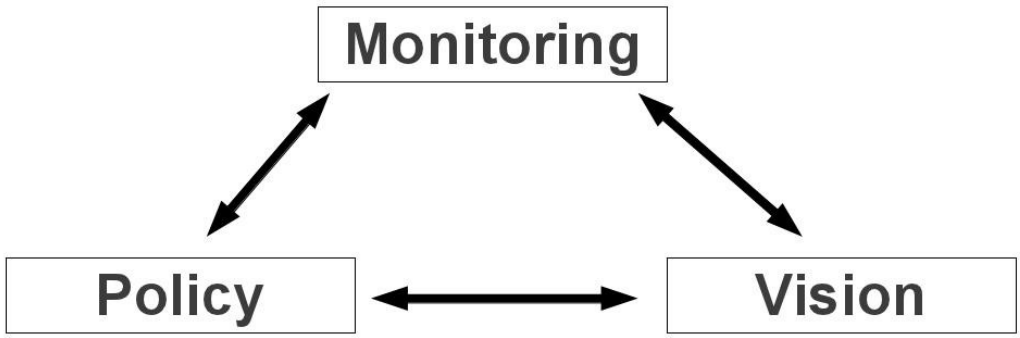


Figure 4: Integration of monitoring in a policy-making process guided by visions

From the examples of our stakeholder regions, notably through the qualitative analysis of the governance system, we can conclude that the actual practical implementation of monitoring is a technical « detail » (even though it does require careful planning and sufficient resources), often more a question of how to adapt existing regional tools, than of inventing completely new systems. The more important issue is the institutional capacity to integrate monitoring (and its results) into decision-making processes.

A regional, territorial performance monitoring tool focusing on European challenges requires that most, if not all of the following conditions are met:

- integration of the monitoring system into a clear vision of the region concerning its goals and objectives and the most important

priorities: monitoring only makes sense if it is linked to some reference

- clearly defined procedures on how to react to findings of the monitoring system (from frequent adaptation of regional visions based on monitoring results up to automatic revision of priorities if certain thresholds are exceeded)
- sufficient resources for continuous update and maintenance, i.e. the monitoring system has to be seen as an integral and necessary part of regional territorial governance and not as a luxury item
- shared ownership, or at least shared profit from the monitoring system with other administrations (sectoral) and lower governance levels, especially when information is needed from these institutions
- a continuous "surveillance" of European policy discussions and documents in order to identify the challenges raised at that level
- relative political "neutrality" of the monitoring system as such (although it has to be able to relate to policy goals), making it useful for all political parties potentially involved in the governance of the region, thus ensuring its survival over time
- long-term commitment to the monitoring process, allowing to build up a pool of interested stakeholders and experts that can contribute
- permanent fora of contact with relevant experts in order to be informed of relevant new studies, documents or research projects, possibly in the form of regular focus groups on defined challenges

In conclusion, a monitoring tool can be a very helpful tool for policy makers allowing them to steer their policies in a flexible manner while keeping their overall goals in mind. This is only true, however, if the political will is really present to allow such an "objective measurement" of the evolution of a region.

For concrete reflections on the policy-relevant conclusions concerning each region, refer to the regional reports.

3 Proposals for dissemination and future orientation for research

3.1 Future orientation of research and action within the ESPON programme

The project has highlighted the fact that the biggest issue of constructing a territorial performance monitoring system in regions are the constraints within the governance structure and also in terms of resources that the

territorial actors in the regions are confronted with. Most of the knowledge actually exists within the regions, but it is the practical work of "putting it all together" and of being able to sustain such a process which is a challenge.

It is also obvious that ESPON can provide many useful elements to help regions in their monitoring tasks, but that at the same time, the programme cannot cater to each and every individual regional governance system. Useful contributions from ESPON are / can be the following:

- the ongoing thematic research projects through their gathering and interpretation of data which allows regions to position themselves in comparison to others, but also by providing innovative tools of analysis (in the form of indicators and of analytical typologies)
- the ongoing development of tools such as the ESPON Database and the ESPON HyperAtlas; during the project it appeared that it continues to be difficult for regions to easily find data and, more importantly, to interpret it; meta-data can still be improved and possibly enhanced by the inclusion of a discussion of the policy-relevance of indicators included in the database
- a sustained maintenance of datasets (ideally also integrated in the ESPON HyperAtlas) tailored to specific challenges, and to specific European objectives

3.2 Dissemination

Three axes of dissemination are foreseen for the results of this project:

1. Publication of a book: preparations have begun for the elaboration and publication of a book presenting the results of the project to a wide audience.
2. Regional events: From the beginning of the project, each of the stakeholder regions was invited to organise a regional event with the presence of some of the members of the research team in order to discuss the project results and their relevance for the region. Up to now, only the region of Navarre has taken up this idea and has organised a public session at the occasion of a team and stakeholder meeting.
3. An event in Brussels aimed at stakeholders and policy makers working for or in relation to the European institutions. Possibly, this event could take the form of an ESPON workshop.

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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.

ISBN 978-2-9600467-5-5 – TPM – Territorial Performance Monitoring