

SeGI

Indicators and perspectives for services of general interest in territorial cohesion and development

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

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List of Abbreviations and Glossary

List of Abbreviations

ICT:	Information and communication technology
NACE:	Nomenclature générale des activités économiques dans les Communautés Européennes
SGEI:	Services of General Economic Interest
SSGI:	Social Services of General Interest
TIA:	Territorial impact assessment

Standard Abbreviations for Country Names

AT Austria	IT Italy
BE Belgium	LI Liechtenstein
BG Bulgaria	LT Lithuania
CH Switzerland	LU Luxemburg
CY Cyprus	LV Latvia
CZ Czech Republic	MT Malta
DE Germany	NL Netherlands
DK Denmark	NO Norway
EE Estonia	PL Poland
ES Spain	PT Portugal
FI Finland	RO Romania
FR France	SE Sweden
GR Greece	SI Slovenia
HU Hungary	SK Slovakia
IE Ireland	TR Turkey
IS Iceland	UK United Kingdom

Glossary

alternative technologies: is a term used to refer to technologies that are more environmentally friendly than the functionally equivalent technologies dominant in current practice. The term was coined by Peter Harper, one of the founders of the Centre for Alternative Technology, in the 1970s.

ecological footprint (of cities): the ecological footprint (of cities) is a measure of human demand on the Earth's (urban) ecosystems. It is a standardized measure of demand for natural capital that may be contrasted with the planet's (cities') ecological capacity to regenerate. It represents the amount of biologically productive land and sea area, spaces necessary to supply the resources a human population consumes, and to assimilate associated waste. Using this assessment, it is possible to estimate how much of the Earth (city) it would take to support humanity if everybody followed a given lifestyle.

explorative scenario: is defined by the fact that they respond to the question What can happen? Two types may be distinguished: external scenarios and strategic scenarios. Explorative scenarios can help explore developments that the intended target group in one way or another may have to take into consideration. This can be in situations when the structure to build scenarios around is unknown, e.g. in times of rapid and irregular changes or when the mechanisms that will lead to some kind of threatening future scenario are not fully known.

hierarchical cluster analysis: Hierarchical cluster analysis is a statistical method for finding relatively homogeneous clusters of cases based on measured characteristics. It starts with each case in a separate cluster and then combines the clusters sequentially, reducing the number of clusters at each step until only one cluster is left. This hierarchical clustering process can be represented as a

tree, or dendrogram, where each step in the clustering process is illustrated by a join of the tree;

normative scenario: Normative scenarios consist of two different types, distinguished by how the system structure is treated. Preserving scenarios respond to the question: How can the target be reached, by adjustments to current situation? Transforming scenarios respond to the question: How can the target be reached, when the prevailing structure blocks necessary changes? In the case of normative scenarios, the study has explicitly normative starting points, and the focus of interest is on certain future situations or objectives and how these could be realised. When it seems possible to reach the target within a prevailing structure of the system, the preserving scenario approach would be appropriate.

Pentagon regions: "Pentagon" in the centre of Europe with London, Paris, Milan, Munich and Hamburg as corners. In 2010, at the time of the EU-25, it numerically covered 20% of the EU territory, 43% of its population and 58% of its economic performance. The Pentagon was also considered in the European Spatial Development Perspective.

politico-administrative systems: Decisions made by the decision-makers can be divided into political and administrative ones. Administrative decisions generally mean making use of the existing regulations and laws. While political decisions, on the other hand, are aimed at creating new laws and regulations, as well as at interpreting the existing ones.

public service obligations (PSO): is an arrangement in which a governing body or other authority offers an auction for subsidies, permit the winning company a monopoly to operate a specified service of public transport for a specified period of time for the given subsidy. This is done in cases where there is not enough revenue for routes to be profitable in a free market, but where there is a socially desirable advantage in this transport being available. The use of PSO can be applied to many mode of transport, including air, sea, road or rail. In many cases the introduction of PSO has been a way to privatize former government owned transport. The infrastructure is often separated from the operation, and may be owned by the governing body or by a third party. The authority may also maintain the ownership of the vehicles, such as ferries or rolling stock.

re-municipalising: After many years when privatisation, contracting-out and outsourcing have been the dominant trends across the public services, there is now increasing evidence, particularly in the municipal sector including water and energy of trends in the opposite direction.

Ringen's Paradox: The paradox is named after its founder, Professor Steinar Ringen. A country with the lowest threshold of a minimum provision of welfare will have a lower share of e.g. poor relative a country with a high threshold. By changing the threshold, accessibility, availability, affordability, quality and choice also change. This reasoning can be transferred to the wider set of services called SGI. If the threshold on e.g. on maximum distance to primary school for pupils is doubled, a larger share of the pupils will live within the threshold compared to before. This is a paradox in line what Professor Ringen discussed.

service network: a collection of people and information brought together on generally the internet to provide a specific service or achieve a common (business) objective. A service network is designed to benefit from the 'wisdom of crowds' and a human's natural tendency and desire to share information, collaborate, and self organize into communities of common interests and objectives. A service network enables entities to realize the benefits of mass collaboration despite the constraints of modern organizational structures and systems.

A. Executive Summary

1 Key messages and findings

This draft Final Report further specifies the empirical approach elaborated in the Inception and Interim Reports and presents the initial results of the analytical work as well as the preliminary results from the case study regions. The results will be further elaborated in the Final Report.

The critical tone evident in this report should not however be seen as expressing disapproval or even the rejection of the political flagships of *Territorial Cohesion* and *Services of General Interest*, rather, it should be seen as the result of an assessment of politics with scientific tools. As such, the starting point of political reality – vagueness caused by negotiations, terminological fuzziness to reach a consensus, indicators with low explanatory value but high political importance mixed with an a-theoretical perception of causality etc., – clashes with the scientific needs of a well-defined terminology, valid and reliable indicators as well as a well-founded and theoretically solid model of causality in the analyses. Tautological arguments are ridiculed and rejected in science, but commonly found and appreciated in the world of politics. It is in this context then that the results in this draft Final Report should be seen. Criticism, as such, is not aimed at the objects of study *per se* in this draft Final Report.

1.1 Defining Services of General Interest

The importance attached to SGI creates a public authority obligation to ensure their provision in accordance with certain standards in respect of quality, availability, accessibility and affordability – in defence of the “general interest”. Also, the categorisation of SGI into being of an “economic” or “non-economic” nature is not, in principle, apparent. In practice the division has become increasingly blurred given the development trajectory in recent decades, varying significantly among the member countries. The criteria used to differentiate between the various categories are not self-evident nor is it clear what specific functions or services are, or should be, included in each category. Indeed, this is often subject to political debate while, in reality, displaying wide variations between the countries. Furthermore, a certain service can simultaneously be of both ‘economic’ and ‘non-economic’ interest and the question of unit (and thus of properties/qualities) of classification remains unspecified for objectives, functions, activities, sectors/industries, responsibility, modes of provision, regulation, types of provider, financing and target groups. Instead, a circular argument is offered; whether the proper member state authorities subject to ‘specific public service obligations’ satisfy the ‘general interest’ criterion and may therefore be regarded as SGI.

The conclusion here then is that the concept of SGI is primarily *functional*, addressing the objectives, purposes and missions of SGI rather than concretely stating or proposing actual content. This project defines **Services of General Interest** as Social Services of General Interest and Services of General Economic

Interest. **Social Services of General Interest** are defined as labour market services, education, health care, child care, social care, (social) housing and social assistance services; **Services of General Economic Interest** encompasses gas, electricity, postal services, transport, ICT, electronic communications, water and waste management.

In order to operationalise our definition of SGI in this project a functional tool is required. Such a tool exists in the NACE rev 2 classifications of economic activities. The use of NACE provides a common frame of reference for the statistical analysis in the project and ensures a reasonable degree of comparability. Even if the focus is on units/classes of economic activity (the SGI providers) NACE also offers a common framework for the classification and comparison of functional and other aspects of SGI.

1.2 Indicators

Indicators are only meaningful when certain criteria are respected, namely, when they conform to theory, relevance and expressiveness. Furthermore, it is helpful if indicators are easily comprehensible while, in addition, they also need to be easily accessible and clearly relate to the question in hand. In complex systems and on broad topics like sustainability, societal wealth or SGI it is necessary then to translate visions into concrete definitions before meaningful indicators can be constructed.

The method of defining SGI indicators is strictly deductive in this project and the starting point is the operational theory based concept of SGI, followed by a 'translation' of the operational concept into indicators. The expressiveness of SGI indicators is highly influenced by the different historical, economic, cultural and political developments of the European countries. In some cases the relevance of the available indicators must be questioned: indicators covering the NUTS0-level say little about the development(s) at the NUTS3-level; some indicators are non-spatial (e.g. pensions, unemployment insurance or sickness insurance).

From the three dimensions – availability, accessibility and affordability - of SGI indicators and using the NACE Rev 2 classifications as a framework for the statistical analysis following the operational definition of SGI. Monetary information on the costs of SGI for the citizens and beneficiaries on the one hand and on the costs or investments of public or private organisations on the other are not available on a regional level and nor even on a national level for most SGI in the ESPON space. To create specific accessibility indicators not only is the affordable data missing but, to make matters worse, the processor capacities for calculating accessibilities on a local or raster-based level in the ESPON space are simply not sufficient.

The main conclusions arising from the work done on key indicators for SGI are as follows: (1) The operational definition of SGI via the NACE classification appears to be satisfactory in statistical terms enabling it to describe the regional variation of the availability of certain services. NACE is mandatory within the European Statistical System. In order to meet the data requirements necessary for a

sufficient indicator system in respect of SGI no new statistics would have to be established. (2) The current availability of NACE statistics on the regional level is insufficient. Several NACE divisions have to be differentiated according to the NACE classes to meet the need for differentiated SGI data, especially the sections/divisions on education and on health. (3) Even at the NUTS 2 level data gaps are evident because of issues relating to confidentiality. Section G for instance on retail shows significant data gaps. Transposing these NACE statistics to the NUTS 3 level would be desirable but seems, currently, to be unrealistic. (4) Qualifying statements, beyond simple availability, in terms of the number of local units one has often to fall back on the national level. Thus calculating the number of persons employed (and the turnover) is necessary in order to gain a better understanding of the regional distribution of SGI. (5) Currently, on the regional level (i.e. NUTS 2) EUROSTAT only has data covering 2008 and 2009. If SGI cannot quickly be integrated into the NACE data an additional attempt to collect the data for at least 2000-2010 should be made. Lastly, (6) the metadata in Eurostat needs better information about the quality and origin of the data, including the statistical unit employed. Thus far it has been very difficult to find detailed information about whether the member states have really provided data on local economic units for all selected NACE classes and sections and not deviant data on enterprises.

Policy making, monitoring and evaluation demand information, which has to be organised in an up-to-date system and harmonised for the sector and territories of analysis. Reliable and relevant indicators are crucial components of this process. The analysis here points to some problems which need to be addressed: (a) There is a need to integrate SGI indicators with context indicators; (b) the need to measure effects is difficult because of the scarcity of relevant data; (c) the SGI 'effects analysis' also obliges us to undertake an inter-sectoral analysis; (d) a scarcity of available information exists for different scales of analysis; and (e) a heterogeneous number of indicators exists for each domain.

1.3 Case Study findings

The case studies cover two geographical scales (national and regional) in nine countries. The studied regions are East Austrian Periphery (AT), Ruhrgebiet (DE), Dél-Alföld (HU), Northeast (IS), Finnmark (NO), Mazowsze (PL), Northeast (RO), Navarre (ES) and South Gloucestershire (UK). The aim here is to reveal the territorial distribution and situation of SGI in particular European regions, recognising the potential of, and the constraints on, territorial development in the context of SGI within different types of territories including rural, urban, peri-urban, rural, mountainous, islands, coastal and outermost regions. Moreover, the analysis of the case studies focuses on the contribution of various Services of General Interest to global competitiveness, economic development and the growth of cities, urban agglomerations and other territories in Europe.

Two factors appear important for Services of General Interest in all of the case study areas: (1) economics and demography appear to be the primary drivers for Services of General Interest. Changes in these areas will have repercussions in

terms of how and to what extent the SGI are provided. (2) The level of SGI produced in the case study regions appears to be dependent on the economic level of the member state.

The results of the nine case studies indicate that the institutional system does not seem to determine the quality of, or accessibility to, SGIs to such a significant extent as was initially supposed. The use of contextualised and specific local factors seems to have a more significant impact on SGIs than the implementation of universal solutions.

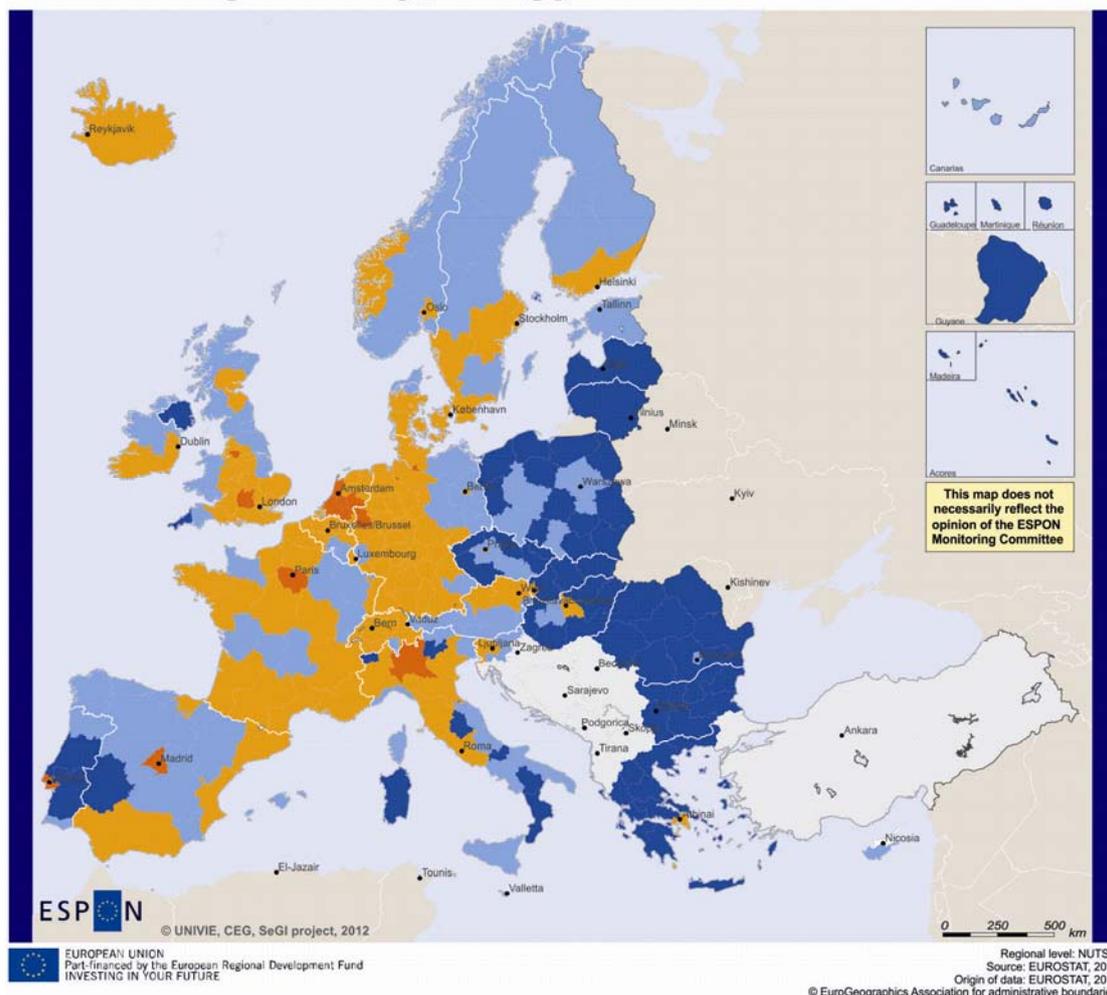
1.4 Typologies

The approach to welfare and planning adopted by a country is to a large extent reflected in the approach it adopts to organising and providing SGI. Various types of ESPON states (NUTS0) are identified by comparing several forms of organisation across five fields of SSGI along 4 attributes. This is (1) the level of responsibility for SGI; i.e. whether, in the main, the national, regional, local or individual level is in charge of providing SGI, (2) the degree of territorial planning over SGI; i.e. if planning over SGI affairs is explicit, implicit or completely absent, (3) if an SGI is mainly produced and (4) mainly financed, by the market, state or society. Based on an expert survey, a hierarchical cluster analysis over 3-dimensional information (NUTS0, SSGI, 4 attributes) resulted in a typology with three macro types and in total nine types. Most striking is the absence of a distinctive East European 'type'. Instead, New EU Member States cluster around various Northern, Continental and Southern European 'types'. A further striking result relates to the tendency of convergence around, and learning between, the main 'traditional' models by Esping-Andersen exemplified by the UK, Nordic and Continental types. The Mediterranean countries form an additional type.

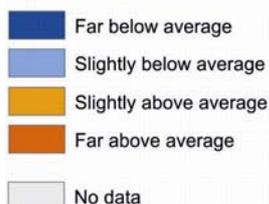
In a second focus, evidence of aggregated patterns of SGI on a regional scale (NUTS2) and in a European comparison is analysed. A list of useful input and output indicators of SGI provides the starting point for three regional typologies on economic SGI, educational SGI and healthcare SGI. In an aggregation step, a typology of social SGI, based on the educational and healthcare SGI typology, is calculated as well as in a final aggregation step a combined typology of economic and social SGI is formed to build an overall regional typology of Services of General Interest. This final combined view on economic and social SGI highlights the existence of a rather wide spectrum encompassing scores for *far below*, *below*, *above* and *far above* averagely situated NUTS2 regions in terms of SGI provision. The situation of SGEI and SSGI provision in regions is positively correlated to each other; in short, regions well situated in terms of SGEI are more likely to also have a good score in respect of SSGI as well and *vice versa*.

Map 1: Regional Typology of Economic SGI (SGEI)

Regional Typology of Economic SGI



Types of regions



with use of the following indicators:

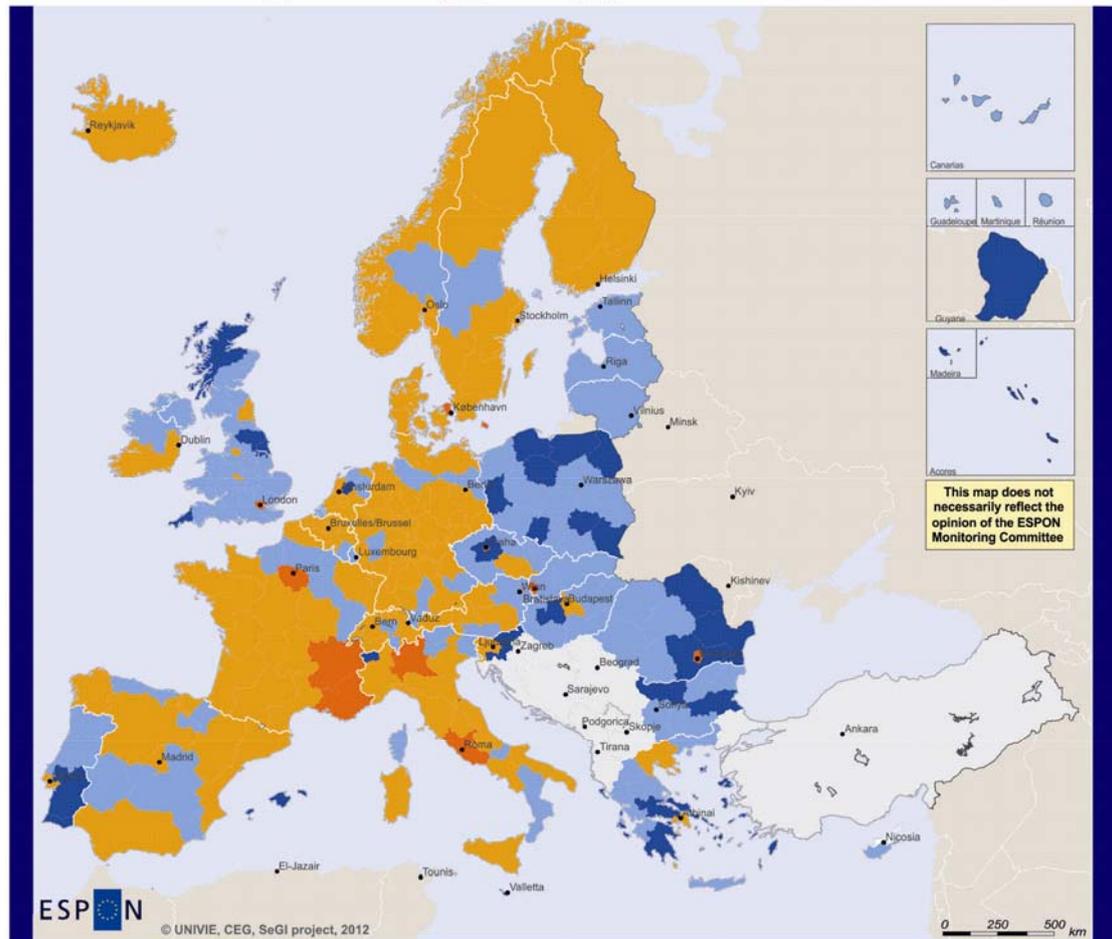
1. Length of motorways in km per 1.000 km² in 2009
2. Percentage of households with access to broadband in 2010
3. Persons employed per 100.000 inh. in PR and consultancy in 2009
4. National public expenditures on economic affairs per inh. in 2009

Coming on to the territorial dimension, this trend clearly illustrates the higher scores for urban and metropolitan regions. On a macro scale, continental Western European regions are predominantly located above the European average while most UK regions and those of some East European states are nearly all far below the average; this is particularly so for EU-external border regions. In Northern Europe the differences between neighbouring regions is much lower than in Southern Europe. Comparing the typology with context indicators, there is a rather weak though positive correlation with population density (0.364) but a stronger negative one with the share of rural areas within the NUTS2 regions (-0.480). Even stronger is the positive correlation with GDP per capita (0.688). This analysis confirms the trends that: SGI provision in a region is (1) generally

better, the higher the population density, (2) worse, the higher the share of rural areas and most importantly (3) better the higher the financial possibilities in terms of GDP per capita.

Map 2: Regional Typology of Social SGI (SSGI)

Regional Typology of Social SGI



Types of regions

- Far below average
- Slightly below average
- Slightly above average
- Far above average
- No data

with use of the following indicators:

1. Students in pre-primary edu. per 100 inh. of resp. age-group in 2009
2. Students in upper secondary edu. per 100 inh. of resp. age-group in 2009
3. Students in tertiary edu. per 100 inh. of resp. age-group in 2009
4. National public expenditures on education per inh. in 2009
5. Available hospital beds per 100.000 inh. in 2008
6. Physician and doctors per 100.000 inh. in 2008
7. Professional nurses and midwives per 100.000 inh. in 2008
8. National public expenditures on health care per inh. in 2009

This twofold analysis leads to an important conclusion. The qualitative aspect (the HOW) of organising SGI is not really the decisive factor in terms of the quantitative (the HOW MUCH) of SGI provision. Rather, it is clear that better SGI provision goes hand in hand with the demographic-territorial and financial potentials of a country/region.

1.5 Governance and policy design

The prime objective of the SeGI policy options is to form the basis for recommendations in relation to future Cohesion policy, recognising the essential importance of SGI for European economic, socio-economic and environmental development. The aim is to specify coherent and coordinated policy options targeted at the city region level of governance, to ensure good governance articulated in accordance with the principles and practices of sustainable development, and to deliver territorially defined policy options supporting the development of SGI in the context of functional and polycentric urban areas.

SeGI policy options address the future orientation of Cohesion policy and consider the nature of future perspectives on the European territory as elaborated by the SeGI explorative scenarios. These policy options fully recognise and anticipate the importance of the global and pan-European drivers of change that impact differentially on the European territory and shape and influence the provision of SGI. These drivers of change include both external shocks such as climate change, demographic change and economic crisis, and internally defined dynamics such as the influence of member state ideological positions on the production and distribution of SGI.

Policy options for SGI aim to fully account for all of these influences, and in particular the major impact of the economic/financial crises factored into the scenario analyses defined in relation to alternative explorative scenario assessments. Accordingly, policy options are elaborated here in relation to SeGI scenarios concerning Competitive, Social and Green Europe, and specified in the Scientific Report (Annex 9). Territorial governance must combine policy principles and territorial dimensions, in this way defining different strategic policy options, options which, in turn, are fundamentally shaped by the policy context in which they are produced.

In respect of competitive Europe it is clear that public expenditure cuts triggered by the financial crisis will impact on the quality and accessibility of existing SGI, and most likely on the future provision and maintenance of SGI. SGI remain critically important, as the level of public service provision is a crucial factor in, for example, both sustaining rural settlements and in maintaining them as part of an integrated urban-rural strategy. Effective public service provision can support the local economy, and public services can create economic opportunity where this is embedded in a territorial development strategy, for example, based on general economic development strategies stressing competitiveness based on a knowledge economy, and priority territorial actions, for example, cities as engines of growth. Regional economic competitiveness can also be advanced by a number of policy levers at the local level including the enhancement of local and regional connectivity.

As regards social Europe a key concern is the extent to which regional policies in support of social cohesion are effective given the significance of the national context. Furthermore, it is evident that there is a real policy conflict identified in the relationship between the contradictory impacts of policies to promote

engagement in the knowledge society for the benefit of the local economy and society, and the impact that this policy has in enhancing socio-economic polarisation at the local level. In this relationship a clear decoupling of social cohesion benefits and economic advancement is evident.

Nonetheless, from the perspective of green Europe new and incremental approaches to service and infrastructure delivery, in partnership with local communities, are emerging, based on more widely distributed service networks and alternative technologies (solar or wind energy) which may be the most appropriate way to service these areas, and to provide a means of reconciling inherent conflicts between economic and social cohesion objectives. The development of urban-rural strategy planning calls for local and regional planning action, and the identification of the level of government which is best placed to manage the territory. A combination of regional and local planning approaches is typically required, with policy options specified accordingly.

1.6 Accessibility and affordability aspects

Specific public service obligations (PSO) by virtue of a general interest criterion, the central definitional criterion of the EU definition of SGI, encompass requirements for continuity, universal access, equal treatment, affordability, security, quality, and users' rights. Of particular importance in the SeGI project, *emphasising the spatial dimension of SGI*, are the closely interrelated concepts of *accessibility* and *affordability*, which will be made operational and addressed empirically to the extent that the current data situation allows.

Accessibility denotes the degree of ease and convenience by which the potential beneficiaries are able to obtain and utilise the available service. A basic precondition for accessibility is *availability*. This precondition should be understood as the extent to which the service exists in adequate supply where the potential beneficiaries are located.

Affordability is the monetary dimension of accessibility. The concept of affordability is relative and context-sensitive as well as being a normative term to be politically defined.

1.7 Scenarios

The future development of Services of General Interest in Europe in the year 2050 is analysed through explorative and normative scenarios. While demography and economy are acknowledged as the main drivers for SGI, the environment and climate change are regarded as secondary external factors. The possible futures for SGI in Europe are outlined in three explorative scenarios: (i) Competitive Europe; (ii) Social Europe and (iii) Green Europe.

The territorial future of Europe looks quite different when we consider the various scenario outcomes. In the scenario 'Competitive Europe' the development will be polarised between the existing densely populated regions, with many metropolitan areas, and the sparsely populated areas in the European periphery. Such a development will not enhance economic, social or territorial cohesion. A

different development is expected in the scenario 'Social Europe'. Investments and the maintenance of SGI by the government in disadvantaged regions will guarantee a certain minimum level of provision, which must be regarded as an improvement on the 'Competitive Europe' scenario. At the same time, a stable situation with regard to SGI in the metropolitan and densely populated regions can be foreseen in the 'Social Europe' scenario.

Table 1: SGI, types of territory and the three scenarios

Scenario \ Type of territory	Densely / urban	Sparsely / peripheral
'Competitive Europe'	 Dynamic/expanding	 Marginalised
'Social Europe'	 'status quo'	 Promoted
'Green Europe'	 Unsustainable	 Sustainable/contextual

In the 'Green Europe' scenario the provision and use of SGEI are seen as unsustainable. Energy use is not limited to transport only, but also to healthcare and education, which means that SSGI are also affected by the transformation towards a green and sustainable society. In sparsely and peripheral regions e.g. the provision of green energy is bigger than the usage; in densely populated areas the relation is the opposite. This is one reason for considering densely populated and urban areas as unsustainable and sparsely and peripheral regions as sustainable in the 'Green Europe' scenario.

In regards to the normative scenario, the Commission White Paper statement on the *provision of SGIs with high quality and affordability to everyone everywhere in Europe* is considered as a desirable future to be reached by 2050. This vision is translated into targets that should be accomplished in order to fulfil the multiple objectives. The present financial crisis has however deprived several countries of the possibility of even maintaining current provision levels in respect of Social Services of General Interest; several countries have experienced, and more countries will experience, significant cut-backs in the provision of Services of General Interest – not only in already disadvantaged regions, but in all regions. Without economic support many economically and demographically disadvantaged regions may become even more disadvantaged as a consequence of the budget cut-backs needed to manage the financial crisis. This development is sharply in contrast with the policy ambitions found in EUROPE 2020 and the Territorial Agenda. Without economic resources to implement these policies several countries cannot meet the ambitions in the policy documents and the achievement of the desired future described in the Commission White Paper on SGI is threatened.

2 Options for policy development

From a scientific point of view it is a non-starter to lump Social Services of General Interest together with Services of General Economic Interest and Other

Services of General Interest. It is, just to give an example, not possible to analyse the consumption of elderly care in the same way as the investment of nuclear power plants or highways or a 4G telecom system – at least not from a scientific point of view.

Public expenditure cuts triggered by the financial crisis will impact on issues concerning the quality and accessibility of existing SGI, and most likely on the future provision and maintenance of SGI. In this context SGI remain critically important, as the level of public service provision is a crucial factor in, for example, both sustaining rural settlements and in maintaining them as part of an integrated urban-rural strategy. Enforcing a broad distinction between public and private services understates the multiple ways in which effective public service provision can support a local economy. The ways in which public services can create economic opportunity should thus be embedded in a development strategy, and the development strategy should be embedded in the operation of those services.

Many economically and demographically disadvantaged regions face the risk of becoming even more disadvantaged as a consequence of the budget cut-backs needed to manage the financial crisis. This would violate the policy ambitions of economic, social and territorial cohesion as the gap between rich and poor regions can be expected to increase. Instead of emphasising common goals and underlining the importance of subsidiary and solidarity between the EU member states, the 7th Cohesion Report indicates other priorities: the regions should set their own goals and they should try to achieve these goals at their own pace (European Commission 2011b). This gives the impression that a relatively passive policy response has been adapted to the problems associated with the financing of SGI provision and the policy goals of economic, social and territorial cohesion. The policy challenge ahead is not only about solving the financial problems in some EU member countries. An even bigger challenge is to be found in the task of resuscitating the policy of economic, social and territorial cohesion. Although the financing issue may be solved, the political will to support subsidiary and solidarity between the EU member states may be more difficult to re-establish.

3 The need for further analysis

Three possible topics for further analysis and research have been identified. The first possible topic deals with data and indicators. The availability of NACE statistics on a regional level is simply insufficient in light of current identified requirements. As things currently stand, on the NUTS 2 level, data is already unavailable for reasons of confidentiality. At the NUTS2 level only data for 2008 and 2009 is currently available. Attempts must therefore be made to collect data from 2000 – otherwise it will be impossible to say anything about trends and developments. An additional issue in respect of data and indicators relates specifically to indicators dealing with aspects related to context, effects and to SGI. They are often confused resulting in context indicators describing SGI. The analysis undertaken in respect of TIA on SGI showed that this appears to be a problem particularly in respect of SSGI indicators.

A second possible topic for further analysis and research is very policy oriented. First of all, a coherent definition of SGI is needed, can SGI be characterised as 'social overhead capital' or something else? More attention must be paid to who is overseeing the implementation of the cohesion policies in the field of SGI and who is monitoring the implementation process. Until now, the Open Method of Coordination (OMC) has allowed for a very vague and heterogeneous implementation process across the implementing countries. In relation to this, the provision of SGI differs in polycentric and monocentric structures, in urban and rural areas etc., while different countries organise SGI at different geographical levels. Is there a 'best' way to organise SGI? To what extent do the various SGI contribute to regional development? Academic and administrative knowledge is actually relatively limited on these issues.

The final topic identified here as worthy of further research relates to the need to deepen our knowledge of the territorial aspects of Social Services of General Interest or, in wider terms, services related to the modern welfare state. The territorial aspects and impacts of Services of General Economic Interest are relatively simple to estimate and tools have been constructed to make the evaluation of the effects of SGEI even simpler (e.g. TIA). For the services related to the modern welfare state the territorial aspects and impacts are not so obvious and tools such as TIA are not particularly efficient. It is then a challenging and demanding task to analyse the territorial aspects and impacts of services related to the modern welfare state.

B. Main Report

1. Introduction

The term SGI is not found in the policy vocabulary of any EU Member State nor is it referred to by the general public. Rather, it mirrors a particular Community effort to establish a common language for specific policy purposes, disregarding the varying national traditions, terminologies, policies and practices, in a field that is outwith Community competences but nevertheless at the heart of public policy debate and closely linked to the controversy over the role of public authorities in a market economy.

Services of general interest touch on the central question of the role played by the public authorities in a market economy, in ensuring, on the one hand, the smooth functioning of the market and compliance with the 'rules of the game' by all actors and, on the other, safeguarding the general interest, in particular the satisfaction of citizens' essential needs and the preservation of public goods where the market fails. It is primarily for the competent national, regional and local authorities to define, organise, finance and monitor services of general interest.

Within this framework for action at the EU level public authorities in each Member State retain considerable freedom to define and enforce public service obligations and to organise the provision of SGI. This allows Member States to define policies that take into account specific national, regional or local circumstances. For example, remote or sparsely populated areas may have to be treated differently from metropolitan or densely populated areas.

The promotion of universal access concerns the right of individuals and businesses to access certain services viewed as essential and to impose obligations on service providers to ensure that they offer defined services in accordance with specified conditions, including complete territorial coverage and at an affordable price. Universal service access provides for a minimum set of rights and obligations, which as a general rule, can be further developed at the national level.

The EU has generally promoted 'controlled' liberalisation, i.e. the gradual opening-up of the market accompanied by measures to protect the general interest, in particular through the concept of universal service to guarantee access for everyone - whatever their economic, social or geographic situation - to a service of a specified quality at an affordable price. This has placed a particular focus on ensuring adequate standards for cross-border services that cannot be adequately regulated at the national level alone. As regards the long-term impact of the opening up to competition of SGI, the results of the case study analysis suggest little evidence that liberalisation has had a negative impact on overall performance, at least as far as affordability and the provision of universal service is concerned. Short-term problems can however be noted in the case study analysis for some services in some countries.

In recent years the Commission has increased its evaluation efforts in the area of SGI in part by developing an evaluation strategy. The evaluation of SGI is a complex task. A comprehensive evaluation must be multidisciplinary and multidimensional and include political, economic, social and environmental aspects, including externalities. It should also take account of the interests and views of all interested parties. It is important to know what users and consumers, including vulnerable and marginalised groups, social partners and other parties consider “a good performance” for these services and their expectations for the future.

A key requirement for the effective implementation of SGI is a full understanding of the nature of provision at the member state level, the ways in which the provision of SGI is territorially differentiated across the EU, the nature of member states’ policy and action to secure the objectives for delivery of SGI, the evident gaps in the information base to support the implementation of SGI, and the means by which these gaps can be addressed. All of these issues form key objectives in respect of this project.

The prime objective of this project is to address the need to support policy formulation, at all levels of governance and in respect of all types of territories, for the effective delivery of SGI throughout Europe. The project brief identifies the gaps that exist in the territorial evidence to support the implementation, monitoring and evaluation of territorial policy measures in respect of SGI. As such, the role of this project is to provide territorial evidence to fill these gaps.

The SeGI project is expected to answer three policy-oriented questions (P) and four research-oriented questions (R):

P1 How should the defined (groupings of) services of general interest be addressed by territorial development and cohesion policies?

P2 What is the territorial distribution of the services of general interest throughout the European territory and how can this be measured?

P3 How and to what extent do the various levels of services of general interest contribute to global competitiveness, economic development and job growth in cities, urban agglomerations and other territories?

R1 How can the existing definition and classifications of services of general interest be applied from a territorial cohesion and development point of view?

R2 What are good indicators to measure the level of services of general interest?

R3 What is the current territorial situation of services of general interest throughout the European territory?

R4 What territorial development potential and constraints do different types of territories in Europe have?

The project and its conclusions and recommendations must be set in the context of the current political debates in which SGI - services of general interest - will be developed. These debates concern the economic crisis, demographic changes and responses to climate change, all of which are fundamental and long-term drivers

of change at the European and local levels. The policy analysis will be grounded on evidence through data collection and aggregation, systematic, comparative and in-depth analyses in order to generate evidence on the state of and perspectives for SGI in Europe. In this light, additional project objectives include the need to create relevant datasets, indicators, typologies and scenarios in respect of SGI. The research team's preliminary findings were presented in the Interim Report.

The transnational project group gratefully acknowledge the comments, suggestions and support provided by the ESPON Coordination Unit in general, and particularly from Ms Ann-Gritt Neuse and Mr Jozsef Szarka, as well as the comments from and the stimulating discussions held with the Scientific Sounding Board members Professor Cem Ertur and Associate Professor Lauri Frank.

2. A Conceptual Framework for SGI

A clear definition of SGI is needed for this project, in conceptual as well as operational terms. Such a definition must be related closely to the EU policy process and its emerging basic policy concepts. It is however also necessary to take a few steps beyond the general EU political/functional criteria in order to establish a definition which could serve as a practical analytical tool. It goes without saying that such a definition should have no explicitly political or legal connotations.

The European Commission (2011a) states that “the debate on services of general interest suffers from a lack of clarity on terminology. The concepts are used interchangeably and inaccurately. Stakeholders have asked the Commission to provide clarity. In doing so, however, the Commission is bound by EU primary law and the Court's case-law. Moreover, the concepts are dynamic and evolve.” The communication offers no further clarity and repeats the general definition stated in previous policy documents.

2.1 The conceptual point of departure

The term “Services of General Interest” (SGI) has widely come to be regarded as covering the arrangements, tasks and functions assumed to be of essential importance to citizen welfare, quality of life and participation, and to the general functioning of societies at a level of development and quality corresponding to Community visions and goals. The term usually refers to general interest *functions, objectives* and *missions*, not to particular activities, sectors/industries, modes of provision or types of provider etc.

The existence of a more universal or collective interest which is shared by – and eventually benefits – all members of society is implied. The assumed essential importance of SGI poses an obligation on public authorities to ensure their provision according to certain standards in respect of quality, availability, accessibility and affordability – in defense of “general interest”. Some commonly stated *examples* of SGI are arrangements for safety and justice, the provision of water supply, postal services, the supply of gas and electricity, transport functions, education, housing, and social and health services.

The term SGI was coined within the EU policy process and does not reflect national terminologies or the various conceptual worlds of scientific literature. The Commission acknowledges that “In the Member States different terms and definitions are used in the context of “SGI”, thus reflecting different historical, economic, cultural and political developments” (European Commission 2003). The term SGI is closely related to – and sometimes overlaps – what is or has been regarded as public goods or social overhead capital.

Consequently, SGI is a concept with a notable lack of scientific precision, no “official” definition, multiple political aspects and implications, and rather indistinct paths of evolution. One potential path is from SGI viewed in relation to possible national exceptions to EU competition policy, to more pro-actively

assigning SGI EU-wide importance in respect of enhancing quality of life, overcoming social exclusion, ensuring Fundamental Rights, and achieving social and economic cohesion (van der Walle 2008). The concept however offers little guidance in the search for an operational approach to the empirical study of territorial patterns and implications.

2.2 Relationship to the political concept of SGI

The key defining criterion of SGI is the concept of “general interest”, which is in EU terminology somewhat circularly defined as services/functions subjected to “specific public service obligations” by the proper national authorities in order to ensure their universal provision and accessibility (irrespective of market-relevant properties of assumed target populations, like individual resources/purchasing power and territorial location), i.e. even if the market fails to provide them. Among the 31 countries of the “ESPON Space” policies and practices vary substantially with regard to which services are classed in this way, how they are “ranked” according to different criteria of degree of “general interest”, how public policies/intervention is justified and implemented, and to what degree policies and practices in this respect are subject to political controversy.

The EU-driven political and legal processes of Europeanisation in the sphere of SGI, especially following the Single Act of 1986 starting with the network sectors of communication, energy and transport, enhanced the general trend towards privatisation, contracting-out and outsourcing across the range of services traditionally regarded as a public responsibility and/or being subject to specific public service obligations. Lately some of the basic assumptions behind the dominant trends in how services are regulated, organised, provided and financed have been contested in several studies. There is also increasing evidence of an emerging trend in the opposite direction, particularly regarding the municipal sector. Several countries have been shown to have experienced an apparent trend towards the *re-municipalisation* of certain basic services/SGI.

A pragmatic operational approach for the sake of empirical/analytical feasibility, as implied above, does not exclude the important discussion of political and legal connotations which are at the centre of EU policy and legal processes related to SGI. Neither does it exclude a critical scrutiny of the concept of “general interest” (and related concepts like “common good”, “public good”, “public interest”, “universal interest”, “essential importance” etc.) according to different political as well as scientific perspectives. Moreover, the SeGI operational definition of SGI should not be taken as the project’s proposed content and boundaries of SGI in relation to EU policies, Community legislation or the general principles of the Community treaties.

2.3 Defining Services of General Interest

The EU general definition of SGI (“*non-market as well as market services which the public authorities class as being of general interest and subject to specific public service obligations*”) does not offer even a tentative definition of “services” or point to any specific/single class of phenomena or activities. This general

definition of SGI used by the EU basically **includes everything**. The Green Paper identifies three rough categories of SGI according to “the need and intensity of Community action and the role of the Member States” (European Commission 2003): **(1) Services of general economic interest (SGEI) provided by large network industries** (e.g. telecommunications/ICT, postal services, electricity, gas, transport); **(2) Other services of general economic interest** (e.g. waste management, water supply, public service broadcasting); and **(3) Non-economic services and services without effect on trade** (a very heterogeneous range of services, not or to a lesser degree subject to specific Community rules, competition and State Aid rules etc., largely associated with the functions of modern welfare states).

More recent documents tend to be more comprehensive and even include labour market services, education, healthcare, childcare, social care, culture and (social) housing. This group of services is called *Social Services of General Interest*. European social policies and their underlying studies use different classifications. There is also an overlap between *Social Services of General Interest* and *Non-economic services without any effect on trade* (European Commission 2006).

This project defines **Services of General Interest** as Social Services of General Interest and Services of General Economic Interest. **Social Services of General Interest** are defined as labour market services, education, healthcare, childcare, social care, (social) housing and social assistance services; **Services of General Economic Interest** contains gas, electricity, postal services, transport, ICT and electronic communications as well as water and waste management. Other Services of General Economic Interest is considered a sub-category of Services of General Interest and not an independent category.

2.4 How to operationalise the concept

Albeit narrowed down in this manner these categories, social services of general interest, services of general economic interest and other services of general interest, remain quite heterogeneous, and, as such, we still need to decide what the units of analysis should be here. In order to operationalise our definition of SGI in this project a functional tool is required. Such a tool exists in the NACE rev 2 classifications of economic activities.

The inclusion of certain NACE classes is certainly subject to discussion. In “border cases” the respective class is normally given the benefit of the doubt. However, the list of included NACE classes encompasses the complete range of economic activities/units of “service” providers normally associated with the concept of SGI and closely related concepts in accordance with a fair perception of the present European landscape of policies and practices.¹ The use of NACE provides a common frame of reference for the statistical analysis in the project and ensures a reasonable degree of comparability. Even if the focus is on classes of economic activity (the SGI providers) NACE also offers a common framework for the classification and comparison of the functional and other aspects of SGI.

¹ The limitations related to the use of NACE Rev 2 are discussed in the Interim Report, Annex 1.

2.5 Minimum or basic levels in the provision of SGI

The concept of a *basic (or minimum) level of services* in the SGI context should not be confused with the concept of basic (low order) services as opposed to more specialised (high order) services, associated with Central Place Theory originating from Christaller (1933). His basic concepts are the *threshold* and *range* of goods and services; the former denoting the minimum population required for the provision of specific goods and services, the latter denoting the average maximum distance that people are willing to travel in order to acquire these goods and services.

The concept of a basic/minimum level of SGI may relate to the range of services as well as to the individual type of service, referring to specified requirements of universal access. The perception of what is a basic/minimum level of SGI differs among countries, regions, types of users/beneficiaries and social groups. *Similar to the definition of SGI the answer to the question of what a basic level of SGI would be, will primarily depend on ideological preferences and moral values.* Different theoretical and philosophical positions imply varying principles and criteria for determining a minimum level of SGI; like theories of “distributive or social justice”, “communitarianism”, “liberalism”, “utilitarianism”, etc.

Additionally, many SGI are not only of importance to the immediate beneficiary, but their presence and operations may be important in a wider societal context and thereby also affect other people and businesses/activities. In certain local communities and regions there are not only population thresholds for supplying certain services, but also thresholds defining a tolerance limit for their sustainability as communities. When even local communities and regions are regarded as SGI targets/beneficiaries, a wider and partly different conceptualisation of what constitutes a ‘basic level’ of services is required, based on a reasoning which includes a varied set of effects/functions (including ‘externalities’) and concepts like thresholds, ‘critical mass’, and vulnerability applied at the local community and regional level.

What is to be regarded as an appropriate operational definition of a basic or minimum level of SGI cannot be determined *a priori* on a general and purely theoretical basis, but should be regarded as a research question to be empirically illuminated, with the specific territorial context taken into consideration.

2.6 Business, individuals and SGI

Most SGI have multiple functions and beneficiaries related to the differing aspects of their products and modes of provision. In a territorial cohesion and development context the analysis of SGI should therefore be separated into the effects on different groups of direct/intended beneficiaries (individuals or households, businesses/firms and regions/local communities), and various indirect effects on economic activity and territorial development. SGI, as defined in SeGI, in most countries contribute between 25 and 35 percent of national GDP and between 25 and 40 percent of total national employment (CEEP 2012). The ‘SGI sector’ not only supplies important factors of production like infrastructure,

distribution services, information and circulation functions, education/human capital, labour market services, housing, health and other reproductive functions, but also represents directly and indirectly (through employees' wages/spending) considerable local and regional demand effects. The 'SGI sector' is also a key investor in the economy. Moreover, at the local and regional level SGI enhances business environments i.e. by ensuring a critical mass of highly qualified persons is available, as well as wider bases for production clusters and more robust innovation systems.

2.7 Accessibility and affordability

A basic precondition for accessibility is *availability*. Does the service exist in adequate supply where the potential beneficiaries (people, businesses/firms, local communities/regions) are located? In relation to SeGI, availability is mainly related to the presence of SGI providers (firms) within NACE Rev 2 classes and preferably some proxy measure of 'adequacy' (like employment, capacity). For some categories of SGI the location of provider units is less relevant, such as for example in relation to certain network services (Internet providers/telecommunication, electricity etc.) and thus other measures of availability are required.

Accessibility denotes the degree of ease and convenience (absence of different barriers; spatial, temporal, monetary, cultural, others) by which the potential beneficiaries are able to obtain and utilise the available service. An important dimension of accessibility is the product of transport and transport policies/planning (networks, stations, modes, frequency, speed, pricing, universal design etc). It is worth noting that all the above mentioned criteria must be fulfilled, however, for a service to be judged accessible. On the other hand, the criteria and definition of an acceptable degree of accessibility differ among categories and types of SGI as well as among different categories of potential beneficiaries.

Affordability is the monetary dimension of accessibility, including aspects such as out-of-pocket expenses for potential beneficiaries/users/consumers and availability of user compensation (including eligibility rules and other potential barriers) of expenses from other sources (public, private). Affordability may also relate to the financing of SGI (supply side); i.e. the adequacy of direct funding to the service provider by the public authorities. The two aspects are interrelated and in SeGI the former aspect has priority. A popular definition of 'affordability' is when one is able to pay the price without risking financial difficulties. The inherent problem is how to decide for different socio-economic groups and other potential beneficiaries (businesses, firms) exactly where this line should be drawn, implying the need to decide a benchmark for which there is no objective definition. Affordability is thus relative and context-sensitive and is then, basically, a normative term to be politically defined.

3. Drivers, Constraints and Challenges

The Drivers can be defined as factors influencing the amount and quality of SGI that are provided in the regions. There are several drivers, each of which can change over time. Changes in these drivers contribute to creating challenges and constraints in providing the services. Constraints in this sense must also be interpreted as absolute (physical) constraints in producing the services and are in this way stronger than challenges. The challenges might be solved, given the application of the right tools.

3.1. Drivers

The SGI drivers operate at two different levels: one abstract and theoretical level and one operational level. They will be discussed separately.

3.1.1 Drivers at an abstract level

There are a number of drivers behind the provision of SGI. By drivers here we mean factors that determine the amount and quality of SGI that are provided in each region. These factors can be divided into five main groups: (1) Demographic factors; (2) Economic factors; (3) Political factors; (4) Social factors; and (5) Climate factors.

Many SGI are provided for the *population*. Therefore, demographic factors are important drivers behind the provision of SGI. In general, the population can be divided crudely into two main groups; the users of SGI, and the non-SGI-users.

The demand for different types of SGI is a function of the cohort development in a country, region and municipality from the cradle to the grave and can be foreseen better than e.g. economic development especially in the short term. The most disturbing factors are associated with short term variations in immigration and are often a function of non-demographic factors outside the control of the immigration country. Demographic changes have a significant economic impact nationally as well as regionally and locally and differ over time as a consequence of cohort sizes and structures. This will change the demand for SGI, and thus the provision of SGI. Over- or under-supply of SGI can be seen as the consequences of rigidities in the economic and political system. Demographic short-term changes and long-term development are also dependent on economic fluctuations and economic trends and attitudes but also on changes in social and family policies. This is valid both for natural population changes and migratory movements. Immigration and in-migration have, in general, a positive impact on the age distribution as immigrants or in-migrants are often in the active ages while the contrary is true concerning emigration or out-migration regions. On the other hand, immigration generally increases the pressure on SGI in the sense that immigrants in many countries are often over-represented among those dependent on public allowances.

The economy is also both a short- and a long-term a driver in respect of SGI as provision is dependent on the economic capacity of the service provider and the

economic surplus which can thus be transferred to SGI. The income distribution is of great importance as it has an impact on which kinds of SGI will be demanded with regard to quality as well as quantity. Short term changes in the supply and demand of SGI are also dependent on short term economic fluctuations as a consequence of variations in the economic surplus and the income distribution. The long term development of SGI is a function of long-term economic development in that it essentially follows the primary economic trends. Thus time will be available to correct imbalances between demand and supply as a consequence of the long-time perspective.

Several economic factors influence the provision of SGI though it is often the case that they are not easy to distinguish from political factors. If we assume that a set of SGI (of certain qualities and amounts) is to be provided for the citizens and businesses of a nation, no one would disagree that this is a political choice. The economic question is how these services could be provided most efficiently and thus is one of resource allocation. Research shows that using the resource allocation perspective, there is no difference between efficiency in the private or public production of SGI (Hartmann 2011). If the conditions for production are the same, private production of SGI is relatively more expensive than public as the private producers want returns on their investments.

This brings us to financial issues. Whether the services are privately produced or not, public provision of services is often criticised for not taking into consideration the effect paying a price for a service has on demand for this service. If the users have to pay directly, they will prioritise between the SGI and other goods and services. If the price is zero, demand is, many claim, indefinite. To deal with this, public provision is often combined with a certain (in many cases relatively small) price for the user. User payment contributes to restricting demand, and at the same time it reduces pressure on the tax system. Generally, the public would to a greater degree accept user payment if the income level is high. Economic growth, where especially the middle classes' income increases, therefore leads to a reduction in the legitimacy of the public provision of welfare services.

There are many issues connected with the provision and the financing of services on the local and regional levels which represent a traditional 'conflict' within economics, a debate which is encapsulated in the conflict between equity and efficiency. Given that decentralising the responsibility for providing certain services to local and regional authorities is often represented as efficient and democratic, there is an interesting discussion to be had here.

The central government can reduce these differences by creating rules and regulations (i.e. minimum standards) within which the SGI are to be provided. One might argue that this is in conflict with local and regional priorities and therefore democracy issues. At the same time, such regulations are national and therefore represent national priorities. Another way of reducing regional differences is to reduce the local tax base's influence on local public income. This is done by re-distributing income between localities and regions, for instance using a so-called municipal income system. In this case, the poorer regions will

be allocated additional financing and it will become easier for them to finance SGI within the boundaries set by national standards. The central government can also add money to the re-distribution system, if it wants to expand the provision of local and/or regional SGI. This neatly illustrates the political and social dimensions inherent in the driving forces behind SGI.

Climate and environmental aspects can also function as SGI drivers. Extreme climate, climate change and environmental damage/preservation require new and other types of SGI. Spring floods, temperatures of +40C, -40C, heavy snow up to two metres in depth or summer drought all demand completely different investments in SGEI.

3.1.2 Drivers at an operational level

The drivers of SGI can also be viewed in terms of provision as well as from the traditional user-perspective. The providers can be public, private, public-private partnerships, non-profit organisations; the users can be both individuals and enterprises. The provision of services is mainly determined by three factors: the existing institutions in the EU Member State, the ideology regarding the provision of SGI in the EU member state and the macro economic performance of the EU member state. The macro economic performance is of importance for the production of public goods; regardless of whether the SGI is provided by private or public providers economic booms or busts will affect service provision. The ideology of provision is important. In some EU member states e.g. childcare is an issue for the family, while in others it is provided by the state via government subsidies. Elderly care is similar in this case; some countries have extensive labour market services, while others have basically none at all. This reflects the ideology of the provision of SGI in the EU member states. In accordance with ideology, matching institutions have emerged to enhance the ideologically desired provision of SGI.

The usage of SGI is determined by three major factors: demography, income distribution and various lifestyle aspects. Users of childcare have one very marked trait – they are children and parents. The same marked trait is found among the users of elderly care – they are elderly. In some EU member states the unemployed also show marked demographic traits: +55 years, young adults, women or immigrants. To what extent a person uses SGI is related to the income distribution both from an individual and a geographical perspective.

The tax base in the richer regions is larger than that in the poorer ones. This implies that the richer regions have more money to spend on SGI, and *vice versa*. This directly and negatively affects the supply of SGI in the poorer regions. At the same time the richer regions may even seek to reduce their tax claim and privatise some SGI, as income levels are high and the public is inclined to pay more themselves as income grows. These two factors endow richer regions with significant benefits.

The income distribution is of critical importance even on the individual operational level as persons with low incomes often simply cannot afford to travel (i.e. use

some types of transport), buy a smart phone, send their children to a school with tuition fees, buy health insurance etc. The use of SGI can, however, in part be stimulated by subsidised provision of these services to hamper the negative effects of a skewed income distribution. Finally, lifestyle aspects also influence the usage of SGI, for instance in respect of the choice over a desired pedagogic approach at school, medical treatment or environmental concern.

There is a difference in the usage of SIG between individuals and business. Both can use SGEI, but only individuals use SSGI. A company going to the doctor, living in an elderly care home or needing social housing would be quite unique; while individuals **working in** the both the private or the public sectors need to use SSGI. The cost of using the SSGI is paid for by the user or by tax subsidies or subventions form the employer. Or through a mix of all three.

3.1.3 A synthesis of SGI drivers

The reasoning outlined above can be synthesised into the following model (see figure below). The different size of the arrows should be interpreted as basic impact (thick) and more unforeseen but 'disturbing' or 'correcting' impact (thin).

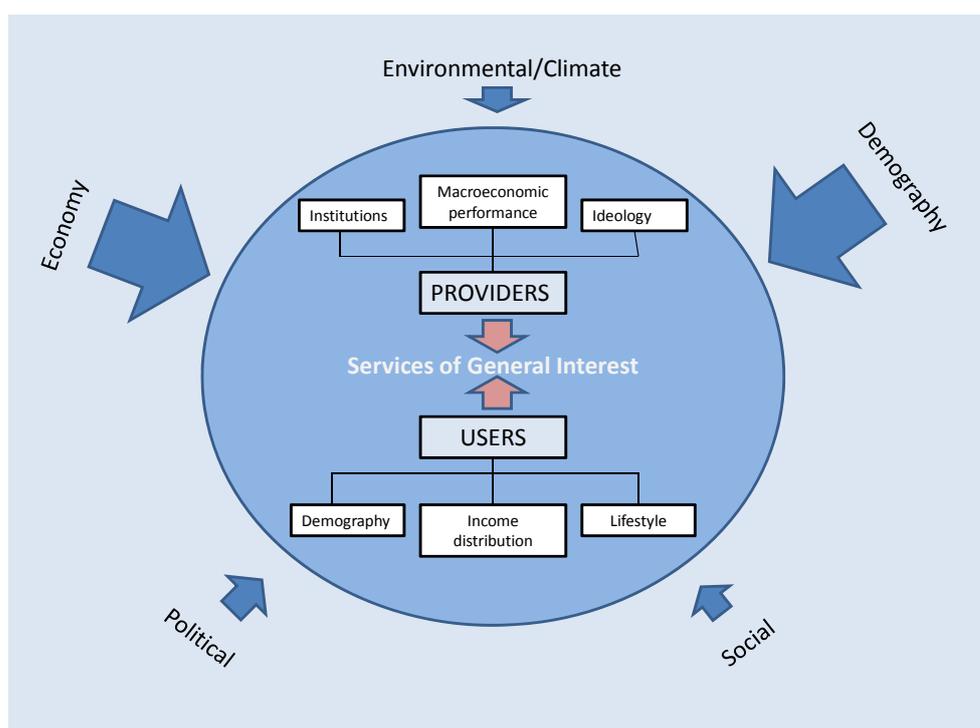


Diagram 1: The Drivers of SGI

3.2 Constraints

Islands, mountainous and outermost regions often face severe physical constraints which affect both the providers and the users of SGI: long distances, topographic (mountains) and geographical isolation (islands) to mention but a few examples. Bridges and tunnels can mitigate some of the problems, but not all.

Accessibility in terms of distance is usually a key issue for some specific types of territory. Rural, peripheral, insular and mountainous regions usually struggle with long distances in the provision of SGI, which also makes the provision of these SGI more expensive per produced unit. The income distribution within and between regions will then decide how much of the SGI provided the population can actually afford to use. Without state subsidies many SGI will simply have to close down since they are too expensive to use.

One consequence of the current economic crisis is that several member states no longer have the required resources to uphold the provision of SGI. Cut-backs in government expenditures have resulted in the reduced provision of, especially, SSGI. The income distribution is here of the utmost importance as different population groups have different levels of ability to provide for themselves during economic recessions. Another result of the crisis relates to the question of who is going to finance the provision of these services in the financially weak member states when their national and regional governments are out of resources. If the national governments cannot uphold and guarantee a minimum provision of Social Services of General Interest, who can? The EU *could* – through the Structural Fund, European Regional Development Fund or the European Social Fund – play an important role in upholding SGI in economically and demographically disadvantaged regions. The challenge however remains – who is willing to pay for this?

The thresholds of accessibility and affordability are set by the standards of the individual EU member state with the thresholds on the minimum provision of SGI thus reflecting national ideology, institutions and macro economic performance. These thresholds also reflect the usage of SGI with regard to demographic structure, income distribution and consumer behaviour (lifestyle aspects). By raising or lowering the threshold for a SGI the provision of a SGI can change – this is called Ringen's Paradox (Ringen 1987).

3.3 Challenges

In a simplified way the constraints can be said to create and trigger the challenges. Many economically and demographically disadvantaged regions face the risk of becoming even more disadvantaged as a consequence of the budget cuts needed to manage the financial crisis. This violates the policy ambitions of economic, social and territorial cohesion as the gap between rich and poor regions can be expected to increase at least in the short term.

Instead of emphasising common goals and underlining the importance of subsidiarity and solidarity between the EU member states, the 7th Cohesion Report indicates another priority: the regions should set their own goals and they should try to achieve these goals at their own pace. This gives the impression of a relatively passive policy response to the problems with financing the provision of SGI and to the policy goals of economic, social and territorial cohesion. Even worse, it signals a retreat by the EU as the agenda setting actor; individual member states will have to handle the provision of SGI by themselves.

The policy challenge ahead then is not only about solving the acute financial problems faced by some EU member countries. An even bigger challenge is to be found in the need to resuscitate the policy of economic, social and territorial cohesion. Although the financing issue may be solved, the political will to promote subsidiarity and solidarity between the EU members may be more difficult to re-establish. An even greater challenge however is the need to solve the unequal distribution of SGI within and between different countries.

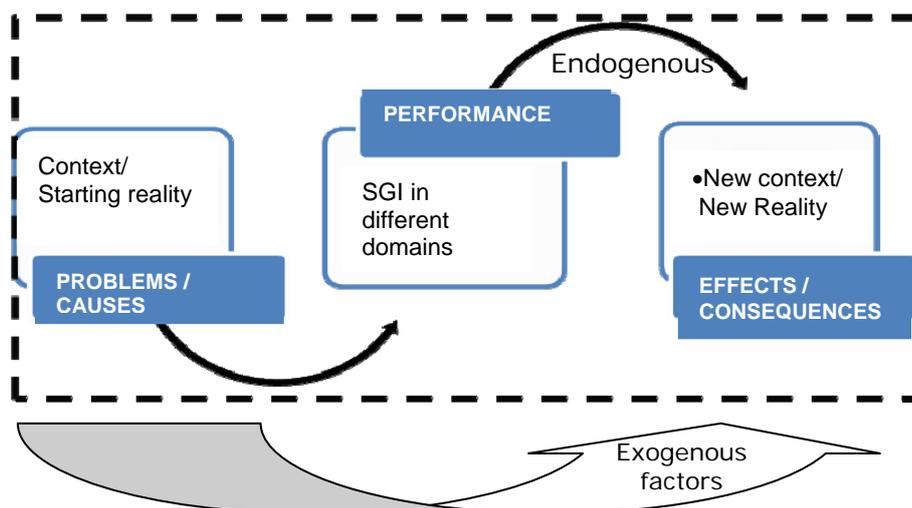
4. An Assessment of Data, Indicators and Key Concepts

In the SeGI project, one of the main objectives is centred on the discussion of what SGI indicators can be used. This objective runs in parallel with the need to have a picture of EU regions related to SGI provision and with the need to improve the discussion of how SGI can contribute to the goals of cohesion policy. According to the concepts and the framework outlined above, a division into six domains was assumed to support the data and indicators assessment: infrastructure; ICT telecommunication; labour market; education; care services; and social housing.

4.1 Indicators and concepts

Regional analysis and policy-making are complex processes that demand conceptual discussion and empirical experiences, supported in concrete and coherent information. This information is generally represented by quantitative and qualitative indicators. Indicators can be classified in relation to their role in the planning process. On the one hand, indicators are measures connected to contextual evolution, on the other, there are indicators linked to sectorial or territorial policies, plans and programmes; and finally, there are indicators that should be linked to the effects or results of policy implementation. In this process, cause-effect processes need to be explored by the way they highlight the triple role of the indicators.

Figure 1: Cause-effect relations in the contextual changes of territories



In addition to criteria related to the role of the planning process, other criteria should be considered in the indicators selection and analysis, in the way, it is possible to directly address the issues raised by the Green and White papers. The currently envisaged methodology will be supported by three levels of criteria:

1. A classification of indicators according to their **role** in the characterisation and evaluation of SGI. In this context, we are going to explore 3 types of

- indicators: (a) SGI indicators - organised in relation to the proposed 6 dimensions; (b) Context indicators – dedicated to the characterisation of territories and sectors, complementary to SGI, including demographic, economic, social and other indicators; (c) Effect indicators - used to measure the direct results of SGI services. They will be considered as evaluation indicators.
2. The need to classify SGI indicators in order to answer directly the availability, accessibility and affordability **principles**;
 3. A discussion about the **relevance** of each indicator, what it means, verifying how adequate and how adjustable indicators are in measuring regional differentiation and to understand the effects of SGI in territorial and social terms, highlighting their limitations to show the phenomena at different scales.

In this context, in addition to the inventory of available statistical information, a critical assessment supported by a literature review needs to be included in the discussion, primarily in relation to the relevance justification.

4.2 Indicator measurement and insufficiency

4.2.1 SGI indicators' availability and relevance

The inventory of available indicators in Eurostat and other sources gave us access to a potentially large but rather unfocused information source. It is however possible to find indicators that can be linked to the previously defined 6 dimensions of SGI, in 3 perspectives:

- some indicators are associated with employment in SGI services (number of employees in the SGI sectors, e.g. % of employment in the health sector);
- others are related to the availability of infrastructure, equipment or services (in the number of units or equipments, e.g. number of beds by 100000 inhabitants);
- and others, linked to the quality of services (in the opinion about the service).

Nevertheless, the relevance and utility of the indicators for our purpose depends on data availability. The large number of indicators can be shortened when information availability and the scale of analysis are considered. There are a lot of interesting indicators but they are generally only available at NUTS 0 or I, thus, we cannot consider them as being suitable to analyse regional differentiation or to understand the effect of these indicators in territorial and social cohesion. This highlights a particular problem related to expenses and receipts in different SGI domains. In this context however highly relevant information is only available at the national level (see annex 8, table 8 and appendix 2 to annex 8).

This aspect should be taken into account in the comparative analyses. The SGI demands are quite different at municipal or parish level, regional or national level. For example, at the parish level, much sensitivity exists to pre-school or

elderly equipments proximity. This means that the measure of the availability of services depends on differing population needs.

As noted previously, the availability and the quality of SGI provision can be affected by several drivers: demographic, economic, political, social and climate.

The last aspect highlights the existence of difficult to measure criteria like availability, accessibility and affordability and translate it in indicators. A service could be available but not accessible for geographical reasons, or for non-geographical reasons (relating to economic, social or cultural issues). Affordability also could be conditioned in two ways: from the demand side; or from the offer side, namely, linked to economic efficiency criteria.

Another aspect that we must take in account is the disparity between the numbers of indicators available for standards and characteristics of SGI provision: the lack of indicators in respect of social housing or ICT is evidence of this disparity across issues. The available information of SGI indicators related to the labour market is also scarce. The domains where most information is available include infrastructure and equipment, namely infrastructures of accessibility by road, motorway and train, as well as those covering the environment, such as water and waste management indicators.

4.2.2 The role of context indicators

The interpretation of SGI indicators in regional disparities in the EU context represents a major challenge. Many factors, including the already highlighted drivers, should be taken into account in this discussion:

- distinct politico-administrative organisation models of countries reflected in more centralised or decentralised systems of governance. The organisation of systems between central and local, between central-regional or central-regional-local powers have a significant impact on process relating to the provision of services. This is particularly evident in respect of social SGI such as the education or health sectors, which perform rather differently in the countries like Portugal, France or Germany;
- the relationship between SGI provision and territory, which allows us to discuss territorial dynamics and characteristics (the level of urbanisation, the demographic structure linked to the ageing process, infrastructure development and other regional development signs etc).

The demographic and urban structure determines the extent of SGI development (affecting demand and efficiency) but at the same time, the adjustment of SGI to the regions is also valid. Ageing areas tend to have fewer services, but a reduced service level does not help in attracting new population. The same can be said of densely urbanised areas, they tend to have more services, but these services can often be heavily oversubscribed and thus of lesser quality or effectiveness.

This highlights the importance of integrating contextual indicators into the analysis of SGI indicators but also of considering the drivers that determine the

provision of the services as well as a range of operational factors that affect both providers and users. In the context of the current study a range of contextual indicators were selected (see annex 8, table 7).

4.2.3 The role of indicators in effect evaluations

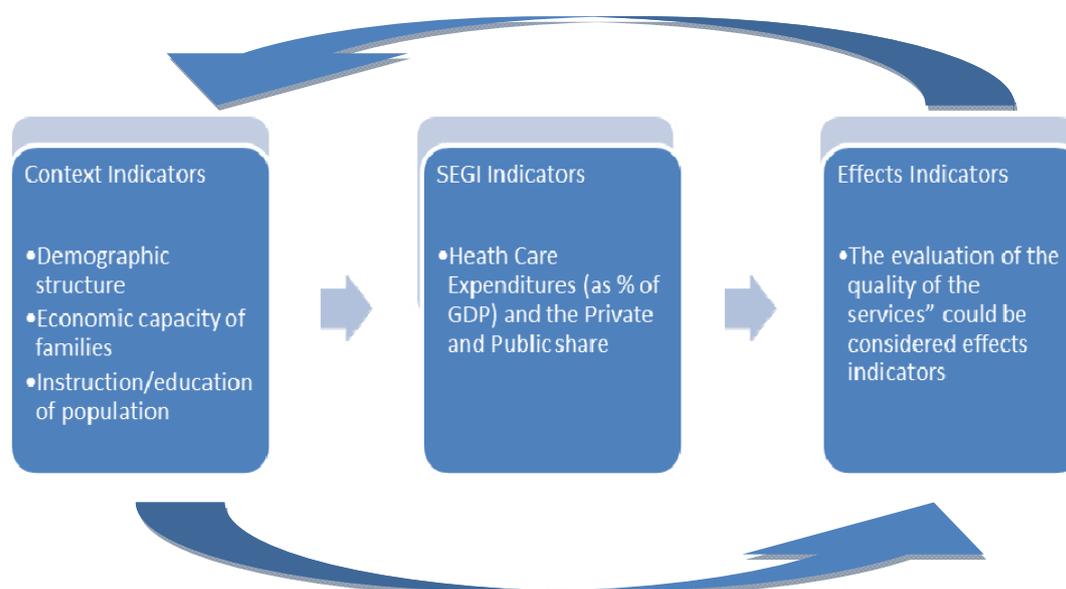
The third dimension of this indicator approach is mainly related to measuring the effects of SGI. Correctly characterising these services, as well as providing a trenchant analysis and an evaluation of their effects are all essential to understanding the role and the meaning of the indicators used. Before embarking upon the analysis process we will firstly highlight the primary cause-effect relation that has to be taken into account.

In the Green Paper on Services of General Interest (Communication of Commission, 2003), as well in the following documents (e.g. White Paper, CCE, 2004), the evaluation of services is one of the key elements under consideration. As noted in CCE (2003), “the evaluation of services of general interest is important because of the significance of these services for the economy as a whole and for everyone’s quality life” (pp. 28).

This evaluation has 3 prongs: (i) “The regular evaluations of network industries that have been liberalised” (sectional evaluation); (ii) Cross-sectional (horizontal evaluation); (iii) Consumer satisfaction surveys;

In relation to sectors and horizontal evaluations, the process of analysis and the availability of data is not systematic, thus making it impossible to integrate into an indicator system. No available data exists on sectional and horizontal issues by region or for a homogeneous period, which invalidates their inclusion in the indicator analysis. The last prong, as suggested in CCE (2003), is associated with Euro barometer opinion and qualitative surveys, where some data and indicators could perhaps be found (see annex 8, table 9).

Figure 2: Cause-effect relations in SGI



Taking the example of the health care service domain, the indicator “healthcare expenditures as a % of GDP” corresponds to an SGI indicator while the effect can be appraised by an indicator for the evaluation of access to available health services. Another common type of indicator used here is those that allow us to evaluate the quality of the services, for example, the satisfaction level of service users, since they correspond to the results of investment and the installed sector infrastructure.

In some cases it is not so easy to establish the indicator’s role. They can be very complex; SGI indicators can also be effects indicators at one and the same time. For example, the “share of households with broadband access” is a SGI indicator but at the same time it is also an effect indicator which reflects family income, as well as the cost of the service or national policies.

4.2.4 Indicators for multi-criteria and multi-sectoral analyses

As noted previously, the indicator’s relevance in respect of measuring SGI services, or of charting the particular SGI’s effect on social and territorial cohesion, is often not clear, especially because this project deals with heterogeneous types of services, some particularly linked to the economy, others, mainly related to social and population services. Moreover, in addition to the classification in the economic or social areas, there is also a need to measure and analyse territorial effects and territorial cohesion.

In this context, in parallel with the statistical indicators overview, empirical studies a literature review and a review of the main political documents were also undertaken. This analysis provided access to a rather more qualitative argument in respect of the evaluation of indicators. In order to undertake the literature review a database of scientific papers was created where SGI were analysed. The main objective was to understand which indicators are commonly used by the scientific community, but also to collect useful information for the subsequent SGI analysis. The literature review was guided by a template that helped us to gather this information by raising a number of concrete issues.

From this process emerges a parallel list of indicators commonly used to study each domain of SGI. The comparison of the two lists (statistical and literature review) gives us a more accurate picture of what indicators could be seen as most useful in understanding and measuring the potential regional differentiation and SGI’s influence in the context of territorial and social cohesion. In addition, we also found important information about data availability and their sources (see annex 8, table 1).

- The methodological process of indicator checks and literature reviews generated important information about the different *problems* highlighted and the different kinds of perspectives used to analyse the various domains.
- Overviews of the results enable us to verify that different approaches can often be quite interesting. This overview provided us with a better understanding of SGI.

One of the main distinctions of SGI from the others services is the obligation that it is provided even in places where demand is not sufficient to otherwise justify efficient service provision. The public authorities must also provide the SGI within certain parameters of quality, availability, accessibility and affordability, in order to be fully accessed by everyone.

In this context, multi-sectorial and multi-scale criteria should be taken in account to interpret the regional performance of SGI. Bauby *et al.* (2003), classify indicators according to 6 criteria: 'Universality and General Accessibility'; 'Affordability and Price Equalisation'; 'Social Accessibility'; 'Territorial Accessibility'; 'Continuity and Quality Of Provision'; and 'Spatial Cohesion and Development' (see annex 8, table 4).

Despite the richness of this multi-sectorial and multi-scale criterion, the lack of data diminishes its effective application in relation to the regional analysis. Nevertheless, it is considered in the case study analysis.

4.3 The meaning of indicators

Indicators are a very useful tool in understanding the real problems of SGI provision across the EU regions, but the wrong interpretations of reality they deliver can often be erroneous. Two examples are presented below showing the importance of correctly understanding the meaning of the indicators.

The first example is concerning the provision of health care services. One of the most commonly used indicators to analyse these services is the 'Number of hospital beds'. Based on this indicator it is possible to understand the capacity of the system in severe situations, but it is not advised to try to explain European regional differentiations on the basis of healthcare services. The number of hospital beds varies simply because of the varying levels of government investment, but also for other reasons such as the different strategies and health care policies of the countries concerned. The profile of investments adopted in Sweden is just one such example. Investment in high-tech equipment allows the number of hospital recovery days to be drastically reduced thus precipitating a decrease in the number of hospital beds.

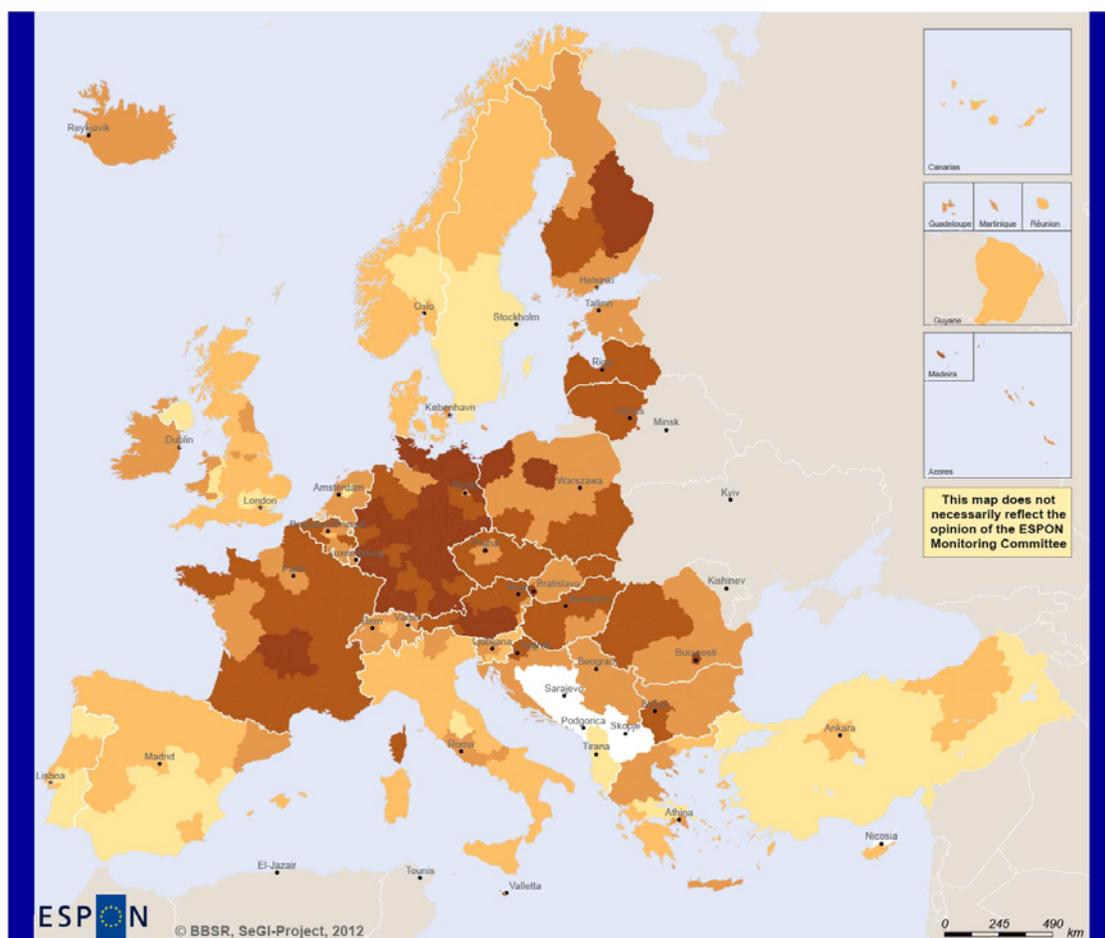
The analysis also needs to be supported by contextual indicators, such as those relating to population density or urbanisation development. In addition to population density, these differences could be explained by questions like the density level necessary to justify the minimal demand level, the type of service provided and also the level of population ageing.

Measuring accessibility to hospitals is also another very common procedure used to analyse disparities in healthcare services access. Plotting the travel time from hospitals allows us to view the provision of the service across the territory and although it is very useful, primarily in relation to support for emergency services or in treating chronic diseases, it cannot be used to explain and detect regional problems *per se*. Crossing this information with the population density and

network accessibility data is required to successfully illustrate the real nature of regional problems, as it is only then possible to detect those areas with population that have to spend more time to access a hospital. Nevertheless, the access to health services indicator can be affected in a more complex way and by several other factors such as cost or the existence of waiting lists for health treatments. Persons located far from hospitals may have to wait 2 or 3 days to receive treatment while those located in close proximity to a hospital may have to wait 3 or 4 months.

Map 1: Hospital beds 2008

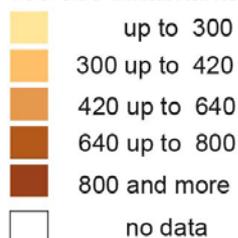
Hospital beds 2008



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Regional level: NUT2/NUTS1 (2006)
 Source: Eurostat databank 2011, National statistical offices*
 Origin of data: Eurostat 2008*
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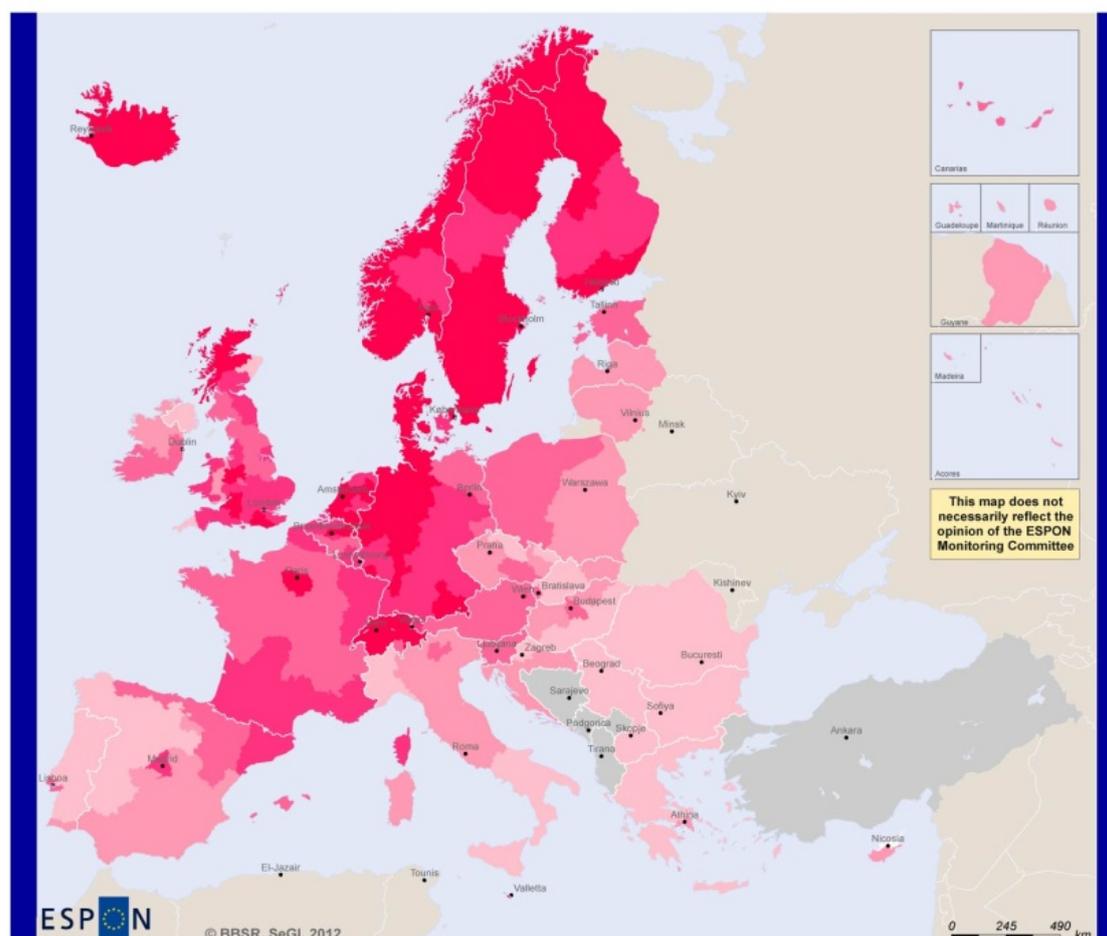
Available hospital beds per
 100 000 inhabitants 2008



* Albania, Iceland, Serbia: World bank data 2007: NUTS 0,
 Germany: disaggregation of NUTS 1 data by data from the Federal Statistical Offices,
 Netherlands: disaggregation of 2008 NUTS 0 data by NUTS 2 data of 2002,
 Estonia: National Statistical Office: 2006
 United Kingdom: disaggregation of 2009 data for England by data of National Statistical Office

Map 2: Access to broadband 2006

Access to broadband



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Regional level: NUTS 2 (2006)*
Source: Eurostat database, 2011
Origin of data: Eurostat, 2010*
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Households with access to broadband in percent of all households

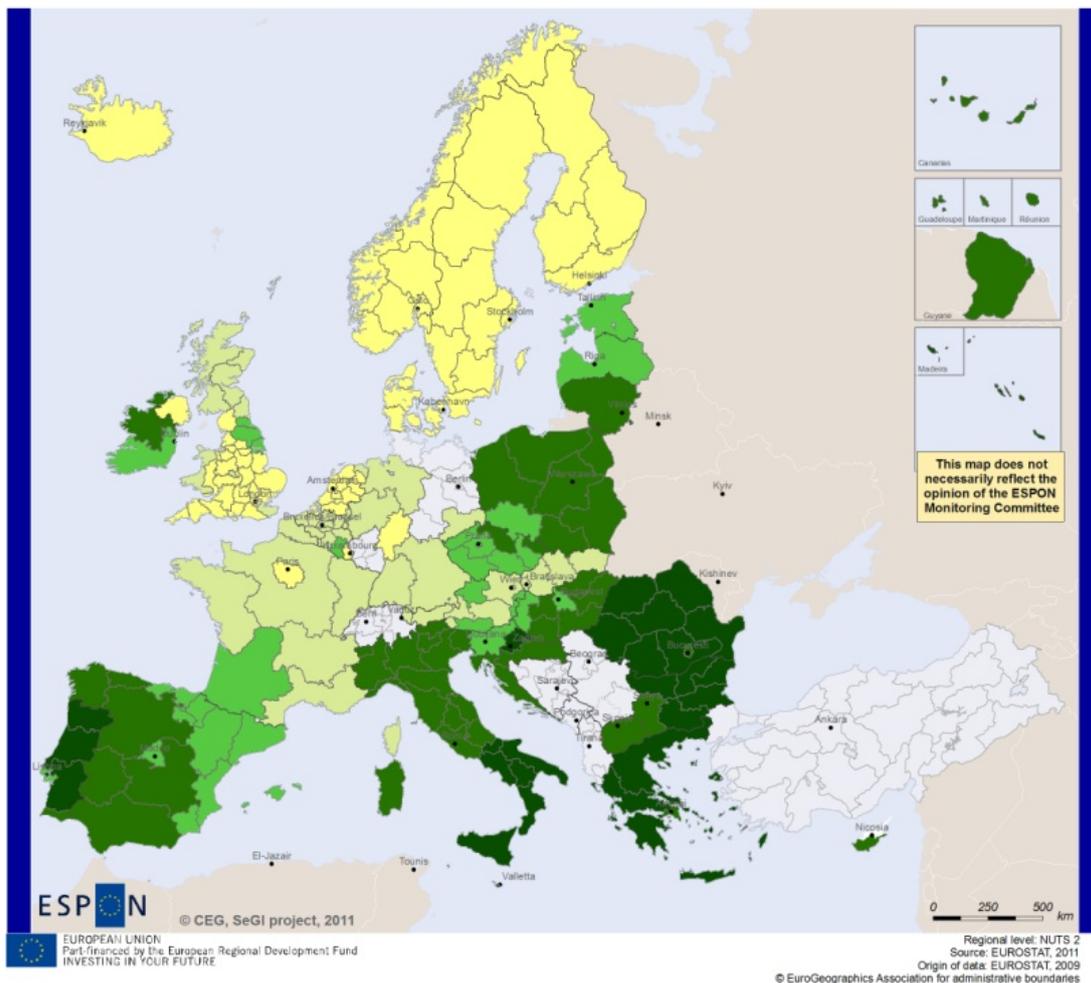


The second example concerns the provision of services from the ICT telecom domain. From the literature review we could check that the indicator 'Households with access to broadband' is frequently used to analyse the ICT domain. However this indicator may not be as useful as it first appears. The technological progress around areas like ICT will continue to change the meaning of some indicators. For instance, we are currently experiencing a significant increase in the user base for fast public internet wireless connections while it is now also possible to access the internet from several locations and in several ways. The general availability of the

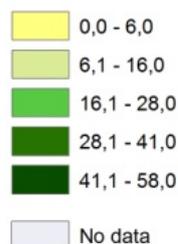
service in workplaces or public spaces like coffee shops or bars, or even on public transport or in the garden while sunbathing allows us to be connected to the internet, via computer, mobile phone or other (often) hand-held device.

Map 3: Individuals who have never used a computer 2009

Individuals who have never used a computer



Percentage of individuals (%)



Data availability:
Information at NUT 1: DE, GR, FR, PL

Internet access is no longer confined to a land-line connection. Given these new factors it is tricky to analyse access to the internet with the context of the indicator presented. If, in some less developed regions/countries, it is possible

that the indicator could still be useful, it is only because all of the other approaches to accessing the internet are not available, in other words, the indicator simply does not reflect the reality of the current situation.

When the indicator 'Access to broadband' is compared to 'Individuals who have never used a computer' the lack of meaning connected to the access to broadband indicator becomes visible. Why is this so? To be connected to the internet – by a computer, phone or by other means – implies that the individual can **afford** to be connected. A smart phone, computer or e.g. an *iPad* is not free, nor is the price of **access** to enable a connection. How much an individual can use internet – and the devices needed to access internet – is dependent on contextual aspects such as income distribution, age structure in the population and educational level.

4.4 Conclusion

Policy making, monitoring and evaluation demand information, information which has to be organised in an up-to-date system and harmonised for the sector and territories of analysis. Reliable and relevant indicators are crucial for this process to be successful. The analysis here points to some of the problems which need to be addressed: (a) There is a need to integrate SGI indicators with context indicators; (b) the need to measure effects is difficult because of the scarcity of relevant data; (c) the SGI effects analysis also obliges us to undertake an inter-sectoral analysis; (d) there is a scarcity of available information for different scales of analysis; and (e) there is a heterogeneous number of indicators for each domain.

5. Key indicators and maps

5.1 The dependence on data availability

From the three SGI indicator dimensions – availability, accessibility and affordability - and using the NACE Rev 2 classification (Eurostat 2008) as a framework for the statistical analysis that followed the operational definition of SGI (see chapter 2) it is primarily the dimension of availability that is most clearly presentable.

The problems of transferring quality aspects into comparable indicators have already been elucidated in the interim report. Monetary information on the costs of SGI for the citizens, respectively as beneficiaries on the one hand and as costs to or investments by public or private organisations, on the other, are not available on a regional level and even not on a national level for most SGI in the ESPON space. Specific SGI accessibility indicators require a highly detailed road network and service layers. Given that data should cover the whole ESPON space a raster accessibility analysis was not feasible within the SeGI project because of limited computational and working capacity. Therefore the question of SGI accessibility is left to the case studies where data is available and the examined area of each case study region is manageable in terms of affordable computer and work capacities.

The availability of SGI is expressed in the number of local units of NACE divisions, groups or classes and the number of persons employed in the NACE division, group or class. Differing from the concept to base SGI indicators on the NACE classes the SeGI project had to refer mainly to the NACE divisions on NUTS 2 level as it was the smallest regional level with available data. Thus, instead of distinguishing the NACE classes (section E) 38.11 'Collection of non-hazardous waste', 38.12 'Collection of hazardous waste', 38.21 'Treatment and disposal of non-hazardous waste' and 38.22 'Treatment and disposal of hazardous waste' the division 38 'Collection, treatment and disposal of waste' in total was the object of examination.

The number of local units represents the actual presence of the specified service while the number of persons employed gives an idea of the regional capacity to produce or supply the service. As reference parameters are generally used the area of the region in square kilometres and the population is used for certain services not other special age groups or beneficiaries as this reference seem to be more appropriate. Additional to this general approach some common indicators on net-infrastructures were also calculated. Where the NACE divisions are not specific enough as in 85 'education' and 86 'health' other statistics were used with the effect that these indicators do not necessarily follow the same construction principles. The difficulties in finding representative and comparable SGI indicators for the section/division 'education' are discussed more intensively in the annex 9 to the Scientific Report. A different approach needs to be taken in respect of the object 'social housing' as it is not part of the NACE classification scheme.

5.2 Regional distribution of SGI availability at NUTS2

The following additional countries were included in the data collection process: Albania, Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro, Serbia and Turkey. On NUTS 2 level 96 SGI indicators could be calculated, while on the NUTS 0 level 123 indicators plus 12 on social housing were used. Unfortunately the number of persons employed as a capacity measure is insufficient on NUTS 2 level for many SGIs. Furthermore, many of the indicators based on the area are highly correlated. That is to say, the characteristics of the region strongly influence the indicator values. Thus those indicators with the area as denominator are generally excluded from further examination. Three other single indicators show high correlations with related indicators and thus are also excluded: number of curative care beds per 100 000 inhabitants, dentists per 100 000 inhabitants and students in pre-primary, primary and secondary education per 100 population aged 2 to 18 years. After this thorough screening of the completeness of data and excluding highly correlated indicators from the final analysis, 29 indicators on NUTS 2 level were taken forward for further analysis.

A factor analysis groups these 29 indicators in a way that might be explained by a combination of Maslow's "Hierarchy of needs" and Christaller's Central Place Theory as shown in figure 1. Christaller's theory is based on market mechanisms that are in its thresholds, which comprises the smallest market area (minimum population) necessary for the goods and services to be economically viable, and the average maximum distance consumers are willing to travel to purchase the goods and services. Some critics argue (i) that with ongoing technical (transport and telecommunications) developments central place theory has declined in explanatory value, (ii) that there are problems of empirical proof and (iii) a clear definition of "goods of higher" order in practical planning is missing (see Scientific Report chapter 9). Maximum distances for services are often set politically and lack a theoretical and/or empirical underpinning; individual communities' financial problems lead to a difficult discussion over the expansion of distances for certain services. Some theoretical indication for the maximum distance consumers may be willing to travel could be taken from Maslow's motivation theory. Modern versions of Maslow's theory argue against a strict hierarchy and rather point to five assumed interrelated levels of needs (see Scientific Report chapter 9). Basic needs require easier access, which means local availability, while needs of a higher order are required less frequently if at all. Nonetheless, all five levels of needs are regarded as necessary for well-being in modern societies.

This tentative two-dimensional ranking based on the two concepts finds some empirical evidence in analysing the indicators on NUTS 2 level. Basically needs like fresh water and electricity are supplied area wide – there are few regions with no local units - while high level needs like certain cultural services and air transport are usually more concentrated in urban and metropolitan areas. While nearly all regions show a certain level of availability in respect of these basic services in terms of local units the same services in terms of persons employed are established to a higher degree where the population is more concentrated. This demand-oriented distribution can be explained by reference to the larger

enterprises/local units located in cities and urban regions and the smaller ones in villages/rural regions. The relationship between regional distribution and the hierarchy of needs is not stringent. Waste management shows a different regional distribution even if this service is also a basic need. This might be due to a different characteristic of this industry and/or the undifferentiated data on hazardous and non-hazardous waste and sewage or because a different regional distribution in respect of the recycling industry was included in the numbers.

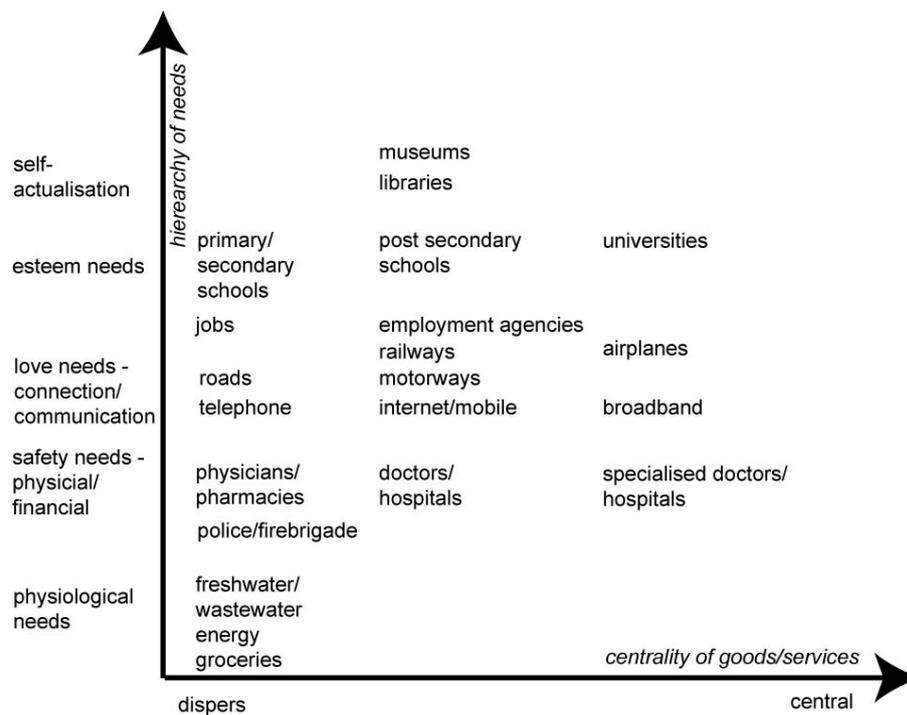


Figure 3: Two-dimensional ranking of services of general interest

However, both concepts lack the cultural framing that the needs as well the standards of being a good or service of a higher or central order depends upon i.e. on the level of socio-economic development and wealth, on the technological level of development and on historic/cultural experience and hence the expectations of the citizens. Moreover, the regional variation of socio-demographic groups may affect the regional variation of service supply beyond these principles of ranking. EU wide variation of the indicator values shows great national level differences in almost all services in a nation-specific manner.

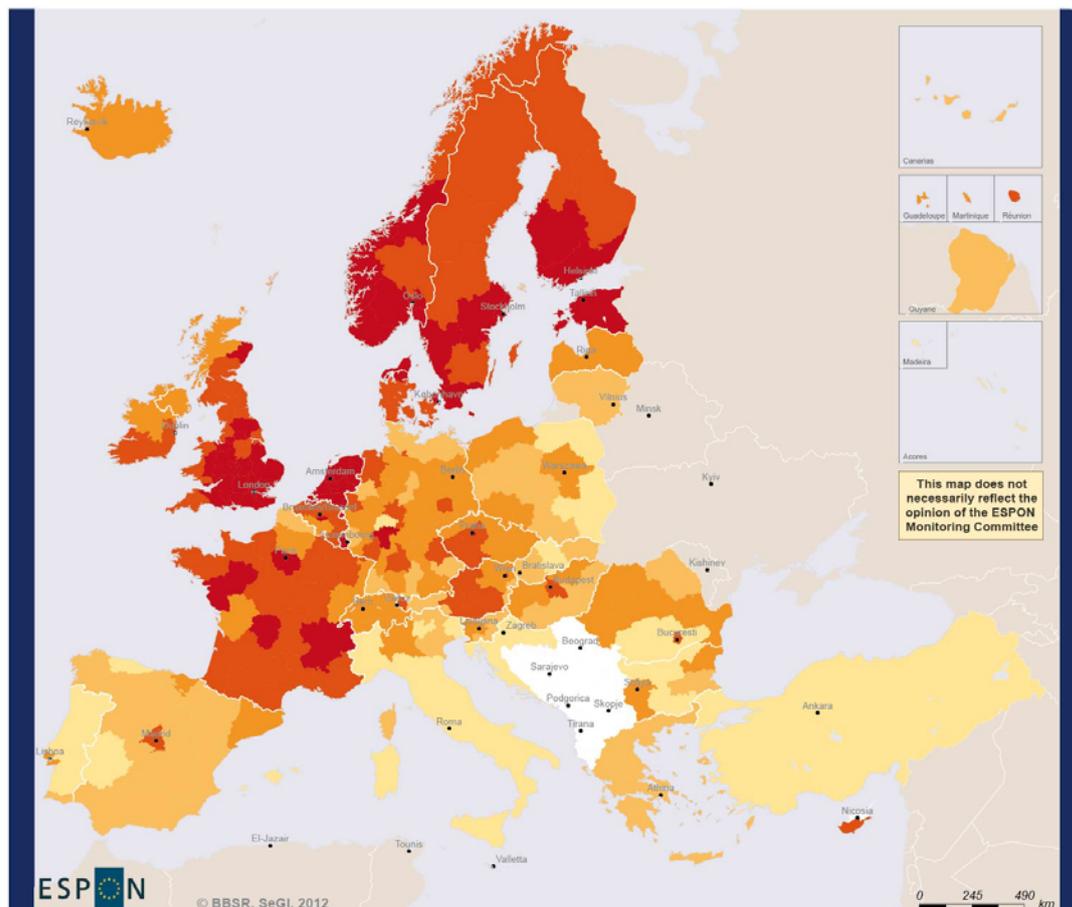
Furthermore, the ranking and explanations are influenced by citizen demand and market evidence. Local units of services are places of employment and therefore also sources of household income with differing levels of importance in different (types of) regions. "... the "SGI sector" employs almost one third of the total EU employed labour force, ranging among member states from around 20 to around 40 percent of total employment. ... The "SGI sector" also contributes a substantial share of national GDPs. The national averages "hide" even wider ranges among sub-national regions" (see SeGI Scientific Report chapter 1).

5.3 Empirical examples

Four examples – two of *Social Services of General Interest* and two of *Services of General Economic Interest* - are selected to show some regional disparities as well as to illustrate some data problems. For additional maps and results, see annex 5 to the scientific report.

Map 4: Employment agencies 2009

Employment agencies 2009



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Regional level: NUTS 0/NUTS 1/NUTS 2 (2006)*
 Source: Eurostat database, 2011
 Origin of data: Eurostat, 2009*
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Local units active in employment agencies
 per 100 000 inhabitants, 2009



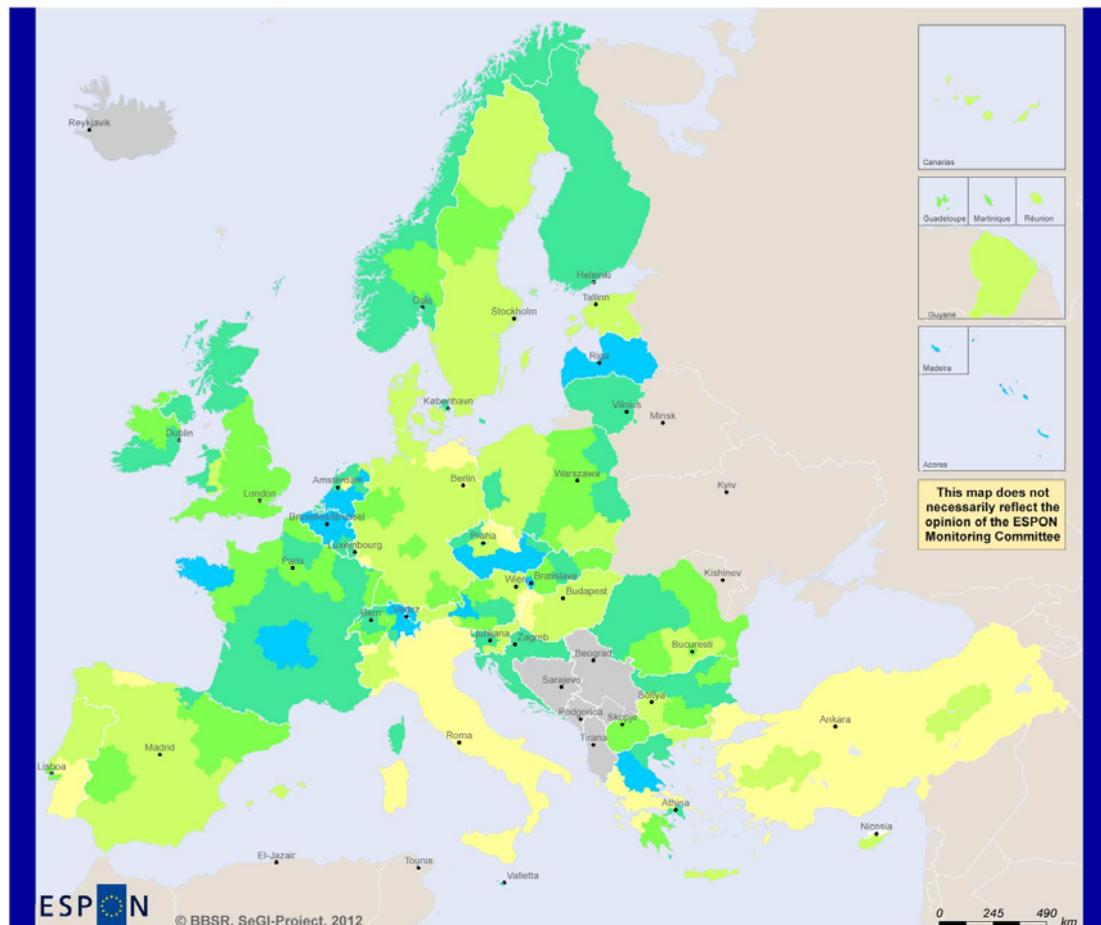
* Croatia, Greece and Switzerland: NUTS 0,
 Denmark: 2008
 Iceland, Turkey: National Statistical Offices

1. Employment agencies: To be in employment is a fundamental human need as it allows individuals to take part in economic and social life. Employment agencies are assumed to strengthen the labour force and help in managing the regional labour market. Employment agencies are not systematically concentrated in more

urban regions and in many countries display a great variety in terms of supply. Neither does it seem that the supply varies by country. There is a medium correlation between the presence of employment agencies and regional GDP *per capita* (0.529) and a light negative correlation with the unemployment rate (-0.344). This is therefore one of the few indicators which verifies the assumptions.

Map 5: Hospital beds of psychiatric care 2006

Hospital beds of psychiatric care



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Regional level: NUT2/NUTS1 (2006)
Source: Eurostat databank 2011, National statistical offices*
Origin of data: Eurostat 2008*
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Hospital beds of psychiatric care per
100 000 inhabitants



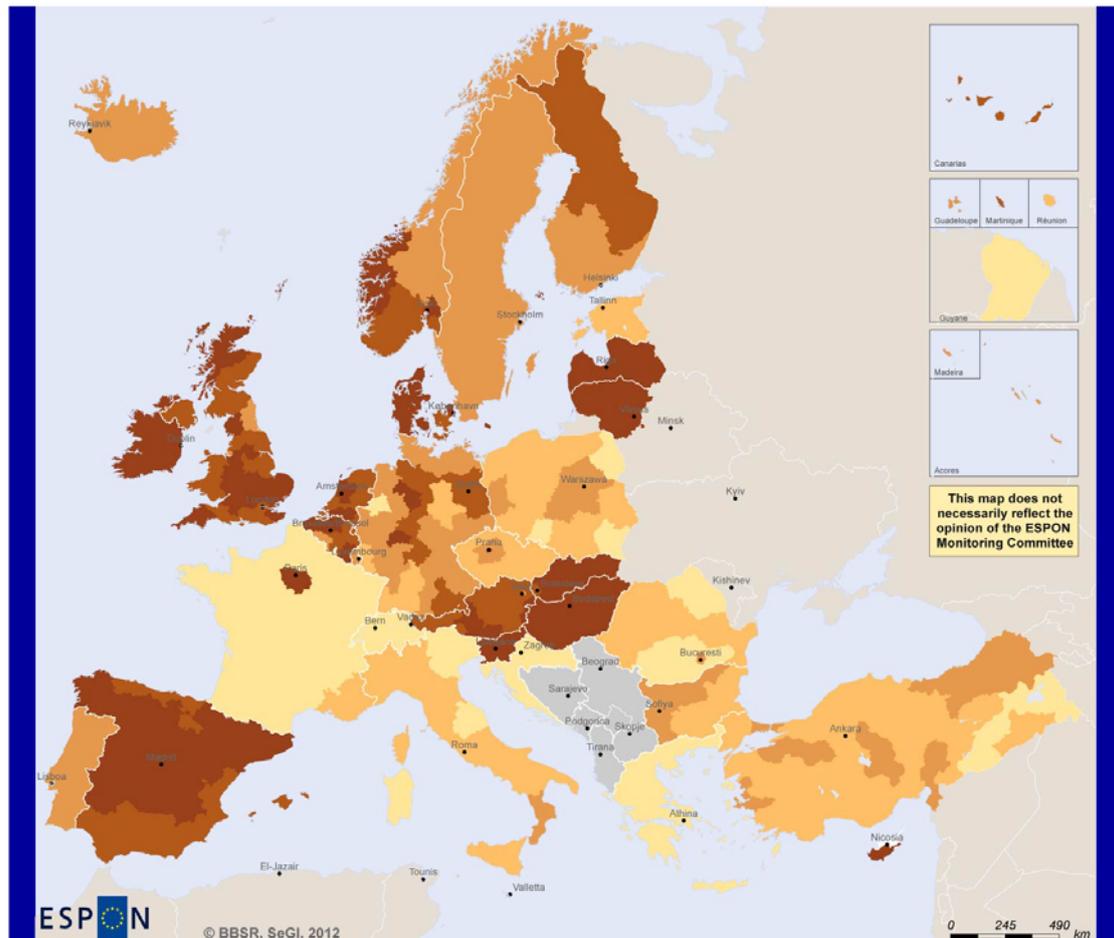
* Germany: disaggregation of NUTS 1 data by data from the Federal Statistical Offices,
Netherlands: disaggregation of 2008 NUTS 0 data by NUTS 2 data of 2002.
Estonia: National Statistical Office; 2006
United Kingdom: data only for England, Wales, Scotland and North-Ireland

2. Psychiatric care beds: The availability of psychiatric care also shows a high level of difference among the countries. However the greater availability of psychiatric beds in hospitals does not coincide with the availability of beds in

hospitals in general. Even if there are more countries that have increased the number of psychiatric beds in numerous regions it is highly likely that the differences in level do not result from an increased level of attention directed towards psychiatric diseases but emerge rather for statistical reasons. Unfortunately, the detailed metadata necessary for qualified interpretations is unavailable from the Eurostat database.

Map 6: Postal and courier activities 2009

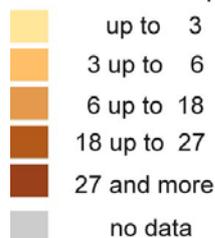
Postal and courier activities



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Regional level: NUTS 0/NUTS 2 (2006)*
 Source: Eurostat database, 2011
 Origin of data: Eurostat, 2009*
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Number of local units active in postal and courier services per 100 000 inhabitants



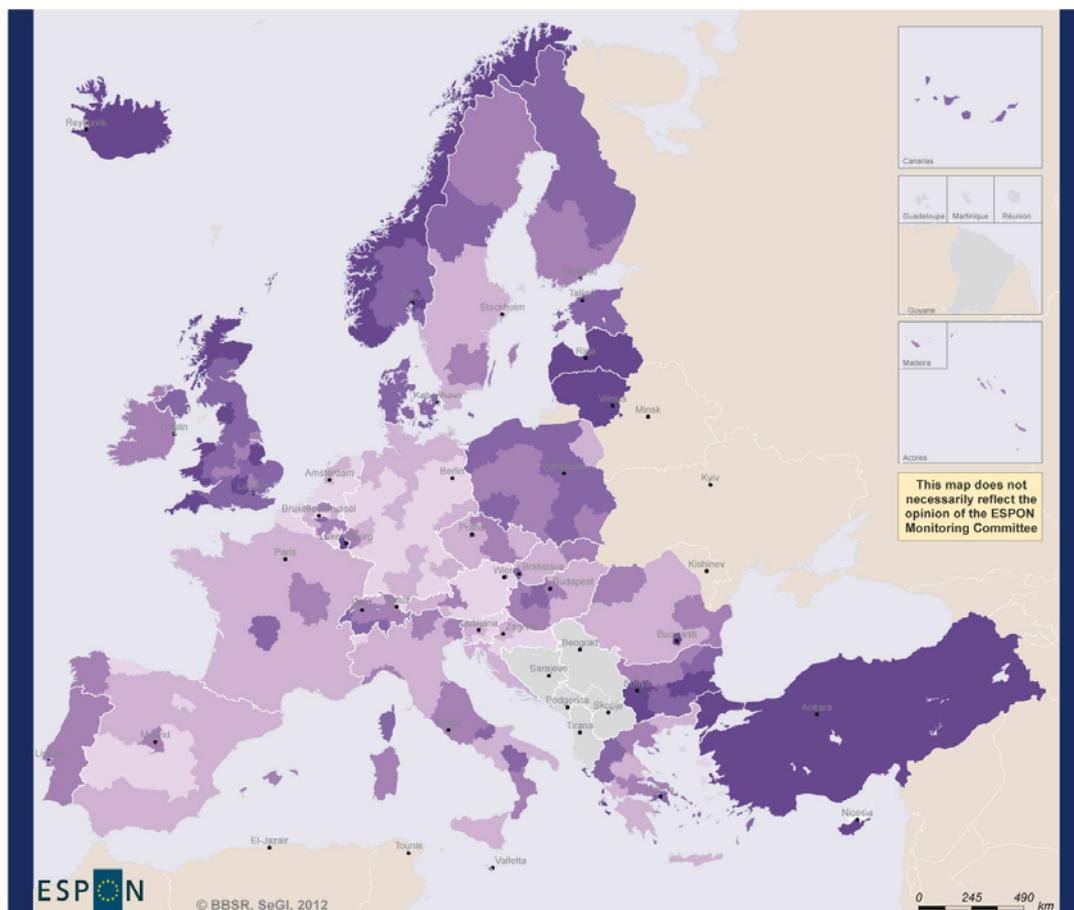
* Croatia, Greece and Switzerland: NUTS0
 Denmark 2008
 Iceland, Turkey: National statistical offices 2009

3. Postal and courier activities: A high or low supply of local units of postal and courier services is very country specific. Within individual countries however the

variation is rather low. The particular distribution in respect of France, with a high supply in the capital region and a very low supply in all other regions, leads to the assumption that data in France do not show the number of local units/firms but the number of enterprises. However, this example may also indicate that some countries keep a dense net of postal offices as an historic and cultural asset (e.g. Hungary) while other states concentrate them due to market liberalisation. In some countries, shops (classified as retail trade) have gradually taken over the postal services in rural regions such that the absence of a postal office does not necessarily mean the absence of this service in the region (e.g. Norway, Germany).

Map 7: Busses and motor coaches 2009

Busses and motor coaches



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Regional level: NUTS 0/NUTS 1/NUTS 2 (2006)*
 Source: Eurostat database, 2011
 Origin of data: Eurostat, 2009*
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**Number of busses and motor coaches
 per 100 000 inhabitants**

- up to 100
- 100 up to 175
- 175 up to 250
- 250 up to 350
- 350 and more
- no data

* Denmark, Ireland and Portugal: NUTS0;
 Germany - Brandenburg: NUTS 1;
 Portugal: 2002
 Iceland: National Statistical Office 2009

4. Busses and motor coaches: While information on the road and railway network is rather well documented, the regional distribution of collective transport by busses and coaches is less often the subject of much interest. Nevertheless these collective transports still play an important role in some countries. In part, busses and coaches seem to compensate for missing rail transport links. There is no clear urban-rural gradient. In countries where the dominant form is personal transport by private car this service is not efficient even in rural regions. Even in such instances however the indicator value should be interpreted with some caution since the statistical unit (firm or enterprise) may not be consistent across countries and even in countries where statistics are based on enterprises the number of enterprises providing the service may vary.

5.4 Conclusions

The operational definition of SGI via the NACE classification seems to be a satisfactory way, in statistical terms at least, to describe the regional variation of availability of certain services even if some data problems still remain to be solved: (1) NACE is mandatory within the European statistical system. To meet the data needs necessary for a sufficient indicator system in respect of SGI no new statistics would have to be established. (2) The current availability of NACE statistics on a regional level is however insufficient: several NACE divisions have to be differentiated according to the NACE classes to meet the needs of differentiated SGI data, especially the sections/divisions on education and on health. (3) Even on NUTS 2 level data is missing or is otherwise unavailable for confidentiality reasons. Section G on the retail trade shows significant data gaps. Establishing these NACE statistics on NUTS 3 level is also desirable but seems currently to be rather unrealistic. (4) For qualifying statements beyond simple availability in terms of the number of local units one has often to fall back on the national level. Consequently, the collection of the number of persons employed (and of turnover to answer the questions on economic importance in the region) is necessary for a better understanding of the regional distribution of SGI. (5) Currently, on the regional level (NUTS 2) only data for the years 2008 and 2009 are available at EUROSTAT. If developments in respect of SGI with the NACE data should not be measurable for some years ahead an additional attempt to collect the data for at least the decade of the 2000s should be made. Without this, time comparisons and empirically based statements e.g. on the impact of market liberalisation are simply not possible. (6) Furthermore, as regards the Eurostat metadata, we need better information about the quality and origin of the data, including the statistical unit employed. Thus far it has been very difficult to find detailed information on whether member states really provide data on local economic units for all selected NACE classes and sections and not just substitute data on enterprises.

6. Territorial Patterns of SGI: an overview

The aim of the case studies is to reveal the territorial distribution and situation of services of general interest in particular European regions. Activity 4 analyses, in a multi-scalar form, the potential and the constraints of territorial development regarding services of general interest within different types of territories including rural, urban, peri-urban, mountainous, islands, coastal and outermost regions (cf. table 1) *vis-à-vis* their national contexts, of which an overview is provided below. A detailed description of SGI in the studied countries and regions can be found in the case-studies reports (cf. Annex 10 to the scientific report).

Table 1: Project case-studies

	Country	Region	Territorial Aspects of the Region*
1	Austria	Eastern Austria	Border, Mountainous, Urban/Rural
2	Germany	Ruhrgebiet	Urban, Metropolitan
3	Hungary	Dél-Alföld	Rural, Border
4	Iceland	Northeast	Island, Coastal, Remote, Rural, Sparsely
5	Norway	Finmark	Remote, Border, Sparsely, Mountainous, Coastal
6	Poland	Mazowsze	Urban/Rural, Metropolitan, Intermediate
7	Romania	Northeast	Border, Rural, Intermediate
8	Spain	Navarre	Mountainous, Metropolitan, Border, Coastal, Intermediate
9	U.K.	South Gloucestershire	Coastal, Intermediate

*Types of regions according to the ESPON Typology Compilation (on NUTS 3 level).

6.1 Methodology

The methodology for the empirical research of SeGI aimed at ensuring the comparability of research results by standardising which services of general interest are to be studied and establishing guidelines for performing the research and for the presentation of their results. The focus is on evaluating the indicators, the current territorial situation in respect of services and the territorial development and potential constraints in different types of territories across Europe. The use of a structuring feature was imperative to extract robust conclusions from very diverse regions and distinct and extensive research reports from the partners. In this sense, the case studies aim to analyse the spatial distribution of services of general interest in the selected countries, as well as their impact on the development conditions of the diverse kinds of territories studied.

6.2 Contextualising SGI development and provision

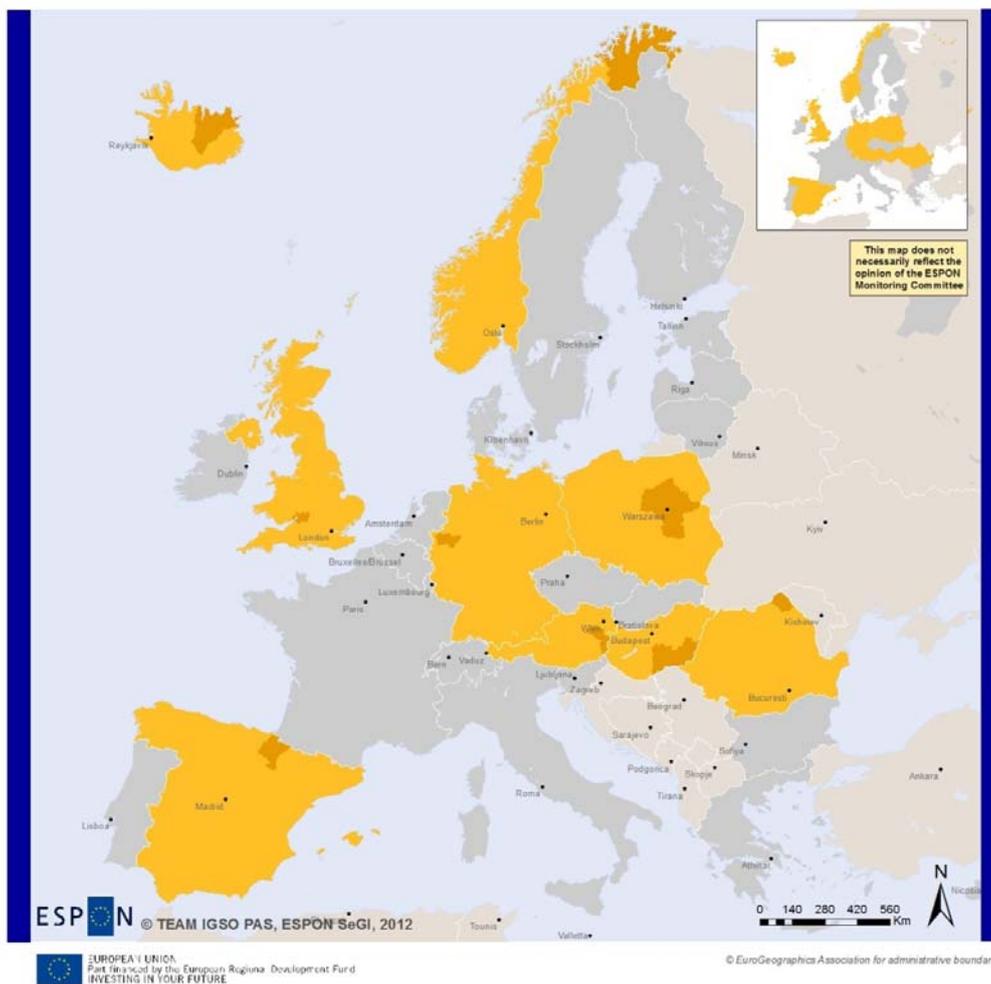
6.2.1 Evidence based processes

The current situation with regard to services of general interest in Europe is very dynamic experiencing vivid and often regionally-varied changes. This diversity is a consequence of various processes that determine the pace of these dynamics. These processes include – among other factors:

- Demographic changes: the ageing of the population (e.g. in Austria, Spain) and the imbalance of gender structure (Poland), the increase in peripheral areas suffering from depopulation;
- Changes in transport needs and behaviours, and an increasing role for individual transport (in an inverse correlation with the quality of public transport). This process is especially observed in the New Member States, where the growth in individual journeys is not only a consequence of the rapid motorisation, but perhaps mostly of the de-concentration of jobs that were previously supported by public transport (Poland, Romania);

Map 8: Case study areas

Case Study areas



Case Study areas

Austria	– Eastern Austria
Germany	– Ruhrgebiet
Hungary	– Dél-Alföld
Iceland	– Northeast
Norway	– Finnmark
Poland	– Mazowsze
Romania	– Northeast
Spain	– Navarre
U.K.	– South Gloucestershire

- The changing family model resulting in the need for more childcare (kindergartens) and the elderly (nursing homes);
- The ongoing economic and financial crisis as well as the deregulatory and liberalisation processes (promoted by the EU).

Investments were reduced with the economic crisis. This primarily relates to central government investments (Spain, Poland) but has also impacted the local level. 'Big ticket' items such as major road projects and transport accessibility tend to be more obviously affected than local undertakings in the sphere of social infrastructure.

Liberalisation and deregulation in various areas of services of general interests have taken place as a result of EU directives (as in Poland in relation to the energy market and postal services; in South Gloucestershire for the energy market and buses). This process led to the establishment of various forms of public-private partnerships. Examples are found in Austria (railways, energy, postal services); Poland (regional railways, road infrastructure such as motorways); Norway (more than 50 per cent of road investments are covered by road tolls; the public sector pays to maintain the roads). Although ICT and telecommunication were liberalised in Germany in the 1990s, *Deutsche Telekom* is still the biggest provider, despite many international companies entering the sector in recent years.

Nevertheless, liberalisation and market deregulation do not entail an immediate change in the territorial dimension. Change in choosing system operators (Austria, Poland) is lower than expected. Recipients remain "faithful" to operators functioning in the region. However, this applies mainly to traditional services (e.g. electricity supply), and not to telecommunications services.

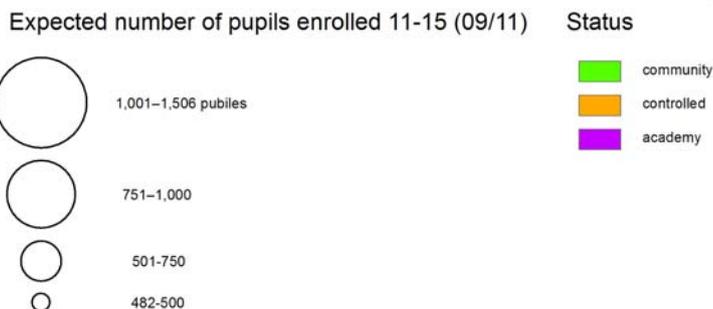
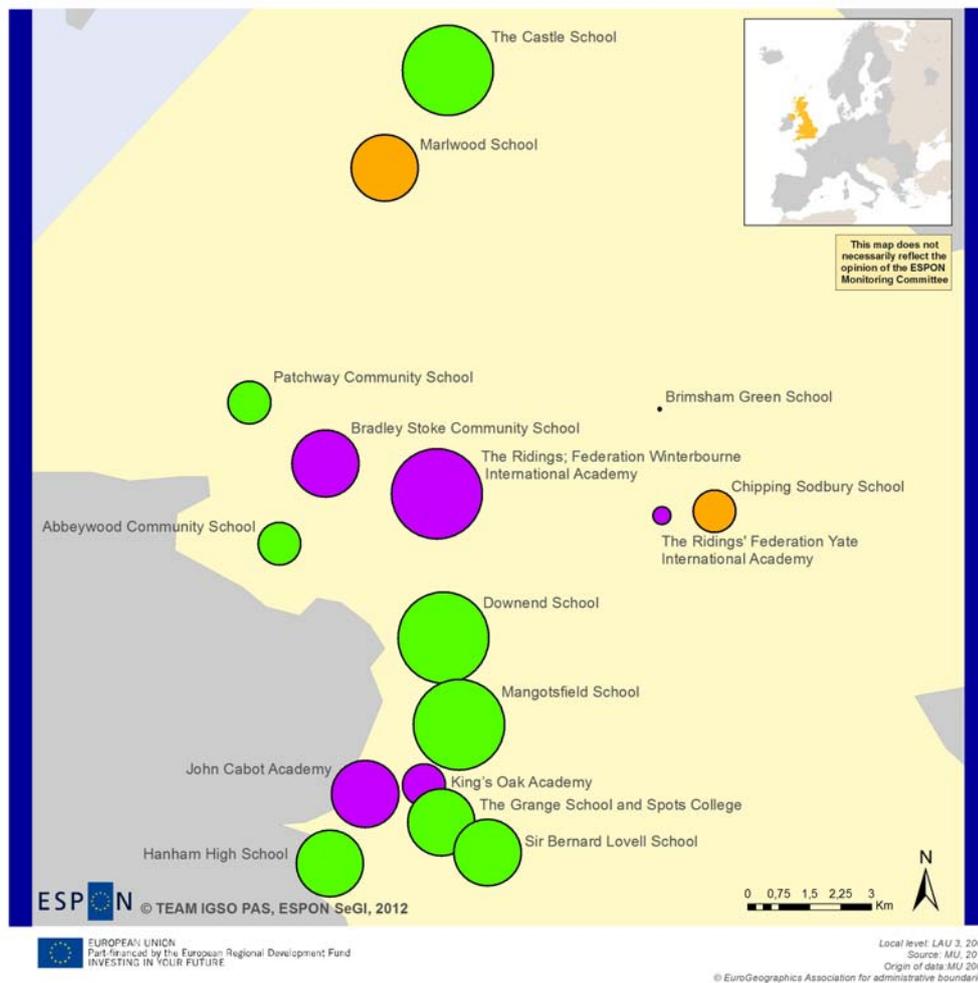
6.2.2 Governance and institutions of SGI provision

Some of the studied areas revealed a centralisation of services in various dimensions. Legal and financial centralisation in Norway included shifting a hospital from county to government financing. Central planning in the UK led the National Infrastructure Plan to comprise a new governmental strategy to meet the country's infrastructure needs. In Iceland, centralisation was physical and mostly regarding the location of high-level services (e.g. specialised medical services) in the capital region to make use of the agglomeration effect.

The approach of local authorities to the development of SGI varied in the studied regions, being conditioned primarily by the specifics of the country concerned. Not without significance, however, are regional and local factors. In countries where services of general interests are generally well developed in peripheral areas, access to services is seen as part of the existing quality of life and thereby a good which requires state protection (Austria, Germany, Iceland). In countries with lower quality of services their development is often attributed to security features which do not include protection of the quality of life. It is assumed however that overall economic development, the growth of tourism, etc., (Romania) can be affected.

Among the social services of general interest, the demand for care services (for the elderly as well as childcare) is clearly on the rise while the traditional family-based 'private' provision model is on the decline. Public institutions are replacing the traditional care function provided by families (Austria, Poland), mainly due to ongoing changes in family structure ('atomic' families). Rising demand for care services creates constraints in terms of their financing from the public purse, especially during financial crises.

Map 9: Secondary schools in South Gloucestershire
South Gloucestershire secondary schools



Regarding the type of provider, the achievement of a complementarity between public and private entities seems to be an important issue conditioning proper

access to services. This is achieved in some countries (Norway, Iceland), while in others, the two types of entities generally compete in some services (Poland, Romania). Cooperation between various service providers is taking place in South Gloucestershire, where the Wessex Water company (water and sewage treatment) actively cooperates with the highway authorities (surface drainage), local authority (plans for urban growth). In addition, cooperation is achieved in South Gloucestershire in secondary school provision between private and public providers; the latter attain a multi-scalar collaboration with community, local and state governments maintaining, financing and running schools (Map 9).

The small size of local government units is a challenge for the provision of services (depopulation processes, weakening of service recipients mass level), requiring cooperation between (or fusion) of the units (Iceland, England). At last, there is cooperation between countries at the local level in remote rural border areas; e.g. in Austria, children are attending Hungarian schools (in Sopron) and Hungarian children are commuting to Austrian schools. Changes in the traditional distinction between the public and private spheres of service provision are often most visible at the regional level, as they are primarily conditioned by local factors. Public support is required for services to be undertaken by the private sector, as for instance, with small shops taking on public service duties in remote depopulated villages. In peripheral areas in Austria, shared call taxi services complement the existing public transport system. At the same time, in other sectors the importance of the private sector is growing as a result of liberalisation and market deregulation processes (e.g. energy supply in the UK, Austria, Poland, and Spain). The case-studies show that public services are increasingly being carried out by public, social (non-profit) and private entities, not only on a sectoral but also in a spatial dimension.

A poorly professionalised bureaucracy and frequent changes in the law (Romania, Poland) impact negatively in the provision of services. Inconsistent and often arbitrary decisions are often made regarding reductions in the demand for various services. In Hungary's public transport sector, traffic reduction is not accompanied by a shortening in the lines, thus increasing costs for providers of services that, at a certain point in time, need support from public resources. In other regions the reaction is the cancellation of connections (Poland). There is a need for (inter-branches/services) long term planning (Iceland's road system; Poland education, Internet, care services).

6.3 Multi-scalar Territorial Patterns of SGI

The rich vein of material resulting from the individual cases allows us to produce an overview of the territorial patterns of SGI in European regions using selected features which crosscut the analysis, namely, availability, accessibility, affordability and the quality of SGI.

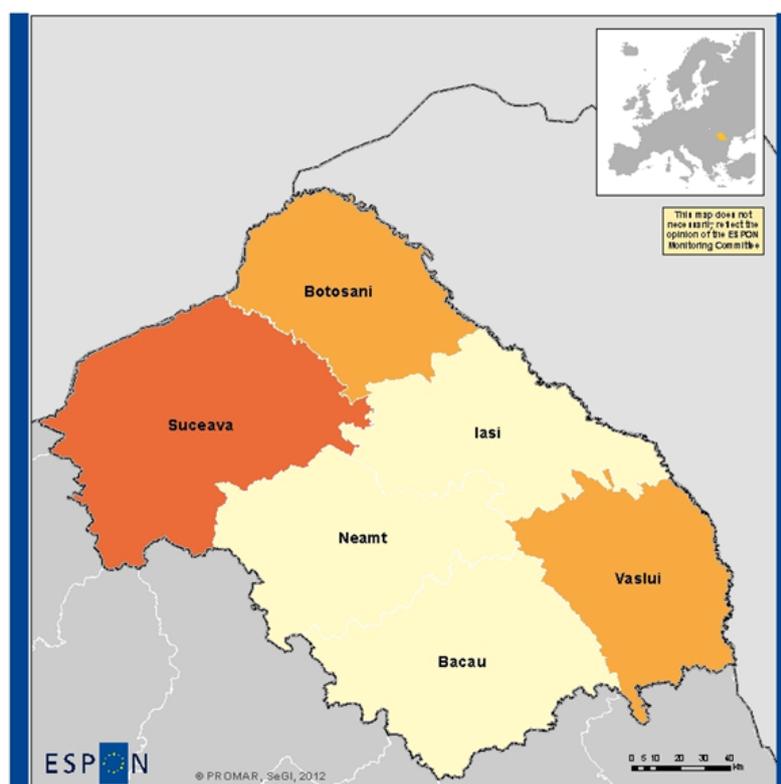
6.3.1 Availability

The analysis of the case studies revealed a division between west and east in Europe. In Western EU countries (Germany, Austria, Spain) services of general

economic interest (especially network-based services like water supply, sewage systems) usually achieve a high supply rate (near 100%), which is not the case for Eastern EU countries (Poland, Hungary, Romania – principally in rural areas).

Under- and oversupply often occur at the same time. In general, agglomerations produce a good level of service provision while peripheral regions experiencing population decline often face significant problems in maintaining service standards or in terms of financing. This creates considerable uncertainty over the maintenance of services in these areas (schools and healthcare services in Iceland and Poland). In North-East Romania, problems relating to the lack of availability as regards secondary and tertiary education in remote and rural areas reflect the country's low rates of people with higher education (cf. map 10).

Map 10: Secondary education graduates in North-East Romania
Secondary education graduates per 1000 inhabitants



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 Local level: LAU2
 Source: Statistical Yearbook of Romania, 2010
 Origin of data: Statistical Yearbook of Romania, 2010
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Romania Case Study
Number of secondary education graduates per 1000 inhabitants

9.8 - 10.1
10.2 - 11.1
11.2 - 11.8

New investments in services (especially infrastructurally-based services: water pipelines, sewage systems etc.) are occurring due to EU funds. A considerable portion of the infrastructure endowment was developed within the last few

decades (Austria, Spain); or, indeed, is still under development (Romania, Hungary, Poland).

Nevertheless, significant gaps can still be found. The regions Mazowsze (Poland), Dél-Alföld (Hungary), North-East (Romania) remain without any provision of gas supply. These three regions also face serious deficiencies in terms of the provision of public transport, such as uncovered areas, faulty time tables, etc., and the solutions fostered are generally based on increased private car use and generally eschewing innovative solutions such as shared or electric cars or seeking improvements in public transport. Climate change and changing weather patterns are provoking a need to improve the technical infrastructure. In Poland (Mazowsze) and the UK (South Gloucestershire) the capacity of drainage systems must be improved, since they are currently not fit for purpose.

6.3.2 Accessibility

Demography seems to impact greatly on the provision of SGIs. Territorial features such as mountainous or remote areas influence the distribution of SGI, which are concentrated in areas with high demographic density. Services are often centralised in agglomerations and centres of counties and towns (e.g. education, health service, as in Poland, Romania and Iceland). Economies of scale privilege large towns – small towns/villages find it hard to maintain high quality services (e.g. Iceland- Akureyri). Therefore, it is imperative to territorially coordinate the various types of services, particularly education, health and public transport. In addition, unfavourable demographic processes have clearly begun to affect the demand for certain services in Europe. The decreasing population greatly affects the demand and provision of educational services in Romania.

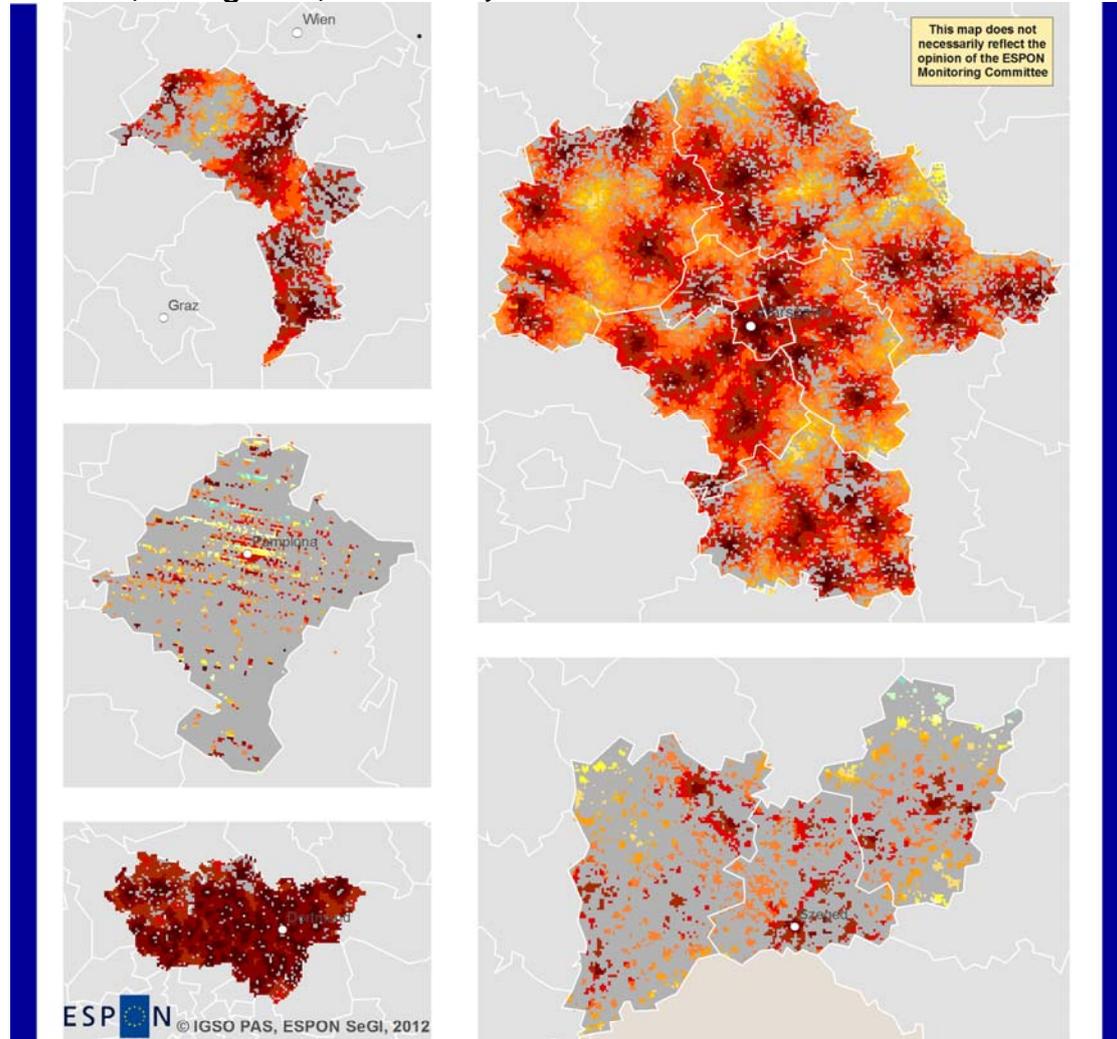
The type of territory generally determines accessibility; e.g. in mountain areas snow on the roads can deny access to service centres. Road infrastructure shapes other services. Transport is the most challenging service to be provided in mountainous areas. In the North East region of Iceland the roads and public transport in mountainous areas are of a poor quality with similar issues arising in parts of Austria, though healthcare in mountainous areas in Austria is satisfactory.

A strong polarisation between rural and urban areas remains. Examples of such tension include the Internet and social services in Iceland and technical infrastructure in Romania and Poland, especially sewage treatment in rural areas – although this has improved immensely after EU accession. This polarisation, nevertheless, weakens the closer the rural areas are located to city borders. It also shows that the once strict rural-urban division is becoming obsolete.

Some services conditioned by the available infrastructure (e.g. roads or ICT networks) grow relatively quickly, especially in the new accession countries. Accessibility can be reduced by a charge (toll roads) or physically by reducing the investment costs (the density of motorway exit and entrance points as in Poland and Hungary; the density of mobile phone masts, as in Austria). Despite the expectations for the alternative development of transport networks and

telecommunications, the disadvantaged areas in respect of transportation often also have poor access to ICT (peripheral areas in Iceland, Poland and Romania).

Map 11: Accessibility to hospitals (in Eastern Austria, Mazowsze, Navarra, Ruhrgebiet, Dél-Alföld)

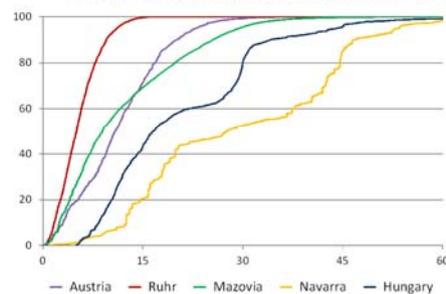
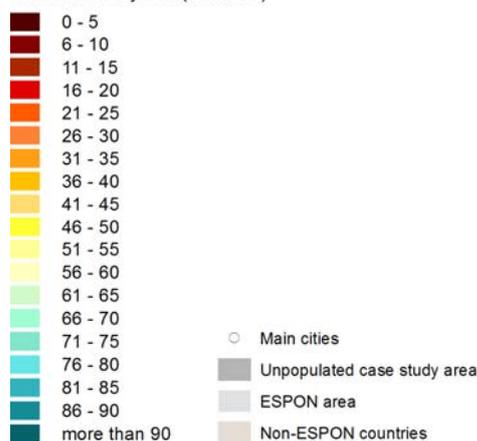


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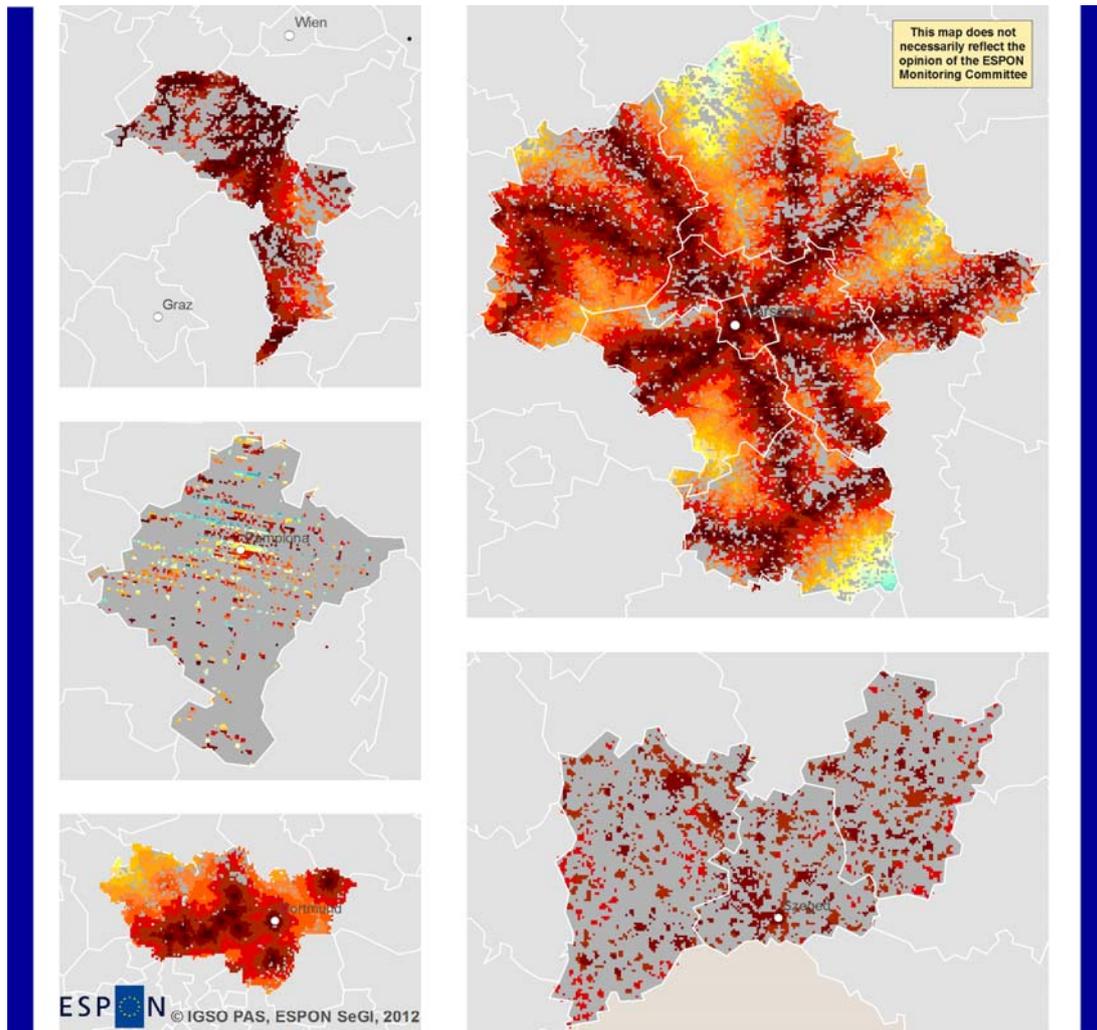
Accessibility to hospitals

Travel time by car (minutes)



	AT	DE	HU	ES	PL
Population weighted average travel time	11,4	5,4	20,7	29,7	11,8
Population last decile minimum travel time	20,0	9,5	34,1	46,8	25,5
Maximum travel time to the nearest service	46,2	20,0	74,6	81,6	60,3
Median for population	10,8	5,0	16,6	27,6	8,9
Median for raster cells	15,4	6,8	26,4	26,6	21,2
Standard deviation for raster cells	7,4	3,5	11,4	16,9	9,0

Map 12: Accessibility to railway stations (in Eastern Austria, Mazowsze, Navarra, Ruhrgebiet, Dél-Alföld)

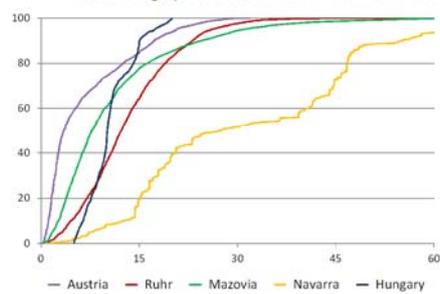
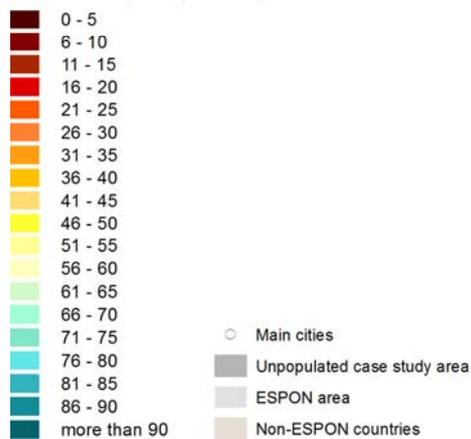


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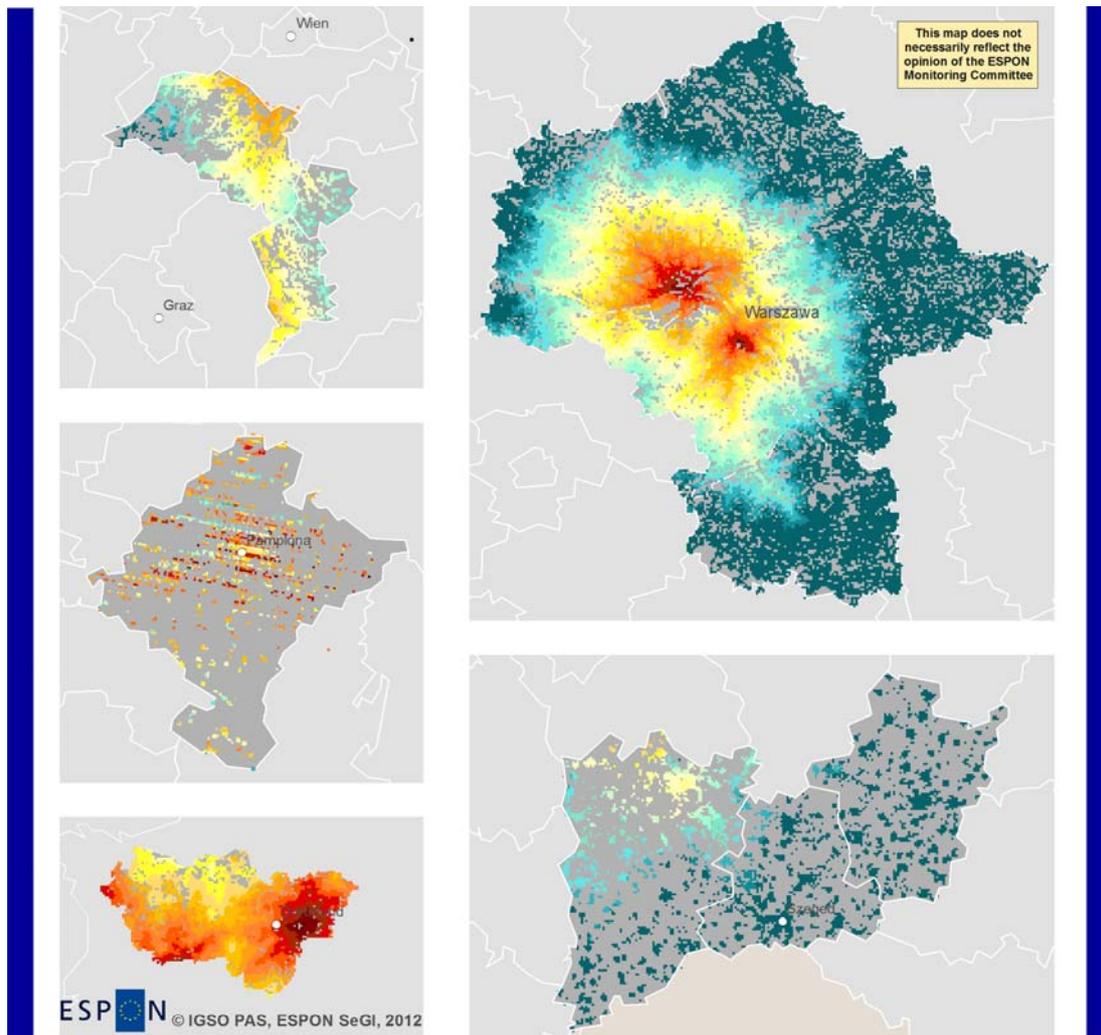
Accessibility to railway station

Travel time by car (minutes)



	AT	DE	HU	ES	PL
Population weighted average travel time	6,7	13,2	10,6	32,0	11,0
Population last decile minimum travel time	17,3	23,1	15,0	55,0	24,4
Maximum travel time to the nearest service	31,9	47,7	20,0	111,4	83,8
Median for population	3,4	12,2	10,1	27,5	7,7
Median for raster cells	9,1	17,5	10,8	26,7	17,1
Standard deviation for raster cells	6,8	8,6	3,6	22,7	12,8

Map 13: Accessibility to airports (in Eastern Austria, Mazowsze, Navarra, Ruhrgebiet, Dél-Alföld)

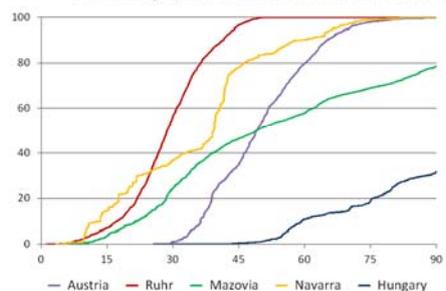
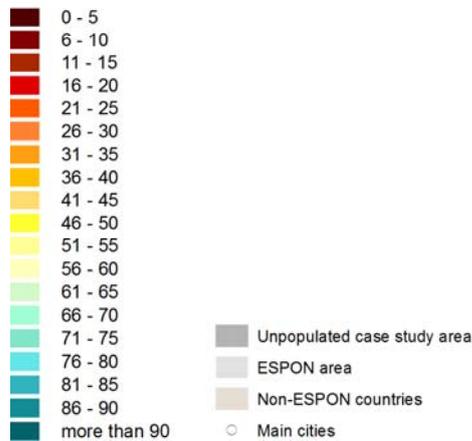


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Accessibility to airports

Travel time by car (minutes)



	AT	DE	HU	ES	PL
Population weighted average travel time	50,1	28,9	131,2	35,7	58,9
Population last decile minimum travel time	65,0	41,4	185,0	58,7	112,1
Maximum travel time to the nearest service	103,7	55,3	185,0	98,9	191,8
Median for population	49,4	29,7	150,3	39,3	49,2
Median for raster cells	56,0	30,1	112,2	36,2	82,6
Standard deviation for raster cells	12,0	10,5	48,9	17,3	33,8

Accessibility in border regions (especially along the former Iron Curtain) can be improved; Austria still lacks train connections with neighbours to the east.

However, access to railway stations in the analysed regions is good; journeys above 30 minutes are very rare. The average travel time is lower than 15 minutes – apart from Navarra where this time is doubled due to its mountainous character (the maximum travel time of 111 minutes was found in Navarra). Maps 11, 12 and 13 show overviews of accessibility in the studied regions for railway stations, airport and hospitals.

Airports are fewer in number than and thus not as accessible as railways stations. The maximum travel time is 191 minutes (Mazowsze, Poland); but in Hungary 60% of the population lives within one hours travel time of an airport. In East Austria or Dél-Alföld in Hungary this service is not located within their borders. Airports located nearby provide this service within, on average, less than one hour in East Austria and a little bit more than two hours in Dél-Alföld. Regarding hospitals, it should be noted that spatial accessibility to the service does not always equate to availability (queues, etc. influence hospital access); however in emergencies, travel time affects service availability. Hospitals are quite evenly spread across the space and generally with good accessibility. The highest average travel time was observed in Navarra (30 minutes) and the lowest in Ruhrgebiet (6 minutes). Apart from Navarra, in all regions at least 80% of the population has a travelling time to the hospital lower than 30 minutes. Very few people travel more than 50 minutes (less than 3% of the population in each studied region).

6.3.3 Affordability

A dispersed settlement structure (Poland, Hungary) resulting in low densities makes the installation of network infrastructure challenging especially in terms of financing. This may cause difficulties in terms of developing a proper technical infrastructure (water supply, sewer, high speed internet), and – to some extent – also an appropriate social one (basic health care, school commuting system). Individual supply occurs, especially in remote settlement areas (sewage, heating and water supply). Social services of general interest are usually concentrated in central locations. As regards education services, primary schools (with a low range) are available in almost every municipality (nevertheless, mainly situated in a central and highly accessible location), secondary schools are usually located in the bigger towns or settlements and universities are located in large central agglomerations.

Demography also plays a role in affordability. A shrinking population size for most services of general interest means higher costs per remaining inhabitant. As such, those services organised at the lower governmental level can often overburden the budgets of the municipalities.

Tensions also exist concerning the territorial distribution of services between the capital region (or regional centre) and the rest of the country/region (e.g. Iceland, Reykjavik region - Akureyri; Poland – Warsaw, Mazowsze, especially on higher education). The capitals concentrate services, which functions as an attractiveness factor for them. Tertiary education seems to be a push factor for migration. This migration is fostered by the desire to attain a good higher

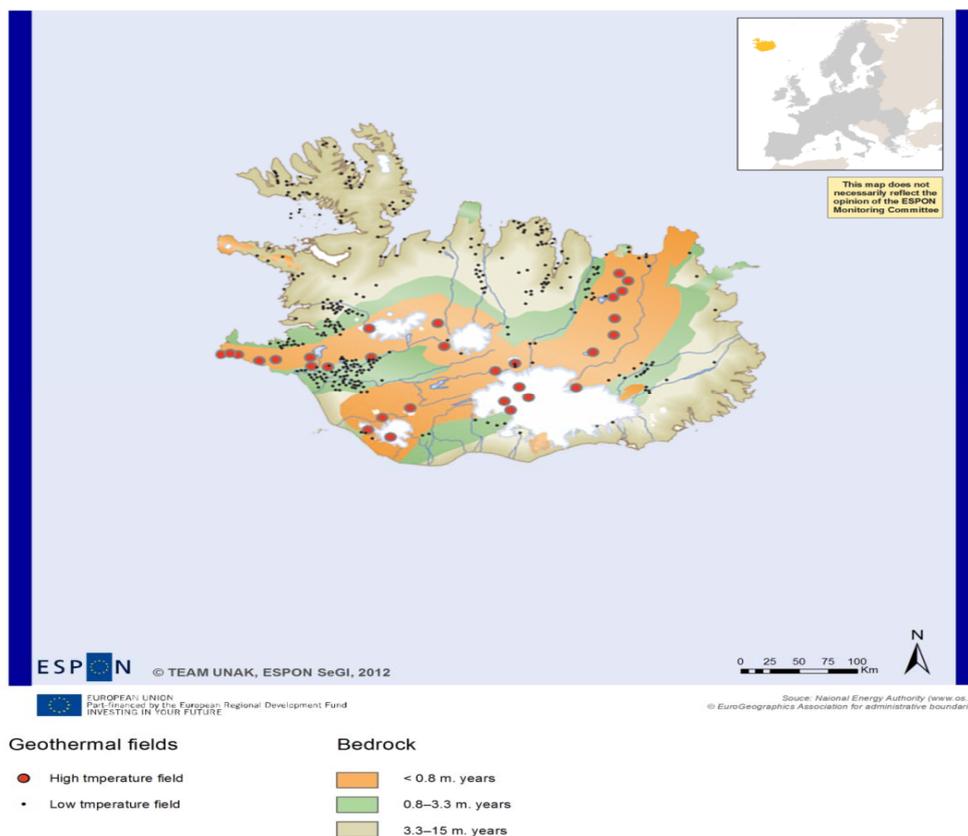
education and is related to the lack of qualified jobs in the migrant's home country/region for those who obtained a university degree, as observed in the Austrian and Polish case studies.

Transport services in less profitable areas are often subsidised by local municipalities, although this is usually the case only for large urban areas and their surroundings rather than for rural and remote areas (Warsaw public transport; Gloucestershire bus operators subsidised by local authority budget). In South Gloucestershire (UK) a programme for affordability helps disadvantaged segments of the community to use public transport providing tickets within a privatised system.

Transport is a SGI that also provides connectivity to social services of general interest. Beyond agglomerations, where public transport is a very important means of transportation, the organisation and financing of public transport is rather difficult. Transportation by car (on the individual level) is of high importance and in some rural areas (Austria, Poland, Iceland, Spain, Hungary), an integrated system of busses and/or trains or complementary transport solutions (e.g. car sharing) is rare and/or absent completely. The lack of alternatives to cars is often described as one of the biggest challenges for peripheral regions in general.

Map 14: Geothermal sources in Iceland

Geothermal fields



The current economic crisis has directly influenced the functioning of various services. In Iceland it provoked major cuts in the maintenance of the road network and in healthcare services. In Spain, a need to develop new ways of financing housing emerged. While families still preferred to own a house rather than to rent it in the market, fewer could actually afford it. Innovations in relation to the provision of dwellings have now emerged in the form of cooperatives, renting systems, municipal housing and others.

Liberalisation however also has also its downsides, especially in terms of price and the availability of services (e.g. in Iceland – postal and Internet services; in Poland and Austria – postal services). Some of these issues are however mitigated through the adoption of innovative answers, such as organising ‘post partner offices’ institutions which provide postal services in places where the traditional post office was closed (Austria).

Geothermal energy allows cheaper access to energy (hot water, electric energy, heating systems, cooking etc.,) for those living within a certain distance of the facility. It is an environmentally clean energy source; however conditioned to the location of the geothermal grid, making its affordability territorially sensitive (Hungary and Iceland – cf. map 14). The provision of hot water encounters the same accessibility barrier for those living at some distance from the plant, though in Iceland hot water is distributed up to 63 km, a relatively long distance.

6.3.4 Quality

Areas with lower population density in general present a trade-off between quality and availability of services. In order to improve the quality, the centralisation of service provision (e.g. education, health service, as in the examples of Poland, Romania and Iceland) is often promoted.

Moreover, the global economic crisis had also had an influence on the quality of SGI, by forcing a change in management, primarily to take into account major factors such as demographic decline and the shortage of public resources for investment and service improvements. A new pattern often has to be adopted by the local public administration. This could include discussing and introducing new standards (like minimum values for the provision of SGI, as in Austria), or general guidelines and regulations about the provision of services (in several of the studied countries, e.g. Austria, Poland, Romania).

Deficiencies in transport infrastructure are characteristic of less developed regions (new accession countries, Poland, Romania) or remote areas (Iceland, Norway). In these same countries, the lack of social infrastructure is largely of a qualitative dimension, rather than a quantitative and/or spatial one. However there are regions where interventions seem to be needed in all of the above-mentioned spheres (north-eastern Romania, north-eastern part of Mazowsze region Poland).

The principles of sustainable development for energy, sanitation, and the environment are taken into account in service provision. This paradigm is followed in various areas like transport (sustainable solutions such as the idea of implementing electric mobility as transport alternative in Austria, use of

alternative sources of energy in Iceland and Hungary, but also improvements in sanitation infrastructures in rural and remotely located areas in Poland and Romania). Inefficient public transport is improved by alternative solutions offered to inhabitants by local or regional authorities (e.g. car-sharing in the UK; Electro-cars and bikes in local and regional hub centres in Austria as an alternative for transport in less populated areas). Innovation in financing is also to be found here: the costs of such services are shared by a small number of interested partners (in Austria a local bus line is organised by five municipalities in an area with low population density).

6.4 Conclusions

The analysis of territorial patterns within the selected case studies made evident the main challenges facing the goal of a universalised provision of services of general interest. Such challenges generally relate to economic conditions and demographic settings. To clarify, areas with concentrated demand benefit from higher availability of SGI, which in such areas tend to be more accessible, with higher quality and more affordable due to economies of scale. Remote, mountainous, rural, and other regions with lower population densities have fewer services available. Often declining demand for such services is a result of depopulation and ageing. The findings indicate that a market liberalisation will not automatically improve accessibility and quality in such regions.

The disparities at the level of SGI provision in the studied countries and regions present a challenge for cohesion in the European Union. The use of contextualised local specific factors seems to be more appropriate than the implementation of universal solutions for overcoming constraints in the provision of SGIs in Europe and thus achieving a more cohesive picture throughout the EU.

Despite the diversity of regions, contexts and situations in respect of SGIs in the studied regions, the institutional system does not determine the quality of, or accessibility to, SGIs. There is an expectation of high quality services among EU citizens (Iceland, the UK, Austria). In addition, the impact of European laws and traditions (Iceland) and the adjustment of national laws to EU regulations (new EU countries such as Romania, Hungary, Poland but also 'old EU members' such as Spain and Austria) can be clearly observed.

Poor access to, and the low quality of, public services can be conditioned by accessibility or affordability. By definition, accessibility has a regional dimension; for affordability, this is not always the case but does often occur. At the regional level an overlapping of these phenomena may occur. Moreover, poor accessibility may be due to deficiencies in social infrastructure (the network of specified institutions or establishments providing a certain quality of services is too small, such as, for instance, in relation to medical services), transport infrastructure (or ICT, lack of connectivity infrastructure in relation to superfast broadband etc.) as well as the organisation of public transport (the ability to reach specific social groups). This effectively determines (territorialises) recommendations for social policy and other related sectoral policies.

7. Organisational and territorial SGI typologies

In this chapter, national policy approaches as well as distinctive regionalised patterns of Social Services of General Interest and Services of General Economic Interest in Europe will be outlined. The aim is twofold. First, politico-territorial structures and forms of organisation in terms of SGI are viewed as central in order to provide a comparative view of the different policy approaches that shape SGI provision. Secondly, evidence of regional patterns in various domains of SGI will be explored in order to detect the territorial disparities in the ESPON space. Three typologies on NUTS2 level in the domains of SSGI (with a focus on educational and health care SGI) and SGEI (with a focus on mobility and communication SGI) will be presented and later aggregated to a grand regional typology on SGI.

7.1 A typology of the politico-territorial organisation of SSGI

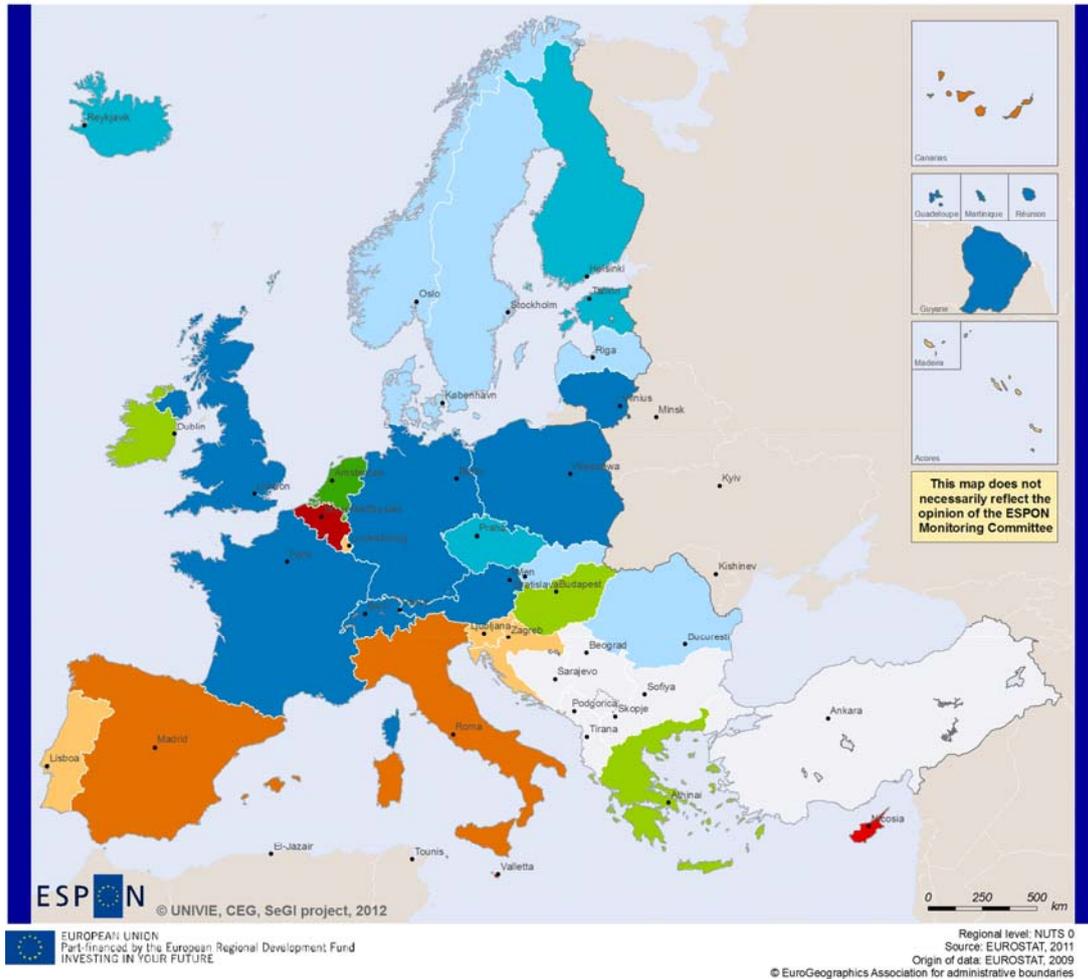
The approaches and practices adopted within the ESPON countries differ significantly when it comes to organising SGI. This is true especially for Social SGI, where national approaches vary significantly since there is – in contrast to SGEI – no shared responsibility between member state and EU level. The nine key SSGI chosen for this analysis are derived from William Beveridge's five social pillars that make up a welfare system: education, health and care, labour market, social transfer schemes and social housing.

Irrespective of the kind of SSGI, four central attributes have been identified that together form a profile of SGI organisation. Two of them derive from the administrative-planning system of a state. This is (1) the level of responsibility over SGI. The national, regional or local level of government can each take the lead – or in case of missing public responsibility it is the individual level. Also, (2) the degree of territorial planning over SGI impacts on SGI organisation and it often makes a difference whether planning over SGI affairs is explicit, implicit or completely absent. The other two attributes derive from the social welfare model of a state; i.e. which sphere of market, state or society is (3) mainly producing SGI and which of these spheres is (4) mainly financing SGI.

Based on an expert survey, a hierarchical cluster analysis over this 3-dimensional information (30 NUTS0, 9 SSGI, 4 attributes) resulted in a typology with three macro types and in total nine types. Macro-cluster 1 comprises mainly Southern countries (T11: HR, LU, PT, SI; T12: ES, IT; T13: CY, MT; T14: BE). Macro-cluster 2 is set up by Central, Western and Northern countries (T21: DK, LV, NO, RO, SE, SK; T22: CZ, EE, FI, IS; T23: AT, CH, DE, FR, LT, PL, UK) with somewhere in-between macro-cluster 3 consisting of four countries (T31: GR, HU, IE; T32: NL).

Map 15: Politico-territorial types of SSGI organisation

Politico-territorial types of SSGI organization



Types of SSGI organization

	11 - national-local, only public or non-public, no planning		MC1 - weak public presence with lack of planning
	12 - regional, mainly public or non-public, no planning		
	13 - national, mainly public, no planning		
	14 - regional, non-profit, implicit planning		
	21 - local, strong public, quite explicit planning		MC2 - sub-rational based with strong public presence
	22 - national-local, strong public, no planning		
	23 - regional-local, strong public, quite explicit planning		
	31 - national, mainly public or non-public, implicit planning		MC3 - national based with private involvement
	32 - national-individual, only public or non-public, implicit planning		
	No data		

The 'traditional' welfare and planning types of countries are often reflected in the resulting SSGI clusters. Macro-cluster 2 comprises Esping-Anderson's three welfare models: the Continental (AT, DE, FR) and Nordic model (DK, NO, SE)

which are both part of the comprehensive integrated planning approach as well as the UK. Most striking is the absence of a distinctive East European cluster. Instead, New EU Member States cluster into various types of macro-cluster 2. This leads to the interpretation that in the process of transition, the East European states adopted the Continental and particularly the Unitarian structured Nordic systems as examples instead of inventing their own approaches. A further conclusion relates to the tendency towards convergence of and learning between the main UK, Continental and Nordic models which can be also interpreted from the results of macro-cluster 2. The Mediterranean countries form a fairly separate grouping or type – only the special cases of LU and BE are also attached to this cluster. Countries of macro-cluster 3 are basically the well-known (in the literature) hybrid systems (like GR or NL).

7.2. Regional typologies of SGEI and SSGI

After having analysed the political prerequisites of SGI organisation, in this chapter evidence of aggregated patterns of SGI on a regional scale (NUTS2) and in a European comparison are presented. A list of useful SGI provision and output indicators as well as SGI input in terms of public expenditures provides the starting point for three regional typologies on economic SGI, educational SGI and healthcare SGI. In an aggregation step, a typology of social SGI, based on the educational and healthcare SGI typology, is calculated while in a final aggregation step a combined typology of economic and social SGI is formed to build an overall regional typology of Services of General Interest. The following table provides an overview of the created typologies with their indicators in the background.

For methodological reasons, only indicators without null-values of the, in total, 286 NUTS2 regions could be taken on board in this study – this is the ESPON space minus Liechtenstein, primarily due to data issues. Besides the limitation in respect of data availability, the chosen background indicators are of good explanatory value and of high representativeness in their respective fields of SGI. Each regional typology is further supported by an input indicator concerning public financing of the respective field of SGI. This corrective makes the typologies more solid in a way that the performance level of SGI finds entry into the analyses. In order to allow for a comparative analysis and interpretation, the background indicators have been standardised into Z-scores; i.e. their original values were recalculated into distance values from the European average. Therefore, all regional typologies presented below do not show 'good' or 'bad' performances of regions *per se* but rather their performance in a relative context with the European average.

Table 2: Background SGI indicators for regional typologies

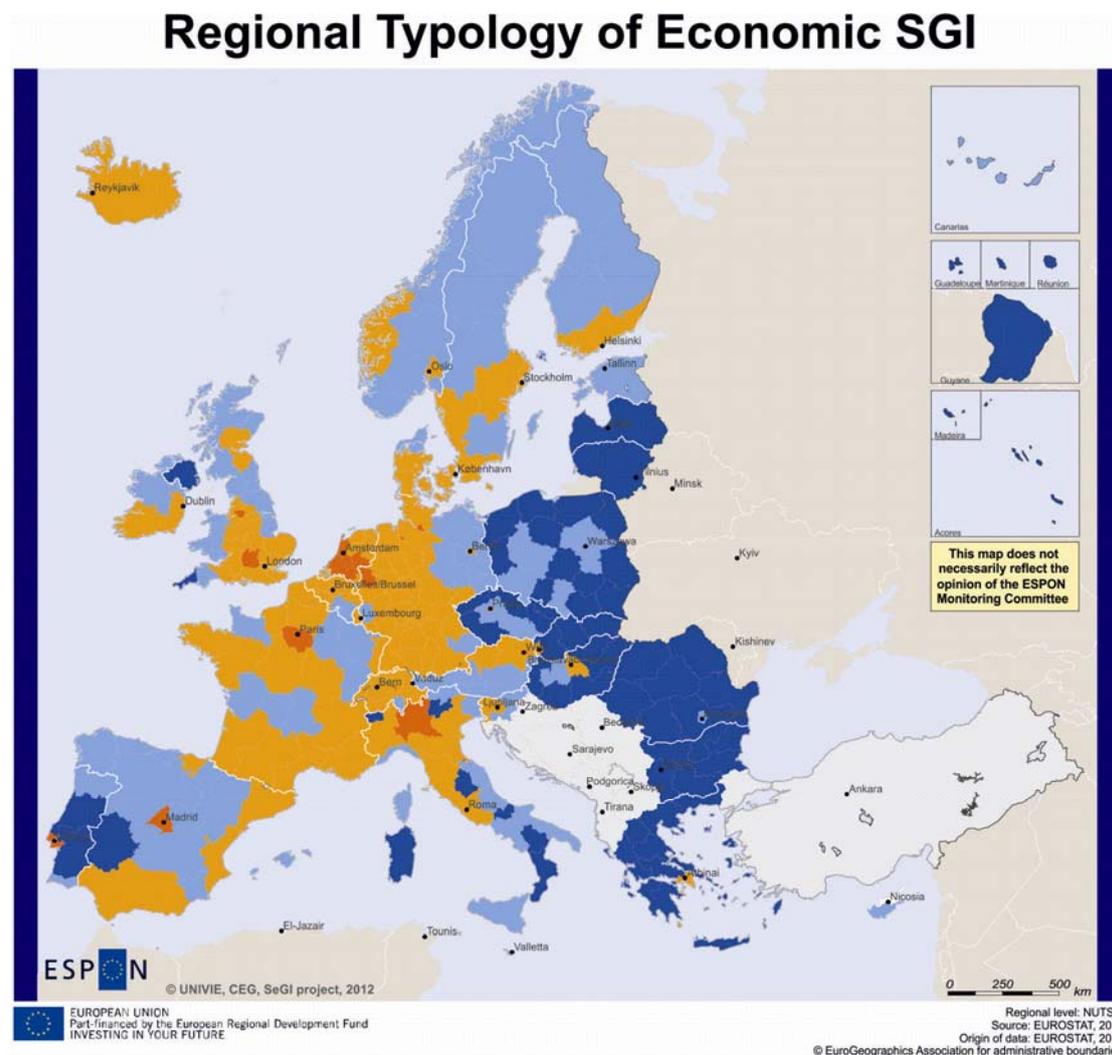
Typologies	Representative fields	Background SGI indicators on NUTS2 level
Economic SGI (SGEI)	High ranked transport infrastructure	Length of motorways in km per 1.000 km ² in 2009
	High quality ICT infrastructure	Percentage of households with access to broadband in 2010
	Vital business surrounding	Persons employed per 100.000 inh. in PR and consultancy in 2009
	Public finance	National public expenditures on economic affairs per inh. in 2009
Educational SGI	Attainment of lower education	Students in pre-primary edu. per 100 inh. of resp. age-group in 2009
	Attainment of higher education	Students in upper secondary edu. per 100 inh. of resp. age-group in 2009
	Attainment of tertiary education	Students in tertiary edu. per 100 inh. of resp. age-group in 2009
	Public finance	National public expenditures on education per inh. in 2009
Health care SGI	Availability of main health care treatment	Available hospital beds per 100.000 inh. in 2008
	Availability of first aid treatment	Physician and doctors per 100.000 inh. in 2008
	Availability of care treatment	Professional nurses and midwives per 100.000 inh. in 2008
	Public finance	National public expenditures on health care per inh. in 2009
Social SGI (SSGI) <i>aggregated</i>	Educational SGI	Additive Z-scores of 4 educational SGI indicators (half weighted)
	Health Care SGI	Additive Z-scores of 4 health care SGI indicators (half weighted)
SGI <i>aggregated</i>	Economic SGI	Additive Z-scores of 4 economic SGI indicators
	Social SGI	Additive Z-scores of education and health care SGI typologies

The regional typology on Services of General Economic Interest is based upon three SGI indicators on transport, mobility and communication. High ranked transport and high quality ICT infrastructure as well as a communicative business surroundings are taken into account to express the relative performance of European NUTS2 regions for SGEI. These chosen SGI are characterised by supporting the basic needs of businesses and enterprises and enabling sound market conditions in terms of production and delivery from the supply side and also the required conditions for demand from the user-side. In short, they are of key importance in establishing and running a business and interacting on the market.

On European scale, Western countries show a relatively better performance on economic SGI while in the new EU member states only a few Central European capital regions are above average (Prague, Bratislava, Budapest). On a regional level, it is generally rather the metropolitan areas that score higher. Most countries show a pattern that capital regions are ranked higher than other regions – most obviously in the geographically outer rim of EU like in Finland, Sweden, Norway and UK and the Southern countries Spain, Portugal and Greece. In some cases (like Berlin or Lisbon) there is even a gravity effect in terms of lowest national performance for the neighbouring regions of the capitals. The territorial type of islands is below European average since infrastructures of high connectivity and wide operating range like motorways are delimited on these territories. The hypothesis that SGI for businesses ‘follow’ their costumers is more likely in this respect than assuming a ‘trailblazer’ role of these SGI. It means that

regions of high economic power also trigger and foster enhancement of economic SGI.

Map 16: Regional Typology of Economic SGI (SGEI)



Types of regions

- Far below average
- Slightly below average
- Slightly above average
- Far above average
- No data

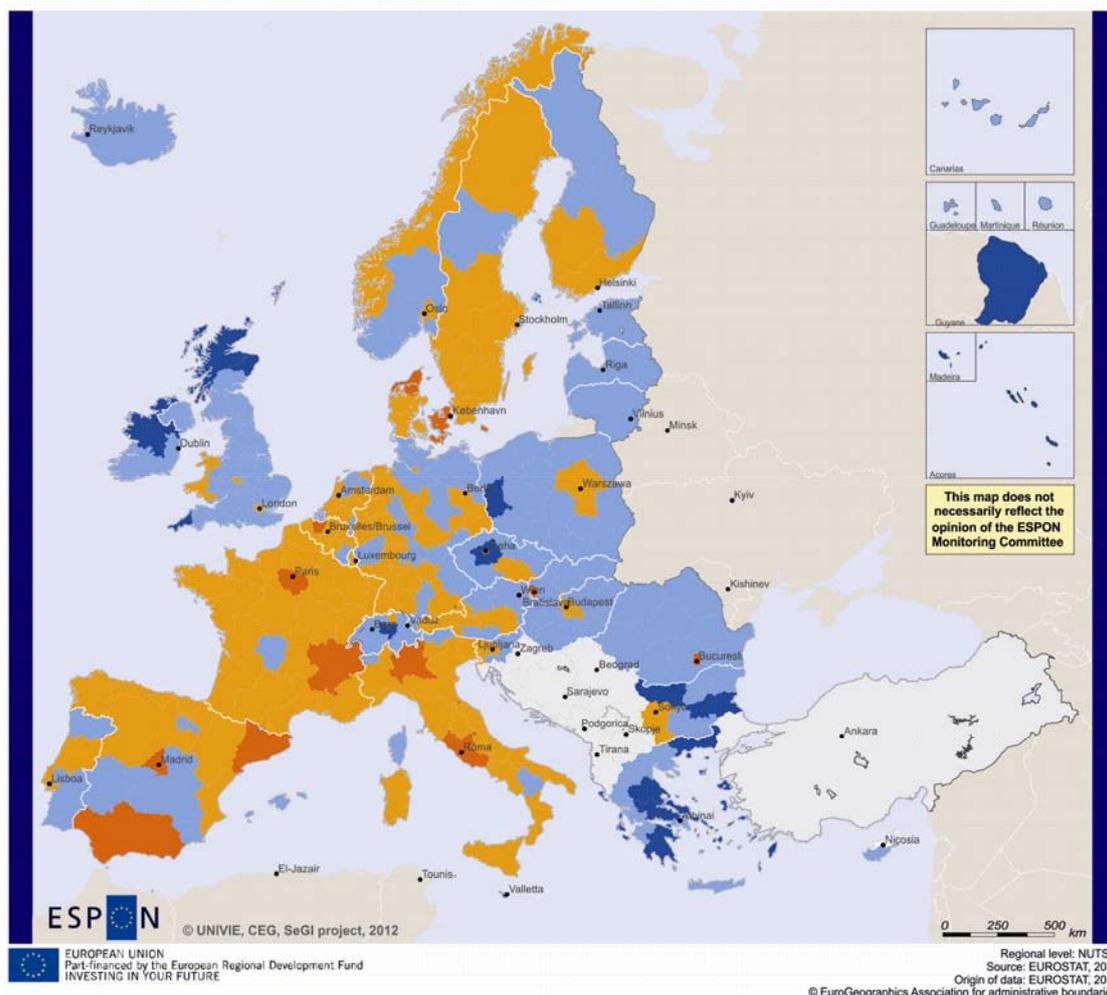
with use of the following indicators:

1. Length of motorways in km per 1.000 km² in 2009
2. Percentage of households with access to broadband in 2010
3. Persons employed per 100.000 inh. in PR and consultancy in 2009
4. National public expenditures on economic affairs per inh. in 2009

In the next regional typology, SGI of education is built on its output which is represented by enrolment figures in non-compulsory schooling of pre-primary, upper-secondary and tertiary education. While attainment rates of compulsory schooling would provide an anyway foreseeable result, a focus on non-compulsory schooling allows a better evaluation of education SGI in terms of their attractiveness.

Map 17: Regional Typology of Educational SGI

Regional Typology of Educational SGI



Types of regions

- Far below average
- Slightly below average
- Slightly above average
- Far above average
- No data

with use of the following indicators:

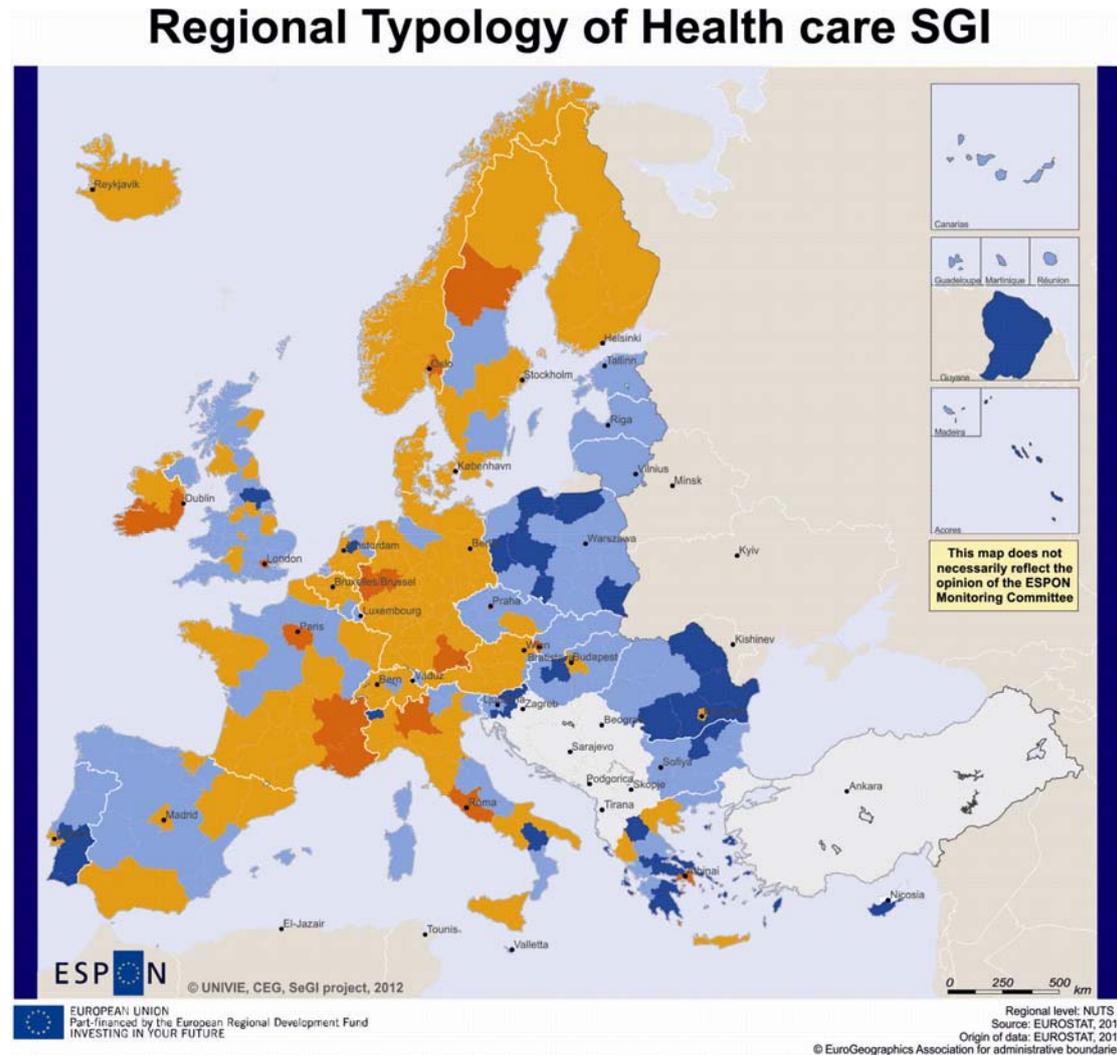
1. Students in pre-primary edu. per 100 inh. of resp. age-group in 2009
2. Students in upper secondary edu. per 100 inh. of resp. age-group in 2009
3. Students in tertiary edu. per 100 inh. of resp. age-group in 2009
4. National public expenditures on education per inh. in 2009

Due to in-homogenous definition of what is understood by upper-secondary level, this indicator was weighted only with 0.5. The total picture shows best scores for Northern and South-Western countries. In detail, it is more heterogeneous. Some countries have very high enrolment in only one field – e.g. Romania, Hungary and Germany in pre-primary schooling and Greece, Poland, Lithuania and Iceland in tertiary enrolment. Capital regions are again rather favoured (esp. due to scores in tertiary enrolment) but the national heterogeneity is comparably low in most states what allows an argumentation of educational SGI being rather immune on different types of territories and instead rather fair distributed. Even on European scale, a moderate deviation from the overall average can be stated; i.e. there are only a few regions that are far below or far above average.

For the regional typology on SGI of health care, indicators representing the three most important parts in terms of availability of health care go into the analysis.

This is a representation of main health care (number of hospital beds), first aid (number of doctors) and care services (number of nurses). Even the different approaches in national health care policies produce different patterns of these three indicators, the combined picture allows an international comparison.

Map 18: Regional Typology of Health care SGI



Types of regions

- Far below average
- Slightly below average
- Slightly above average
- Far above average
- No data

with use of the following indicators:

1. Available hospital beds per 100.000 inh. in 2008
2. Physician and doctors per 100.000 inh. in 2008
3. Professional nurses and midwives per 100.000 inh. in 2008
4. National public expenditures on health care per inh. in 2009

The number of hospital beds per inhabitants is quite a difficult indicator though and highly depends on the state of development and focus on in- or out-patients' treatment policies. Therefore this indicator went into the analysis with only 0.5 of its weight. The European wide analysis declares the Northern, Central-western and Alpine regions as having relatively best availability of health care; additionally, Ireland and some capital regions in South-eastern Europe

(Bratislava, Budapest, Bucharest and Athens) have to be mentioned as well. The vast majority of East European regions is below or in more rural regions even far below European average. With a national scope, most states have a high diversity within their NUTSO boundaries. East-European and Iberian countries have highest number of hospital beds per inhabitants but a fairly poor availability of first aid and care services.

While the each three indicators together allow a comprehensive expression of the situation for economic, educational and health care SGI, the fourth indicator (on public expenditures) that is integrated in each of the three typologies is representing the input and efforts taken in a field of SGI and has not yet been discussed explicitly. In all cases, the amount of public money spent per inhabitant is basically higher in EU15 than in the new EU-Member States, which on first sight seems to bias the typology. But given the fact that high investments in fields of SGI should lead to generally better availability and performance, this input-side in the systems of SGI provision has to be reckoned in regional typologies. With representing 1 of 4 chosen indicators it is reckoned at least with a minor influence.

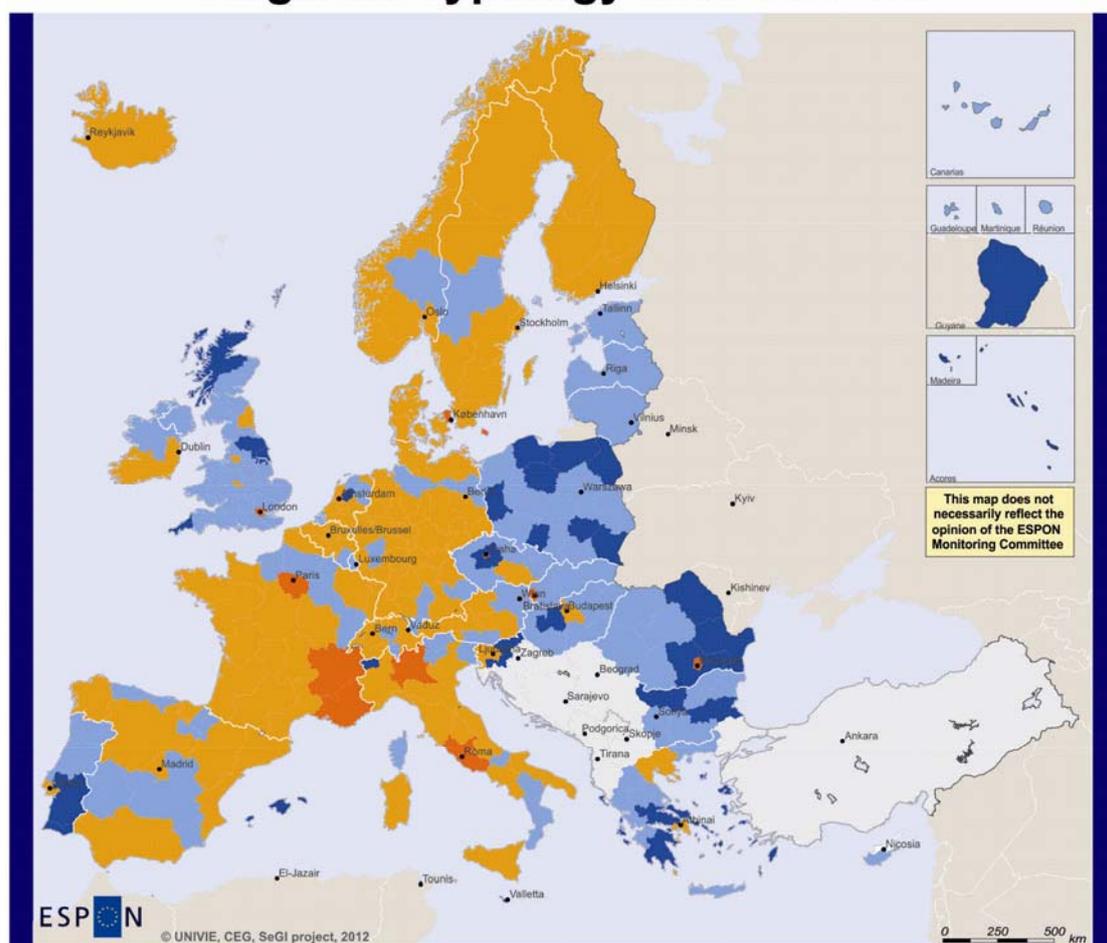
Also when disregarding the financial indicator for a moment, a general picture of comprehensive SGI provision identifies the Northern as well as the Central-western and South-western countries as better equipped in social services of general interest (education and health care) while not really surprisingly the 'Pentagon'-regions and few more capital regions do best in economic SGI. Aggregated typologies will help to further elaborate on the regional situation of SGI availability. Thereby, the typologies of educational and health care SGI will be aggregated together into a new social SGI typology. In a last step, this created social SGI typology will be added with the economic SGI typology to one grand regional typology on Services of General Interest.

The two typologies on educational and health care SGI that have been used to build up an aggregated typology of Social SGI show a rather similar picture. As expected, the aggregated typology is easing the values for some regions which are relatively well-off in one part but rather behind European average in the other part. Still, a correlation of 0.61 describes a generally strong positive linkage between the level of provision in educational and in health care SGI. The NUTS2 regions of Ireland show the most heterogeneous picture with educational SGI below or far below average but health care SGI above or even far above average. Otherwise, NUTS2 regions' tendencies towards the European average are fairly similar in both underlying typologies. Taking this into account, the regional typology of social SGI points out a few regions far above average in Italy, France and around national capital cities (like London, Copenhagen, Prague, Vienna, Bratislava and Bucharest). Regions far below European average in a combined view on the domains of social SGI are mostly located in East and South Europe. Peripheral regions of e.g. Poland, Romania, Bulgaria, Greece and Portugal are complemented with coastal regions in the UK. A group of states in the North (except of Copenhagen) and Baltic area as well as Germany, Switzerland, Ireland and Spain is special in respect of a missing of any far below or far above average

scoring region in domains of social SGI. In opposition, the UK, Italy, Czech Republic and Romania contain regions of the full range between far below and far above European average.

Map 19: Regional Typology of Social SGI

Regional Typology of Social SGI



ESPON
 © UNIVIE, CEG, SeGI project, 2012
 EUROPEAN UNION
 Part-financed by the European Regional Development Fund
 INVESTING IN YOUR FUTURE
 Regional level: NUTS 2
 Source: EUROSTAT, 2012
 Origin of data: EUROSTAT, 2012
 © EuroGeographics Association for administrative boundaries

Types of regions

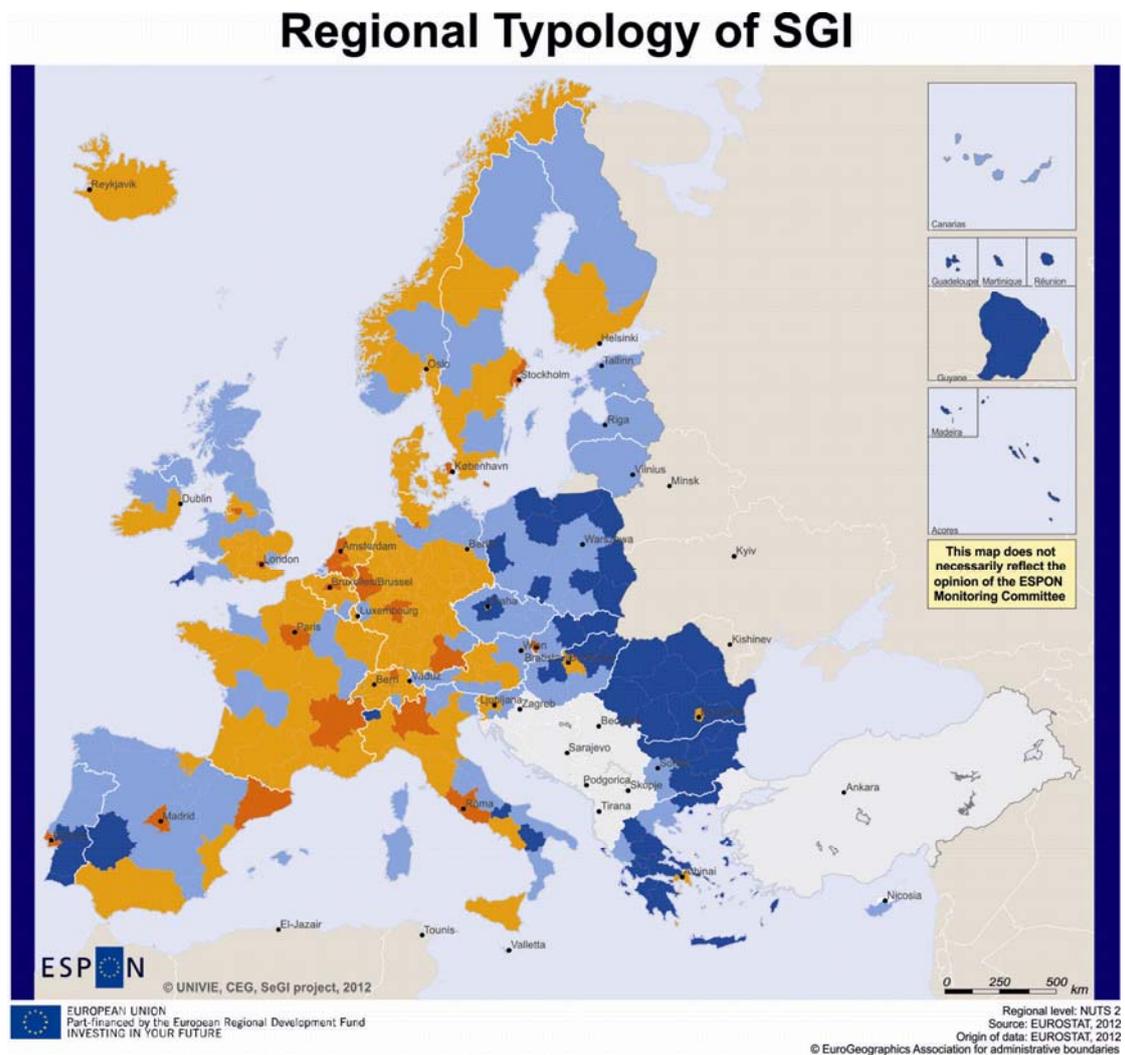
- Far below average
- Slightly below average
- Slightly above average
- Far above average
- No data

with use of the following indicators:

1. Students in pre-primary edu. per 100 inh. of resp. age-group in 2009
2. Students in upper secondary edu. per 100 inh. of resp. age-group in 2009
3. Students in tertiary edu. per 100 inh. of resp. age-group in 2009
4. National public expenditures on education per inh. in 2009
5. Available hospital beds per 100.000 inh. in 2008
6. Physician and doctors per 100.000 inh. in 2008
7. Professional nurses and midwives per 100.000 inh. in 2008
8. National public expenditures on health care per inh. in 2009

On basis of this aggregated typology of social SGI plus the above presented typology on economic SGI, in a final step a grand aggregated regional typology on SGI has been formed. Respecting the limitations of such a multi-step aggregated and statistically transformed result, this last regional typology allows only interpretation on a very general scale and is meant to give a broad European picture.

Map 20: Regional Typology of Services of General Interest



Types of regions

- Far below average
- Slightly below average
- Slightly above average
- Far above average
- No data

with use of the following indicators:

1. Length of motorways in km per 1.000 km² in 2009
2. Percentage of households with access to broadband in 2010
3. Persons employed per 100.000 inh. in PR and consultancy in 2009
4. National public expenditures on economic affairs per inh. in 2009
5. Students in pre-primary edu. per 100 inh. of resp. age-group in 2009
6. Students in upper secondary edu. per 100 inh. of resp. age-group in 2009
7. Students in tertiary edu. per 100 inh. of resp. age-group in 2009
8. National public expenditures on education per inh. in 2009
9. Available hospital beds per 100.000 inh. in 2008
10. Physician and doctors per 100.000 inh. in 2008
11. Professional nurses and midwives per 100.000 inh. in 2008
12. National public expenditures on health care per inh. in 2009

If on beforehand a rather eased picture of European regional pattern of SGI was expected due to this broad typology, the result has to be put in another light. A combined view on economic and social SGI shows a quite wide range of far below to far above average situated NUTS2 regions. So, it's rather the case that the values for SGEI and SSGI reinforce each other; a positive correlation of 0.619 confirms this. This trend is to the better of urban and metropolitan regions (as e.g. Stockholm, Lisbon, Madrid, Catalonia, Rome and the pentagon-regions). Continental Western European regions are mostly above European average while

the regions of some East European states are nearly all far below average; this counts especially for EU-external border regions.

7.3 Conclusions

The overall regional typology of SGI shows rather moderate correlation with population density (0.364) but stronger one with the share of rural areas within the NUTS2 regions (-0.480). Even stronger than the demographic or territorial trends, the regional typology on SGI is correlating with GDP per capita (0.688). This analysis confirms empirically the trends that concerning the European average: SGI provision of a region is (1) the better, the higher the population density, (2) the worse, the higher the share of rural areas and most importantly (3) the higher the financial possibilities in terms of GDP per capita.

This twofold approach towards on the one hand political aspects of SSGI organization and on the other hand regional territorial 'realities' of SGI provision furthermore lead to one important conclusion. The qualitative aspect (the HOW) of organizing SGI is not really the decisive factor upon the quantitative (the HOW MUCH) of SGI provision in Europe; a pro-argument for the in detail divers approaches of European States. Betterment of SGI provision instead rather goes hand in hand with fortunate demographic-territorial and financial potentials.

8. Future Perspectives

8.1. Three explorative scenarios

'Competitive Europe' is a market-oriented development scenario where the role of the public service sector is quite limited. Europe is globally committed and adjusts its trade policies to open up even more to the world market. As a consequence European economies give less attention to the level of internal demand while significant efforts are made to promote innovation and efficiency in production efforts at the global scale. Population and its demographic structure is the decisive production factor. With regards to migration, competitiveness leads to more or less free movement. People may live in other countries, work in different areas and move across Europe almost without restriction. Societal needs are regarded as having a much reduced significance. Most importantly, society's task is viewed, primarily, as supporting the market-oriented framework.

European integration is reinforced as a measure to strengthen competitiveness *vis-a-vis* other parts of the world. Most of the Member States support and join the traditional EU framework especially on issues related to the single market, trade, research and development and measures to promote growth. The EU adopts a development model that prioritises innovation and specialised education as the main approaches to achieving competitiveness. Environmental issues are regarded as important not only due to increasing global climate challenges but also as a profitable strategic lever that strengthens the European position within the global economy. Nevertheless, this environmental view is not supported by modern post-industrial lifestyles characterised by high personal mobility and high consumption rates of energy and resources.

A competitive Europe allocates to the market the main role of providing SGI. The state only intervenes in circumstances of market failure or disinterest. As the market dictates the rules individuals are not empowered to actively engage in SGI provision. This market-driven model of provision however overlooks the social aspects of service provision as, in a fully functioning market economy, there are no subsidies to make the cost of SGI more affordable to potential users while the market is instead entrusted with functioning in such a way as to provide competitive and therefore affordable prices; hence the users must be assumed to be able to pay the full price of the services provided. People who cannot afford certain SGI are thus excluded from consumption and have to create substitutionally-based SGI via informal schemes.

With regard to the provision of SSGI this scenario entails means-tested assistance, or modest social insurance systems. Benefits cater mainly to a low income clientele. In this model the progress of social reform has been severely circumscribed by traditional, liberal work-ethic norms: it is one where the limits of welfare equal the marginal propensity to opt for welfare instead of work. Entitlement rules are therefore strict and often associated with stigma; benefits are typically modest. In turn the state encourages the market, either passively – by guaranteeing only a minimum – or actively – by subsidising private welfare

schemes. Higher education, innovation and research are the strategies used to encourage growth. Higher education is very much based on the triple helix model in which the universities, industry and government cooperate with a view to fulfilling market demands. Therefore research and innovation is mostly driven by market needs. Nevertheless the same efforts and investments do not apply to basic education.

In this scenario SGEI are allocated a greater importance than SSGI. ICT services and transportation are placed at the top of the EU agenda and are viewed as a means to endorse efficiency in communication and in the circulation of flows (individuals, capital, information, etc..) while also promoting a frictionless mobility as the best strategy to reinforce the internal market and support the economic interaction of Europe with other parts of the world.

The concentration of firm ownership to a large extent drives the availability and quality of services at the individual level since one of the factors that prevails in terms of enterprises' location choice is the disposal of 'good life' conditions for their employees. It shapes the European territory differently particularly as the market invests depending on the prospects of profit, i.e. an SGI with a high prospect of generating profit will be attractive for investment and *vice versa* which results in the exclusion of peripheral areas since the prospects for profit-making are partly dependent on the demand for the SGI in question; a long term and stable, or increasing, level of demand is needed. The size of the market, i.e. how many users live in relatively close proximity and/or have a good level of accessibility to such services where they are 'delivered' is thus of great importance.

As the demand for SGI is met predominantly by the market rather than by the public sector, in declining regions it is likely, however, to be more difficult to address the demand for services as public interventions are more limited and private services are not as profitable to deliver as in prosperous regions. In prosperous regions private services are more cost-effective because of economies of scale, deregulation and the increased demand for services, not only concerning SGEI but also, for example, in respect of both health and child care. As a consequence of these divergent policy actions regional inequalities will be even more accentuated than they are currently. This holds true in general terms for economic development, labour market conditions, educational activities and general service supply. These imbalances will also foster the underlying divergent tendencies between the regions in the ESPON space.

The 'Social Europe' scenario is a reaction to the ideology of competition, individualism and the breakdown of traditional social ties. A fundamental change in terms of values takes place in Europe towards support for solidarity, equality and social justice rather than competition. In order to minimise the damages of market liberalisation and deregulation, the state places the economy in a more rigorously constrained and regulated environment. Consequently the European economies become rather disconnected from global market processes and innovations and focus more on internal demand. The state takes responsibility for

a demographically functioning society. Rather than tolerate the dualism between state and market, a welfare state is pursued to promote equal standards. People in employment age sustain younger and older age groups; the same rationale sees the well-off parts of the population 'help' those with more limited means. The 'Social Europe' scenario experiences a family-friendly welfare policy which has a positive impact on fertility development with a growing population experienced in many regions. This positive population development is a consequence of the combination of a decline in mortality and a rise in fertility rather less than of immigration. A general ageing of society is then a dependent of combinations of these factors.

Robustly exercised state sovereignty restricts common global action. In consequence, relations between the Member States and the EU are weakened as individual polities focus more on their internal market and do not share common interests. European level governance is massively downgraded in ambition as some Members States are unable to cope with the multilateral obligations and fiscal impacts of the global economic and financial crisis. As a strategy to safeguard individuals' basic living requirements environmental issues are addresses through the promotion of strict regulations on company and other enterprises' activities. Energy resources are exploited and distributed in a structured way, according to the population's and businesses' needs defined by the market.

In the 'Social Europe' scenario the public sector is the main provider of SGI. Universalism is the guiding principle for the state. SGI should be accessible, available and affordable to all users. In this state-dominated system the market plays a rather secondary role to society.

The state is the only actor, through the public sector, which can reallocate income and resources. In the SGI area the state can over-charge the users of a service in one kind of territory and under-charge users of the same service in another to level out provision costs and increase accessibility and affordability. The efficiency of financing SGI is a minor target and monetary turnovers – taxation, subsidies and re-distribution – are high. The focus is on the internal market to supply social demands instead of economic ones, as such, SSGI are highly prioritised. Education, health and social care are at the core of this 'social' Europe since these services ensure individuals' basic rights. The variety of SSGI is rather low though availability and accessibility is high.

With regard to SGEI large investments in infrastructure and networks can be made by the state as it has the required resources to make investments based upon the criteria of need and long-term benefits, rather than whether it will generate a monetary return in the short-term. Investments in transport are not intended to be profitable *per se* but to allow people to satisfy basic mobility and communication needs. ICT, the SGEI domain with the highest needs in terms of innovation and technical progress, is however developing rather slowly.

The focus in the 'Social Europe' scenario is to promote regional development and stimulate territorial cohesion. This is an indirect but positive effect the market

does not take into account when investing. Under this scenario cohesion policy is more focused on equalising regional development and therefore some counteraction in terms of regional imbalances is expected to reduce the burden on dynamic and prosperous regions. This will have a direct impact on the provision of SGI. The focus of territorial policies will be on declining regions facing the problems of ageing, unemployment and low labour force participation. In central regions the focus will be on SGI of higher centrality – such as higher education and specialised care services. In the ‘Social Europe’ scenario the public service sector will be able to address these challenges with a high level of monetary re-distribution while the market is involved only as a minor complementary factor in the provision of SGI. This situation will be most frequently faced in the expanding regions but in stagnating or declining regions individual or public solutions will be more frequent.

The emergence of the ‘Green Europe’ scenario comes about as a consequence of the failure of both ‘Competitive Europe’ and ‘Social Europe’ as neither was able to prevent serious negative ecological developments. So it is up to society to find alternative ways to organise. Europe has adopted a zero-growth policy as a way to reduce the pressure on environmental resources and to help the damaged environment recover. Social cooperation and local scale activity are the keywords here in terms of economic development. Economic and societal activities are intertwined rather than separated since society is viewed as an engine for the economy in terms of initiating and carrying out activities. Most goods and services are locally produced and consumed. Small businesses are the main employers, and are the providers and consumers of the goods and services that sustain the local economy. Local and regional production is also supported by bottom-up networked organisations that link producers and distributors into a system that helps to guarantee access to a variety of goods produced regionally. Innovation and information is spread informally and depends on the free networked organisations.

The limitation of environmental resources shapes individual lifestyles. Mutual help and life in harmony with nature has grown supported by family structure and social organisation in small communities. The progressively ageing population has become a social problem due to the declining number of people of actual working age. The policy response to this is to try to retain the older age generation as long as possible in the productive parts of society.

Local and social organisations are responsible for the provision and maintenance of SGI. These organisations emerge on the local level according to local demands; nevertheless they are linked to networks that support their development. Most SGI are managed within the context of community-based resources. Education and care are at least partly provided for on a family basis or through the work of voluntary associations. Other SSGI, such as housing or social transfer schemes are organised individually on a bottom-up basis, based on civic engagement but lack security of provision.

Specialised human resources are obtained in special centres located around Europe and not fair accessible by all people. In Europe there are few centres dedicated to research and innovation, especially to produce research on environmentally friendly ways of living. Nevertheless this type of service could be related to SSGI once it is provided and sustained by joint cooperation between different countries.

Including ICT, the demand for SGEI has generally declined. The development of information technology is based on high connectivity, transport networks and special materials. Societies instead have arranged themselves to become as independent as possible from ICT technologies. High energy prices had been counteracted with new forms of energy conservation and organisational arrangements. E.g. waste and sewage systems are mostly run and organised by local initiative groups without public authority involvement; similarly, public transport for intra-regional purposes is organised. However, territorial distances have become a severe obstacle.

The 'Green Europe' scenario will have the greatest impact on the network services connected to the Services of General Economic Interest (SGEI), which contains e.g. transport, electricity, ICT, water and waste-management. Alternative technology will play an important role here. In regards to these services peripheral, rural and remote regions (the "disadvantaged" regions) will witness increasing problems related to negotiating long distances and high transportation costs, which gives densely populated regions with better geographical location comparative advantages in organising SGI of high centrality. On the other hand, urban and metropolitan areas are in an unfavourable position in relation to the complexity of parallel bottom-up solutions for small-scales in a rather anonymous societal setting. In respect of SGI, European territories will be shaped very differently in accordance with the respective small-scale solutions devised autonomously in the regions.

Table 3: SGI, types of territory and the three scenarios

Scenario \ Type of territory	Densely / urban	Sparsely / peripheral
	'Competitive Europe'	 Dynamic/expanding
'Social Europe'	 'status quo'	 Promoted
'Green Europe'	 Unsustainable	 Sustainable/contextual

These three scenarios each produce different outcomes with regards to sparsely populated/peripheral regions. As the market is the main provider and the profit motive predominates in investment decisions in respect of services in 'competitive Europe', these regions are disadvantaged. On the other hand, the provision of services is, in relative terms, improved when the state takes responsibility for them. The 'Social Europe' scenario is the one that offers the best pre-conditions for this. In the 'Green Europe' scenario even though the provision of services is

better managed within small community structures it is still difficult to organise – SGI in peripheral areas and it depends to a large extent on varying regional prerequisites such as civic engagement and regional resources. Table 3 summarises the analysis concerning how the different types of territories perform in relation to the explorative scenarios.

8.2 A normative scenario

A starting point when constructing the normative scenario on a desirable future regarding the SGI is found in the Commission White Paper on SGI, which states that the policy ambition focuses on

“ensuring the provision of [...] services of general interest to all citizens and enterprises in the European Union. [...] Citizens and businesses rightly expect to have access to affordable high-quality services of general interest throughout the European Union. For the citizens of the European Union this access is an essential component of European citizenship and necessary in order to allow them to fully enjoy their fundamental rights. For enterprises, the availability of high-quality services of general interest is an indispensable prerequisite for a competitive business environment” (European Commission 2004).

Empirical evidence presented in the case studies suggests that demography and economy are the key determinants of SGI. A declining number of inhabitants in rural areas create a considerable uncertainty of how the provision of services in these areas can be maintained. The findings also show that economic crises result in cutbacks in the provision and maintenance of SGI. Some types of territories experience obvious problems regarding the accessibility of SGI: remote, sparsely populated, mountainous, insular and outmost regions show clear concentration tendencies towards major towns and city agglomerations.

A shrinking population base for most services of general interest mean higher costs per remaining inhabitant and a weaker tax base; it is not a sustainable strategy for local authorities to subsidise the provision of SGI in disadvantaged regions. Neither the market (lack of profit) nor the social economy (lack of resources) can provide the necessary resources to reach the Commission White Paper on SGI. Only national governments and the EU have such resources.

Which policies, processes and programs can be identified to take us to the desirable future? EU can – through e.g. the regional development fund and the structural fund – do vital investments in regions suffering from a weak economic structure as well as a population decline in the areas of Services of General Economic Interest and, eventually, in Other Services of General Interest. Regarding the area of Social Services of General Interest the main responsibility has so far been of national governments to ensure a minimum provision of these services in economically and demographically disadvantaged regions.

The present financial crisis has however deprived several countries the possibility of even uphold the present provision of Social Services of General Interest;

several countries have experienced, and more countries will experience, significant cut-backs in the provision of Social Services of General Interest – not only in already disadvantaged regions, but in all regions.

If the national governments cannot uphold and guarantee a minimum provision of Social Services of General Interest, who can? To a minor extent non-government and non-profit organisations can play a role, but not a major role as they lack the needed economic resources. Without prospects of profit the market will not act in this case. It is more likely that e.g. the European Social Fund, i.e. the EU, could play a very important role to uphold Social Services of General Interest in economically and demographically disadvantaged regions if the national governments due to financial problems are unable to do so.

Without economic support many economically and demographically disadvantaged regions may become even more disadvantaged as a consequence of the budget cut-backs needed to manage the financial crisis. This development is sharply in contrast to the policy ambitions found in EUROPE 2020 and the Territorial Agenda. It is obvious that several EU member countries will not have the needed economic resources to implement these policies. This threatens the achievement of the desired future described in the Commission White Paper on SGI.

9. Policies and governance of SGI

The prime objective of the SeGI project is to address the identified need to support policy formation at all levels of governance, and in respect of all types of territories for the effective delivery of SGI throughout Europe. In this regard options for policy development form a basis for recommendations in relation to future Cohesion policy.

Services of general interest (SGI) are a key element in European society. Their role is important for the quality of life for all citizens; they are drivers of the economy and influence the production of goods and services. The efficiency and quality of the services are essential for the competitiveness and cohesion of society as well as overcoming social exclusion.

This report on policy and governance responds to the requirement to define robust policy options that recognise the essential importance of SGI's for European economic socio-economic and environmental development. Policy options are elaborated here in relation to SeGI scenarios concerning Competitive, Social and Green Europe, cross-referenced to more detailed specifications in the Scientific Report (page xx).

9.1 SGI Policy design framework

Key drivers of change including global and more local drivers shape the evolution of SGI's and their differential territorial specification as mediated by political priorities at European, member state and regional levels. The SeGI case study, typology and scenarios analysis has provided critical evidence of the impact of the drivers of change on the current development of SGI's as well as their future development.

This evidence forms part of the framework of policy design principles that are central to the analysis necessary for the specification and targeting of policy options. The overall goal is to ensure that robust policy options are generated that can address the inherent complexities surrounding SGI, including the various modes of production and delivery of SGI, as well as the variety of political and administrative governance systems that impinge on how, where and whether SGI are delivered.

9.2 Policy Principles

SeGI Policy Options respond to the principles of territorial cohesion strategy that maintain the three orientations:

- rebalancing principle
- growth-and-development principle
- territorially orientated principle

9.2.1 Rebalancing principle

Rebalancing principle refers to the pursuit of strategies promoting equity and fairness and assumes territorial cohesion to be a rebalancing objective,

counterbalancing the strength and the competitiveness of some regions through wider access for citizens and enterprises to those general services more related to economic performances, e.g. energy and communications. The spatial aspect of the territorial cohesion concept here is dualistic: on the one hand it draws attention to the differentiation created by local specificities; on the other hand, it reduces the appearance of this diversity by its promotion of equal access to services. A note of the European Parliament in 2005 is clear in this latter perspective: it defines territorial cohesion as a pivotal concept in reducing disparities between regional development capacities, explicitly relating it to the objective of equality among citizens and to the aim of progressing beyond spatial discrimination (EP, 2005).

9.2.2 Growth-and-development principle

More recently the second orientation has strengthened. In this respect territorial cohesion is viewed as a principle that pursues the increased competitive capacity of territories, and adopts sustainable development strategies. The eastern enlargement and post-2007 economic crisis have led to a stronger focus on competitiveness in recent years. If the EU's goal is to enhance regions and their cities through synergies, and through improving their regional and urban competitive capacities, the more cohesive the EU territory, the more competitive its component parts can become in the world economy.

9.2.3 Territorially orientated principle

The third orientation stresses the importance of focusing on territory, since this is what drives the necessary integration of different policy approaches at different spatial scales, most clearly presented in a place-based approach to meeting European Union challenges and expectations (Barca, 2009). The territorial orientation is neither an alternative to, nor a reframing of, the rebalancing or the growth-and-development principles. Instead, pursuing territorial cohesiveness means that the territory is at the same time both the objective and the means for the integration of policies and the achievement of their intentions.

9.3. Future Perspectives

SeGI policy options also address the future orientation of cohesion policy and consider the nature of future perspectives on the European territory as elaborated by the SeGI explorative scenarios. Robust and effective policy options fully recognise and anticipate the importance of the global and pan-European drivers of change that impact differentially on the European territory and shape and influence the provision of SGI. These drivers of change include both external shocks such as climate change, demographic change and economic crisis, and internally defined dynamics such as the influence of member state ideological positions on the production and distribution of SGI.

Policy options for SGI aim to fully account for all of these influences, and in particular the major impact of the economic/financial crisis factored into the scenario analyses defined in relation to alternative explorative scenario

assessments. Public expenditure cuts triggered by the financial crisis will impact on the quality and accessibility of existing SGI, and most likely on the future provision and maintenance of SGI. In this context SGI remain critically important, as the level of public service provision is a crucial factor in, for example, both sustaining rural settlements and in maintaining them as part of an integrated urban-rural strategy. In particular, effective public service provision can support a local economy, and public services can create economic opportunity where this is embedded in a development strategy.

9.4. Policy option review

The framework of policy design, outlined above, highlights a large number of strategic suggestions, recommendations, approaches, and substantive policies. These include general economic development strategies, e.g. stressing competitiveness based on a knowledge economy, spatial models e.g. polycentrism, or urban–rural relationships, priority territorial elements and actions e.g. cities as engines of growth, the importance of brown-field site rehabilitation, or specific performances e.g. accessibility to services of general interest.

Some important elements seem to emerge. On the one hand there is the importance of spatial characteristics and their treatment as local assets, which lends significance to the concept of “territorial capital” (OECD, 2001). On the other hand, there is an idea of spatial justice and the concept of social protection based on place.

Similarly one of the main conclusions is the recurrent presence of the political tension between the solidaristic and a competitiveness-orientated approach. The solidaristic and competitiveness-orientated attitudes can be interpreted as a reactive and a proactive way of implementing EU cohesion policy: a solidaristic approach could lead to a reactive position (the need for balance), while competitiveness lends itself to a proactive strategy aimed at the enhancement of regional performance even among the most advanced regions. These are legitimate political orientations, as defined by the ESPON project 3.2 (ESPON, 2006a), which translated them into alternative policy scenarios.

However, the combination of political and geographical dimensions means that translation of the territorial cohesion into policy and practice is complex, while the multi-scalar nature of the EU makes it difficult to assess and measure the “rate” of territorial cohesiveness both between regions or nations, and within the same region, or urban area.

Territorial governance must combine policy principles and territorial dimensions, which define different strategic policy options, the recurrence of which depends on the types of document at hand and the policy context in which they are produced. Nevertheless, some specific differences and possible contradictions in terms of interpretations of territorial cohesion can be highlighted.

For instance, the general need to reduce inequalities at the wider scale is often translated into the need to pursue and enhance development capacity in the

regions and cities lagging behind. However, when this broad aim becomes more specific, the indications often become vague and simplified, showing the inability to deal with more substantial and innovative policy recommendations: the objective of balancing accessibility to services becomes a simplified strategy to achieve social cohesion, and the use of the territorial capital as an asset becomes the most common recommendation for local development strategies.

Paralleling this, the policy answer to the social issues raised by territorial cohesion tends to focus solely on local solutions i.e. the social problems that are usually concentrated in specific deprived (often urban) areas, or the aim of creating individual “sustainable urban communities” (UK Presidency, 2005).

Overall it is probable that both rebalancing and development strategies could perform better if they adopted more explicit tailor-made territorial development strategies (ESPON, 2006b), introducing innovative concepts and approaches.

9.4. SeGI policy options and policy challenges

SeGI Policy options, are not defined at higher scales of governance including macro-regions, as these key principles of policy design including sustainable development, cooperation, integration and coordination, are fully elaborated by policy provisions, including Europe 2020 and the Territorial Agenda 2020 at the European level. At lower scales of governance however, SeGI policy options cannot be specified, given the specificity and variety of local territorial assets at the urban and sub-regional levels that must be assessed in a local political context. Coherent and coordinated policy options are therefore targeted at the city region level of governance, to ensure good governance articulated in accordance with the principles and practices of sustainable development.

Furthermore, territorially defined policy options supporting the delivery of SGI's are developed and delivered in relation to functional and polycentric urban areas, and not focused in relation to administrative boundaries. In particular, the functional areas of towns and cities encompass their hinterlands in multiple sets of regionally defined mutual dependencies, whether for work, waste disposal, water or tourism, to cite just a few examples. Whether or not formal regional bodies exist, and in several countries they do not, ways have to be found to intelligently relate action to these realities.

The following summarises the critical policy challenges associated with the long-term and on-going trends in relation to economic, social and environmental transformations, and the associated policy options.

9.4.1 Policy Challenge – Competitive Europe

The long-term and on-going trends in relation to the economic transformation of Europe, with resulting industrial restructuring and offshore relocations, has left many older industrial and mining towns without a viable economic base. These underlying transformations of the economy will increasingly challenge Europe's regions. The prime concern is with loss of employment and economic decline, prompting population out-migration, abandoned homes and areas, and a

declining support base for commercial activities and SGI. These problems have been exacerbated more recently by the global economic crisis, which directly and deeply affects the economic growth potential of Europe's regions, further reducing employment. In addition, the crisis has limited foreign direct investment (FDI), and reduced municipal funding, has constrained expenditure for state-initiated urban and infrastructural projects.

9.4.2 Policy Options – Competitive Europe

Policies concerning regional economic competitiveness at the level of macro territorial planning, focused on the growth of the functional regional territory have been mostly defined at regional and national levels, and have been most actively pursued in central and eastern Europe where the stronger intensity of transformations has been supported by Structural Fund policy frameworks. In general terms the policy issues are focused on territorial balance and the polycentric development of the territory, whilst maintaining competitive sustainable development.

Regional economic competitiveness can be advanced by a number of policy levers at the local level including the enhancement of local and regional connectivity, and integration with the hinterland, and in respect of human capital via education, although not always a competence at the local level, and more generally via housing provision. Nonetheless, evidence indicates that the model of regional economic competitiveness based on metropolitanisation process may be evolving with the weakening of cities -- hinterland relations.

The capability and capacity of the region to mobilise policy options in support of regional economic competitiveness, is influenced by local vision and governance capability, factors which may remain problematic in parts of central and east Europe. The economic crisis has the potential to extend the divide between west European knowledge-based economies, and those in the east aiming to modernise production, whilst remaining vulnerable to external competition. The fiscal crisis associated with the economic downturn, also seriously decreases the room for manoeuvre by the regions. However, agglomeration economies supporting regional competitiveness, and the future economic development of regions, are most dependent on the nature of the recovery from the economic crisis taking place in a global context, and therefore substantially beyond the control of regional governance.

9.4.3 Policy Challenge – Social Europe

The changing structure of urban labour markets arising as a consequence of economic transformations has generated a growing polarization of occupational and income structures, exacerbating urban income inequality. The changing structure of labour markets has also left many urban residents poor and unemployed, and deteriorated public housing estates now coexist with new urban mega-projects.

Furthermore, regional competitiveness, the desire to attract foreign investment, fuelled by the former booming property market have driven processes of

gentrification and suburbanisation, segregating many urban areas into elite enclaves and sprawling middle-class suburbs. This, in turn, has given rise to urban areas with major contrasts between areas of wealth and poverty, creating in some contexts rising crime levels, fuelling the desire by the wealthy to spatially separate themselves from the poor. Consequently, income inequality and territorial fragmentation are mutually reinforcing, leading to more segregated urban areas and increasingly problematic frameworks for the delivery of SGI's.

9.4.4 Policy Options – Social Europe

The extent of socio-economic polarisation depends substantially upon the national context, and the degree of insertion in the global economy, whereby knowledge-based jobs requiring higher skill levels tend to enhance socio-economic polarisation. Also in the national context, the extent to which cities have been subjected to more substantial welfare cuts and higher levels of migration, especially from the east of Europe, has increased socio-economic polarisation.

Regional policies in support of social cohesion are probably relatively ineffective given the significance of the national context, furthermore it is evident that there is a real policy conflict identified in the relationship between the contradictory impacts of policies to promote engagement in the knowledge society for the benefit of the local economy and society, and the impact that this policy has in enhancing socio-economic polarisation at the local level. In this relationship a clear decoupling of the relationship between social cohesion benefits and economic advancement is evident.

Socio-spatial polarisation has also increased in line with socio-economic polarisation, although socio-spatial polarisation appears to be specifically exacerbated by the impacts of both the gentrification and suburbanisation processes that lie within the control of city-region governance, in contrast to the national and global drivers of socio-economic polarisation. Clearly, there has to be careful assessment of policy impacts when designing policies to "gentrify " or enhance the attractiveness of urban cores, which also have unintended consequences in increasing socio-spatial polarisation.

Looking forward there is concern that the economic crisis will only serve to intensify socio-economic and spatial polarisation, and decisions at the member state level, rather than the local level, concerning the nature of the welfare state model and the potential for new social compromise, will significantly influence the opportunities for social cohesion in the regions of Europe and thereby access to SGI's.

9.4.5 Policy Challenge – Green Europe

A key challenge for the regions of Europe remains the process of suburbanisation and urban sprawl, in which differentials between the cities of Europe in relation to urban growth are attributed to the stage in the process of urbanisation, still strong in parts of east Europe, the underlying economic structure, and the effectiveness of territorial governance at the local level.

The major part of new urban growth is still taking place on the urban edge, and in some parts is linking existing settlements to form extended urban corridors. Elsewhere, the shrinking population of cities particularly in the east Europe, arising from demographic and migratory change, raises a related challenge for territorial governance and the provision of SGI's at the local level.

Current trends in urban development and the territorial structure towards sprawl, fragmented development and car domination have expanded both the territorial and ecological footprint of cities, with major impacts on urban efficiency, increasing social marginalization, impacting the quality of urban life, and creating loss of natural resources. Furthermore, in relation to the issues provision of access to SGI's much of this new development is fragmented, and lies beyond the boundaries of municipal governments, areas that are difficult and expensive to service in conventional ways.

9.4.6 Policy Options – Green Europe

Regions are at the forefront of the challenge of environmental sustainability, responding to the need for climate change mitigation and adaptation measures, energy and resource efficiency as well as the emerging challenges concerning the transition from oil to alternative energy sources.

The complex and interconnected nature of these issues at the local level demands an integrated place-based perspective on the management of the territory, for which sustainable development is the paradigm. Indeed the place-based policy of integrated regional development necessarily combines not only policies concerning the environmental challenges facing urban areas, but also typically strongly influences both social and economic outcomes in the city, and thereby strategies for the provision of SGI's. The strategic policy objective is to secure the policy co-benefits whereby policies addressing environmental objectives, secure also desired socio-economic criteria including those concerning SGI's.

Territorial governance and the role of local policy frameworks to counter urban sprawl are critically important. These are articulated primarily in the framework of compact city-region planning, including the promotion of smart growth principles, development of the role of transit-oriented development, making the infrastructure plan a central element of the territorial plan, together with coordination of growth across municipal boundaries, supported by regional structures that manage growth, and assisted by appropriate planning strategies.

Looking forward, with a slowing down of processes of suburbanisation, particularly in eastern Europe, combined with ageing population and the impacts of the economic crisis, local policy concerns with the retrofitting of the existing urban areas to address environmental and associated policy objectives become increasingly significant, and a major policy reference for the provision of SGI's. Reconfiguring cities from car dependent to public transport-based and non-motorized movement systems, supported by bicycle and pedestrian networks, implies significant territorial change, that impacts the provision of SGI's.

New and incremental approaches to service and infrastructure delivery, in partnership with local communities, are also evident, based on more distributed service networks and alternative technologies (solar or wind energy) which may be the most appropriate way to service these areas. The planning of these peri-urban areas, also calls for local and regional planning action, and the identification of the level of government which is best placed to manage such areas. A combination of regional and local planning approaches is typically required, with policy options specified accordingly.

10. Concluding remarks

The prime objective of the SeGI project is to form a basis for recommendations in relation to future Cohesion policy, recognising the essential importance of SGI's for European economic socio-economic and environmental development. The aim is to specify coherent and coordinated policy options targeted at the city region level of governance, to ensure good governance articulated in accordance with the principles and practices of sustainable development, and to deliver territorially defined policy options supporting the development of SGI's in the context of functional and polycentric urban areas.

SeGI policy options address the future orientation of cohesion policy and consider the nature of future perspectives on the European territory as elaborated by the SeGI explorative scenarios. These policy options fully recognise and anticipate the importance of the global and pan-European drivers of change that impact differentially on the European territory and shape and influence the provision of SGI. These drivers of change include both external shocks such as demographic change, economic crisis and climate change, and internally defined dynamics such as the influence of member state ideological positions on the production and distribution of SGI.

In regard to these challenges a number of policy and research questions have been defined in order to structure the consideration of potential policy options for SGI.

10.1 Policy questions

P1 How should the defined (groupings of) services of general interest be addressed by territorial development and cohesion policies?

In the first place, Services of General Economic Interest should be clearly distinguished from Social Services of General Interest as these two groups of services, representing considerations of competition on the one hand, and balance on the other, cannot be addressed from a policy perspective as a single grouping of Services of General Interest. Secondly, territorial development delivered via economic, social and territorial cohesion requires that the regional goals are set by one actor. Cohesion will not be obtained if all regions set their own goals and targets. Thirdly, it is also unfortunately that the use of SGI by individuals and business are seen to be generated by the same processes. Reality is however more complex than that. Finally, a clear balance between market provided services and publicly provided services, complemented by efforts by civil society, is required to achieve territorial development and economic, social and territorial cohesion. If any of these sectors, the market, the state or civil society, becomes too dominant it will undermine policy objectives to achieve territorial development and cohesion.

P2 What is the territorial distribution of the services of general interest throughout the European territory and how can this be measured?

Although the definition of SGI, outlined above may facilitate the division of responsibilities and policy options specifications, nonetheless definitional challenges remain. The concepts of SGI can be divided and categorized in many ways, for example in terms of economic and non-economic interest, in terms of network services and social services, and according to different typologies of territory. Services are also highly influenced by changes in society and culture and evolve over time. For example, on-going trends of decentralization and liberalization are influencing the development of many sectors providing SGIs. According to ESPON project 1.4.2. *Social aspects of EU territorial development* this complex situation is a challenge for cohesion aims both in regard to policy formulation as well as policy implementation. These differences combined with the historical and geographical specifics of SGI are crucial to their organizational status and technological development, and therefore present distinct challenges in defining strict guidelines and comparable indicators.

Finally the territorial distribution of SGI is, to say the least, very heterogeneous, as demonstrated by the maps and discussion presented in chapter 5 in relation to examples of postal and labour market services. Although the indicator data is collected from Eurostat the lack of homogeneity in the national definitions of these services make country comparisons misleading. This heterogeneity in the territorial distribution of SGI is also found in the regional typologies of SGI in chapter 7.

P3 How and to what extent do the various levels of services of general interest contribute to global competitiveness, economic development and job growth in cities, urban agglomerations and other territories?

Clearly not all services of general interest contribute to competitiveness, economic development and job growth, and this is especially evident in relation to the distinctions between SGEI and SSGI. Furthermore, there are very significant variations across the European territory, regarding the impact of SGI on competitiveness, economic development and job growth in different types of territory.

For example in recent decades rural, peripheral, insular, mountainous and outermost areas have in general experienced decreasing accessibility to SGI, while the opposite trends are evident in metropolises and urban agglomerations. The on-going privatisation of SGI will not improve the situation for these disadvantaged regions.

10.2 Research questions

R1 How can the existing definition and classifications of services of general interest be applied from a territorial cohesion and development point of view?

The term SGI is not found in the policy vocabulary of any EU member state and it still remains mostly unknown to the general public. It mirrors a particular Community effort to establish a common language for specific policy purposes, disregarding the varying national traditions, terminologies, policies and practices,

in a field being at the heart of public policy debate and closely interlinked with the controversy over the role of public authorities in a market economy.

The EU general definition of SGI (“non-market as well as market services which the public authorities class as being of general interest and subject to specific public service obligations”) does not offer even a tentative definition of “services” or point to any specific/single class of phenomena or activities. This general definition of SGI used by the EU basically includes everything. Within this framework for action at the EU level public authorities in each Member State retain considerable freedom to define and enforce public service obligations and to organise the provision of SGI. This allows Member States to define policies that take into account specific national, regional or local circumstances. For example, remote or sparsely populated areas may have to be treated differently from metropolitan or densely populated areas.

Every EU member state has the right to decide what is or is not a SGI, and what threshold there should be for the provision of SGI, and accordingly EU members have the freedom to decide to what extent they implement cohesion policy in their country. As a result of this member state freedom of action it is top-down promotion of SGI cannot be certain to produce commensurate contributions to economic, social and territorial cohesion, to economic development, job growth and increased competitiveness.

R2 What are good indicators to measure the level of services of general interest?

The main conclusions from the work with key indicators for SGI can be summarised as follows. The operational definition of SGI via NACE classification seems to be a satisfying way in statistical terms to describe the regional variation of availability of certain services. NACE is mandatory within the European Statistical System, and therefore no new statistics are required to deliver the data necessary for a development of a workable indicator system for SGI. However, the current availability of NACE statistics at the regional level is insufficient. Furthermore, several NACE divisions have to be differentiated according to the NACE classes to meet the needs of differentiated SGI data, especially the sections/divisions on education and health.

Already at NUTS 2 level data is missing because of confidentiality reasons. The section G in the NACE classification on retail provision demonstrates significant data gaps. Establishing NACE statistics at NUTS 3 level, and preferably at LAU1 or LAU2 level, is desirable but currently presents many difficulties in implementation. Qualifying statements beyond simple available in terms of number of local units one has often to fall back on national level so far. Consequently the collection of information concerning the number of persons employed, as well as turnover, requires better understanding of the regional distribution of SGI. Presently, at the regional level (NUTS 2) only data for the years 2008 and 2009 are available from EUROSTAT.

Policy making, monitoring and evaluation demand information, which has to be organized in an up-to-date system and harmonised for the sector and territories of analysis. Reliable and relevant indicators are crucial for this process. The

analysis here points at some problems which need to be addressed: (a) There is a need to integrate SGI indicators with context indicators; (b) the need to measure effects is difficult because of the scarcity of relevant data; (c) the SGI effects analysis also obliges an inter-sectorial analysis; (d) there is a scarcity of available information for different scales of analysis; and (e) there are a heterogeneous number of indicators for each domain.

R3 What is the current territorial situation of services of general interest throughout the European territory?

During the current on-going economic and financial crisis it has become clear that that several EU members do not have the financial resource to maintain the present provision of Services of General Interest in general, and especially Social Services of General Interest. Many SGI are critical to the delivery of the modern welfare state. Empirical evidence from the case studies, demonstrates the emergence of such trends in some regions of Europe.

If the national governments cannot uphold and guarantee a minimum provision of Social Services of General Interest, who can? To some extent non-government and non-profit organisations can play a role to fill the gaps in provision, but this can only be a minor role given the lack of necessary economic resources. Clearly without the potential for profitable operation, the market will not act. . These realities are in sharp contrast to the policy ambitions found in EUROPE 2020 and the Territorial Agenda, and it is clear that several EU member countries will not have the necessary economic resources to implement these EU policy ambitions. Specifically the high ambitions of the Commission White Paper on SGI, seeking the provision of SGI for everyone everywhere in the EU are quite unobtainable. .

R4 What territorial development potential and constraints do different types of territories in Europe have?

The homogenous specification of policies at the EU level in reality belies a heterogeneous mix at the regional and local level. EU targets influence national and regional targets, but policies are always specified and implemented at the Member state level. This means that a full understanding of the national and regional policy systems and modes of governance is essential for any effective policy design. Furthermore, territorial differences and the spatial division of governance areas affect the provision of services and this makes territorial cohesion an essential element in policy formulation.

Indeed the 7th Cohesion Report does not emphasise common goals and the importance of solidarity between the EU member states, rather it indicates that regions should set their own goals and achieve these goals at their own pace. The policy challenge ahead is not only about solving the financial problems in some EU member countries. An even bigger challenge is found in the attempts at resuscitation of the policy on economic, social and territorial cohesion. Although the financing issue may be solved in the medium-term, the political will of subsidiary and solidarity between the EU members may be more difficult to re-establish.

In this regard, in line with the principles of subsidiarity, the definitions, organization, financing, and implementation of policies supporting the delivery of SGI's is primarily a decision for collective agreement at the Member state level, involving national, regional and local authorities. Consequently the impact of EU policies on local decision-making and implementation at the operational level is relatively weak.

10.3 Outlook

Collectively, although from different perspectives, policy and research related questions identified above respond to the challenges arising from the impacts of the socio-economic and environmental drivers of change in the provision of SGI in Europe today. Policy options supporting cohesion policy objectives to secure a proper provision of SGI have promoted growth and development, rebalancing as well as concerns for territorial specifics. Indeed these three principles of policy design are unified by a territorial cohesion as the territorial orientation or place-based approach, ensures that territorial cohesiveness is not only the objective, but also the means for the necessary integration of sectoral policy and the achievement of its policy goals.

The future orientation and forward-looking components of the policy options supporting an appropriate mix of growth and rebalancing initiatives, delivered via cohesion policy in support of wider Europe 2020 objectives, are clearly central to policy option design. Public expenditure cuts triggered by the financial crisis will impact on the quality and accessibility of existing SGI, most evident in the future provision and maintenance of SGI. SGI remain critically important as the level of service provision is a vital factor for existing rural settlements, and in maintaining them as part of an integrated urban-rural strategy. In particular effective public service provision can support a local economy, and public services can create economic opportunity where this is embedded in a territorial planning strategy.

Territorial planning strategies combine strategic recommendations and substantive policies. In a development perspective these, for example, focus on competitiveness based on a knowledge economy, implemented by spatial models, for example, polycentricism, and thereby supporting urban-rural relations as well as accessibility to SGI. In parallel rebalancing strategies to enhance social cohesion and to reduce inequalities may be translated into the need to provide and enhance development capacity in regions and cities lagging behind, focused on territorial capital specified according to territory with typology is the keystone of local development strategies. Clearly the territorial dimension provides a uniting framework for development and rebalancing policy options and indeed ESPON (ESPON 2006b) demonstrates that both rebalancing and development strategies will perform better if they are delivered via more explicit tailor-made territorial development strategies.

Finally, with a note of caution, territorial governance must combine policy principles and territorial dimensions which define strategic policy options. However, the combination of political and geographical and normative conceptual dimensions means that the translation of territorial cohesion into policy and

practice in a context of multi-scalar governance is complex. Consequently territorial defined policy options supporting the delivery of SGI must be conceptualised according to principles of sustainable development, and must be developed and delivered in relation to set functional and polycentric urban areas that transcend existing administrative boundaries. All of this is deeply challenging from both the perspectives of policy formulation as well as implementation and assessment.

References

- Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press
- Barca, F. (2009) *An Agenda for a Reformed Cohesion Policy, A Place Based Approach to Meeting European Union Challenges and Expectations*. Independent report prepared at the request of Danuta Hubner, Commissioner for Regional Policy.
- Bauby, P. et. al. (2010): *Mapping of the Public Services. Public Services in the European Union & in the 27 Member States*. The European Centre of Employers and Enterprises providing Public services (CEEP), Brussels
- CEEP (2012): *Mapping of the Public Services. Public Services – Supporting The Very Fabric of European Society*. The European Centre of Employers and Enterprises providing Public services (CEEP), Brussels
- Christaller, W. (1933): *Die zentralen Orte in Süddeutschland*. Jena. Gustav Fischer
- ESPON (2006) *ESPON project 3.2 Spatial Scenarios and Orientations in relation to ESDP and Cohesion Policy*. ESPON, Luxembourg
- European Commission (2003) *Green Paper on Services of General Interest*, COM(2003)270 final
- European Commission (2004) *White Paper on services of general interest*, COM(2004)374 final
- European Commission (2006) *Implementing the Community Lisbon programme: Social services of general interest in the European Union*, COM(2006)177 final / SEC(2006)516
- European Commission (2011a) *A Quality Framework for Services of General Interest in Europe*, COM(2011)900 final
- European Commission (2011b) *The Urban and Regional Dimension of Europe 2020. The Seventh Report on Economic, Social and Territorial Cohesion*. Luxembourg: Publications Office of the European Union
- European Parliament (2005) *Services of the General Interest in the Internal Market*. Working Paper, PE 359.357
- Eurostat (2008) *NACE rev. 2 - Statistical classification of economic activities in the European Community*. Luxembourg: Publications Office of the European Union
- Hartmann, Laura, red. (2011): *Konkurrensens konsekvenser. Vad händer med svensk välfärd?* SNS FÖRLAG, Stockholm
- OECD (2001) *OECD Territorial Outlook*. Paris, OECD.
- Ringen, S. (1987) *The Possibility of Politics. A Study in the Political Economy of the Welfare State*. Oxford: Clarendon Press
- UK Presidency (2005) *Conclusions of Bristol Ministerial Informal Meeting on Sustainable Communities in Europe*. Bristol, 6–7 December 2005
- Van de Walle, (2008) 'What services are public? What aspects of performance are to be ranked? The case of "Services of General Interest" '. *International Public Management Journal* 11(3):256-274

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