

ESPON ATLAS

ESPON ATLAS - Mapping European Territorial Structures and Dynamics

ESPON ATLAS

Scientific Platform and Tools Project 2013/3/5

Interim Report | Version 26/07/2013

This report presents the interim results of a “Scientific Platform and Tools” Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

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

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

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

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

This basic report exists only in an electronic version.

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List of authors



Federal Institute for
Research on Building,
Urban Affairs and
Spatial Development

within the Federal Office for
Building and Regional Planning



Federal Institute for Research on Building, Urban Affairs and Spatial
Development (BBSR)

Volker Schmidt-Seiwert

Kirsten Hohmann

Regine Binot



Spiekermann & Wegener, Urban and Regional Research (S&W)

Klaus Spiekermann



VÁTI Hungarian Nonprofit Limited Liability Company for Regional
Development and Town Planning (VATI)

András Nagy Phd.

Ferenc Staub

Gergo Szanko

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1. Executive summary

1.1 Elaboration of Table of Contents of the ESPON ATLAS

The ESPON ATLAS is supposed to offer a synoptic territorial representation of the European territory based on empirical findings, analytical results and policy recommendations elaborated in the framework of ESPON projects. At the end of the ESPON 2013 programme the atlas will summarise territorial structures and trends, as well as territorial impacts of political activities. In some respect it will be a winding up the ESPON 2013 programme, being a worthy representative of all ESPON projects and their activities. The atlas will be published in the transition phase between the “old” and the “new” ESPON programme and will to some extent be the bridge to or maybe the overture for the future ESPON 2020 programme.

The ESPON ATLAS project has to consider two challenges. The range of ESPON projects has to be taken into account appropriately and the thematic range has to be oriented along the policy relevant themes and the current policy debate. The project is asked to be flexible in this respect, taking into account recent developments and demand.

In the Inception Report, the project outlined a draft version of the Table of Contents to be responsive to this plea of flexibility. On the basis of this first outline of the structure, a meeting with the ESPON Monitoring Committee in December 2012 gave the opportunity to clarify the demand for territorial information and to further develop the Table of Contents. Taking into account the remarks, suggestions and recommendations of this ESPON ATLAS workshop with the Monitoring Committee the Table of Contents has been reshaped.

Due to the fact that some of the chapters are still waiting for the analytical findings of on-going ESPON project, a draft final version of the basic structure of the Table of Contents is presented in chapter 2.3. On the way to the final product, modification and readjustments will be necessary to mirror the thematic outline with the ESPON results.

The sketches of the contents of chapters presented in this report are based on the findings of the ESPON projects and do not give reference to any specific map or illustration. For the chapters dealing with results of projects delivering their findings later only the intended thematic range is presented. The content of these chapters might be subject of changes later on.

The discussions concerning the structure of the ESPON ATLAS showed that a reader not that involved in the ESPON context might need some kind of introduction to the somewhat specific ESPON findings related to territorial questions. Due to this, the TPG decided to have some more general information for each theme dealing with the main policy issues of that theme,

including elementary territorial findings to guide the reader to the more specific chapters.

1.2 Communication style and cartographic representation

According to the project specifications the ESPON ATLAS project is asked to elaborate and introduce appropriate ideas concerning the style of communication and cartography in the Interim Report. The TPG is of the opinion that the questions related to the layout, the graphic and cartographic style should be clarified before the actual production of maps and illustrations can be started. The print format defines the page layout. The number of illustrations depends for example on the page size, as do the maps. Furthermore, the TPG believes that dealing with the layout and design questions it is not just a preparatory activity to avoid double work in producing maps and rework them afterwards in a new design; it is also a project action to meet the requirements as set out in the project specification.

Beside the ESPON ATLAS project, different ESPON activities, among which a service contract on the layout and graphic design of ESPON publications and an action started under priority 3 aiming at the elaboration of a modernised ESPON cartographic language, are on their way. Since these three activities are actually closely interrelated, the ESPON CU proposed an exchange of ideas among the three teams. As specific input in these planned activities, the ESPON ATLAS project decided to elaborate a proposal of the visual and communication strategy and on the format of the ESPON ATLAS to meet the expectations expressed in the project specification but also to serve the specific needs related to the atlas as such.

The ESPON ATLAS will in its final version be based on the communication style and the cartographic representation developed in the guide on ESPON cartographic language.

This means for the ESPON ATLAS project that the presentation of example pages of the atlas in this Interim report (see Chapter 4) are first design proposals to be understood as input into the exchange of ideas on communication and cartographic style from the ESPON ATLAS project side.

Communication style

The ESPON ATLAS is understood as a unique product using the existing ESPON results, citing, but not repeating the maps of the ESPON projects so far.

The indented use and dissemination in a broader context to policy makers, stakeholders, scientists, students and the broader public suggest to use less scientific presentation of ESPON information and to present existing and also

newly created results in a more graphical way, e.g. in form of infographics. Citing from the Wikipedia, “information graphics or infographics are graphic visual representations of information, data or knowledge intended to present complex information quickly and clearly. They can improve cognition by utilizing graphics to enhance the human visual system’s ability to see patterns and trends. The process of creating infographics can be referred to as data visualization or information design”.

A proposal for a new ESPON map design

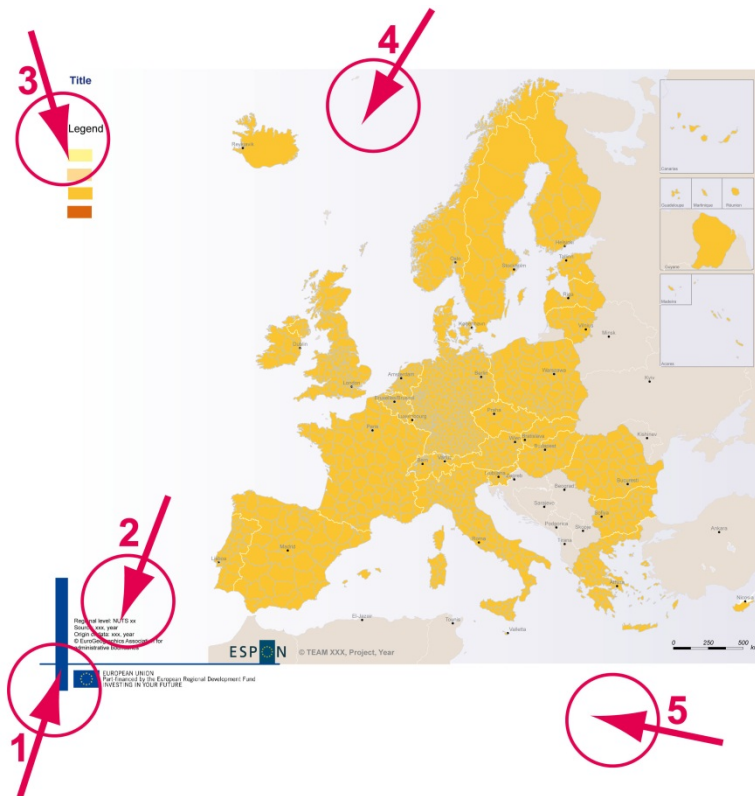
In the last ten years the ESPON map design was established as 'figurative mark' with a distinct recognition value. It was furthermore an example for the successful implementation of a corporate map design within a research network with different cartographic skills of the people involved.

The ESPON map design worked very well in the intended use in reports and presentations with mainly one map on one page. The former ESPON Atlas 2006 has shown that it worked also with several maps on one page, but the visual “heaviness” in the graphic appearance increases with rising numbers of maps and blue edge strips. Especially the proposed new way of the ESPON ATLAS to use more maps of smaller size on one page demands a bit more visual lightness related to the map design.

The ESPON map proposal of the ATLAS project tries to avoid a potential ornateness that might come from too many blue edge strips without, however, abolishing the introduced map brand element in total. Figure 1 displays the main elements of the proposed map design for the ESPON ATLAS.

A map needs some graphic anchor on the page. Instead of having two strips on each side of a map, the ESPON ATLAS project proposes to have a vertical blue edge strip at the lower left corner of the map, in width a reference to the old design but clearly reduced in height. A thinner horizontal line connects this left margin of the map with the ESPON logo in the map (see Arrow 1 in Figure 1)

Figure 1. ESPON ATLAS map design proposal



- 1: Short blue edge strip with thinner horizontal line connecting ESPON logo and map
- 2: Field for basic information on data sources, geometry as integral part of the map
- 3: Legend field
- 4: Map background and sea with colour range from white to blue, leaving white space for legend and information
- 5: Space for information in ESPON 2013 map design, now integrated and no longer separated from map content

The map extent will be opened to the left side creating space between the left margin of the map and the anchor corner built by the crossing of the blue edge strip and the line connection to the map. The space offered will be the place for the basic information on data sources and so on (see Arrow 2 in Figure 1). By this the important information will become an integral part of the map. In the former map design, this information was placed outside the map and in fact sometimes cut off for presentation purposes (see Arrow 5 of Figure 1).

The title of the map and the legend will be placed in the upper left corner of the map creating the visual corner of the map (see Arrow 3 of Figure 1).

The background of the map, including the sea, will be built with a colour range from white (in the legend and information area) to blue on the right side, ending in the colour used in ESPON maps up to now.

The map design for the ESPON ATLAS has been elaborated in three different sizes to fit the layout specifications of the atlas.

Format and layout of the ESPON ATLAS

The ESPON projects provide plenty of territorial information, but the ESPON ATLAS will have only limited space. The ESPON ATLAS 2006 has shown that an ESPON map fills a full page of an A4 landscape page in a suitable size to show small regions also in a visible manner. However, if one wants to put some additional information in graphic form on the same page, the format one has to consider more and more detaches from A4.

A brief check of different atlas formats of hand atlases, world atlases, school and thematic atlases shows that the format A4 is in fact not used for any atlas. The choice of the size of an atlas depends on the intended use and the kind of representations.

Based on these considerations the ESPON ATLAS team favours a quadratic format for the atlas in a height and width of 30 cm. -Such a format offers the opportunity for a broad openness to graphic possibilities and for interesting combinations of maps, graphic and text.

ESPON ATLAS layout

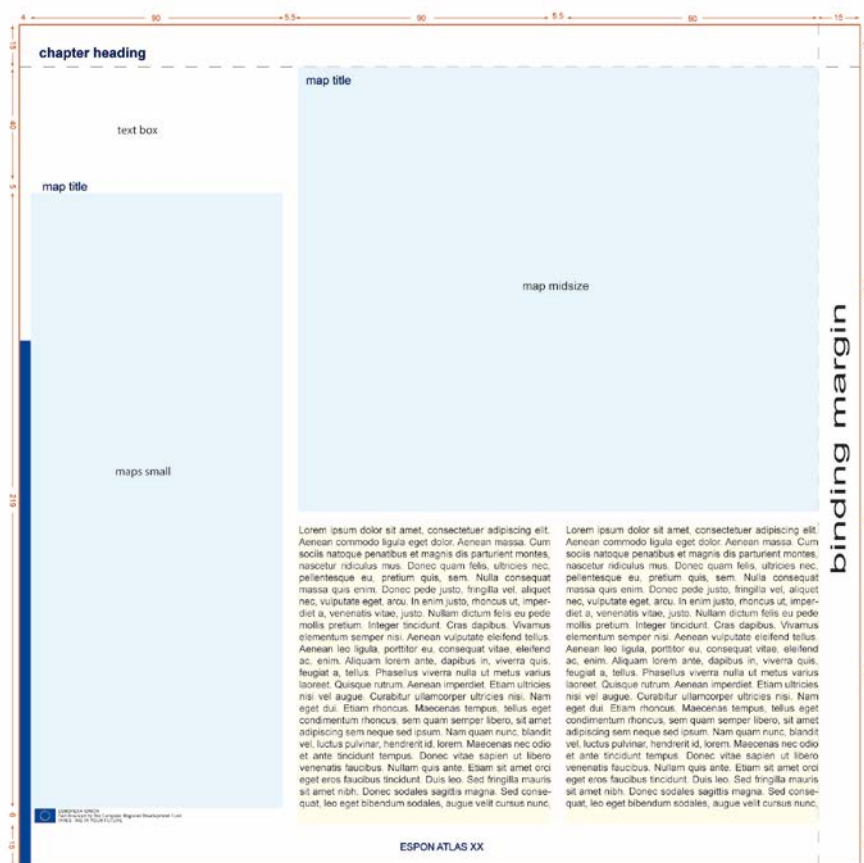
The ESPON ATLAS 2013 orients itself on the structure of the previous publication in 2006 by having preparatory analytical results on the left page and a “big” synoptic map always on a right page.

The pages as such will be divided into a 3 columns raster, the outside columns ending as marginal note in a blue edge strip directly with the page border. The blue edge strip as reference to the old ESPON publication design will not stretch along the whole page border to reduce visual weight. It will be placed on the lower left respective the upper right sides of the pages.

The enlarged size gives space to more graphic information and text. The three map formats fit into the columns' width of the print space. The first page of a chapter gives space to a medium sized map and for example three small maps in the marginal column. The text field fills the space under the map (see Figure 2).

The amount of text in the ESPON 2014 Atlas will be limited compared to the ESPON 2006 Atlas. The different topics will be explained mainly in broader territorial and political contexts. There will be related explanations of the indicators used and their explanatory power. Interpretations of maps larger in detail with respect to territorial patterns will concentrate on the main policy relevant territorial findings

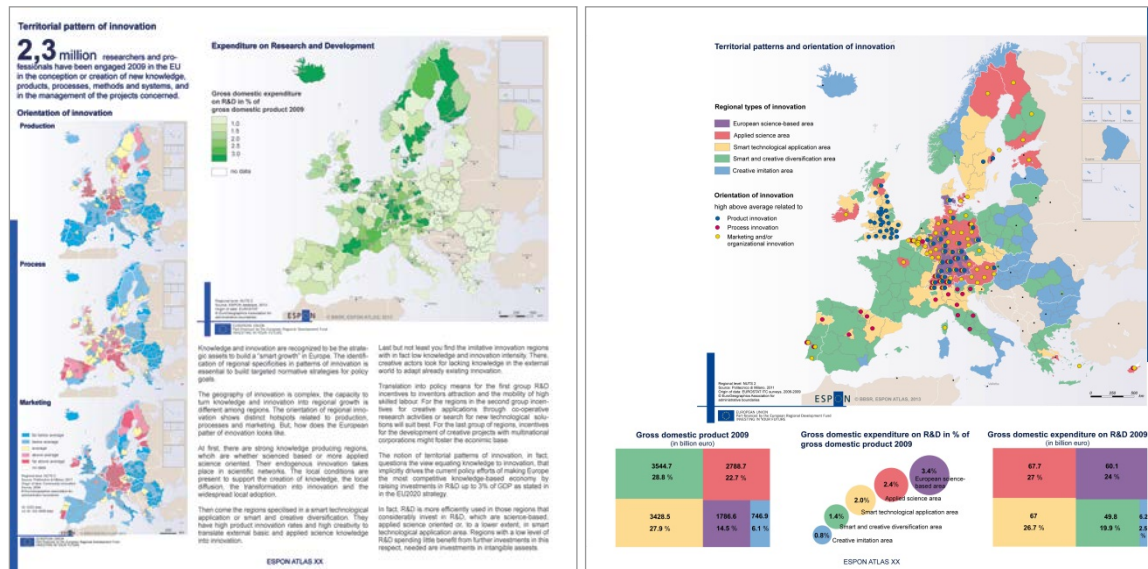
Figure 2. Print space first side of chapter



The last page of a chapter, which will always be a right-hand page, will present a large synoptic map as main component. The proposed format of the ESPON ATLAS will allow to include additional information under or besides the map, preferably in graphic form, dealing with further thematic aspects or deepening the map content.

Figure 3 shows how an ESPON ATLAS double page might look like by following the page layout and the map design proposed.

Figure 3. Example pages of the ESPON ATLAS 2013



ESPON ATLAS online version

This layout proposal is suitable for some selected pages showing the project ideas of how the ESPON ATLAS might look like. It is however not suitable, and this is also one outcome of the January 2012 meeting of the TPG and the CU, to build the base for the prototype of the digital version of the Atlas. The work to elaborate software for this prototype basing just on a design proposal and rework the product afterwards again in the final communication style would be in fact a waste of time and personnel resources.

Instead of a prototype of the digital atlas version, this Interim Report will therefore introduce the basic concept and illustrate the functionalities related to content, menu and user guidance.

The contents of the paper version of the ESPON ATLAS will be transferred to an interactive digital version. This digital ESPON ATLAS will be implemented as part of the ESPON website, i.e. for a HTML web browser. An offline version of the online version can also be put on a CD-ROM and might be attached to the printed paper version.

The objective of the online version is to provide access to the contents of the atlas in a user-friendly and interactive way by using a second communication medium. Compared to the paper version the digital version of the ESPON ATLAS will offer added-value as it will allow to access all information of the atlas in a way driven by the information need of the user. It enables more detailed insights into the maps and diagrams and its underlying data, and it enables to use the downloadable maps and diagrams of the atlas for other purposes, e.g. for presentations, for teaching at schools or universities or for publications.

For the development and implementation of the digital version of the ESPON ATLAS, particular attention is given to three guiding principles:

- **Legibility.** Digital products for the visualisation of information very often overload the screen with too many elements, thus confusing the user and reducing the motivation to access and use the information provided.
- **Usability.** The user guidance through the digital ESPON ATLAS will be developed in a way that is obvious and self-explanatory with a clear and consistent conceptual structure.
- **Functionality.** The digital version of the ESPON ATLAS will be organised in a way that all elements of the paper version (e.g. maps, diagrams, text, underlying data and information) will be accessible and can be visualised.

Embedded in the digital atlas will also be options to download all datasets forming the base of the atlas and to download the maps as high-resolution bitmaps in standard formats (e.g. PNG or JPEG).

It should be noted that the digital version of the ESPON ATLAS developed in this project will contain thematically very broad and comprehensive information from the ESPON projects that can be accessed and extracted by the user in various ways. However, the digital ESPON ATLAS will not be an online mapping-tool that would allow the user for instance to change map colours, legend classes or to combine any indicators to be displayed in map form. However, apart from the predetermined cartography, the user is free to access all maps, search, navigate (e.g. pan, zoom, reset) and visualise various elements of the atlas (i.e. maps, text, supporting data and information) in an interactive way.

Following the principles stated above the screen of the digital atlas version will be divided into three broad functional areas (Figure 4 and 5):

- **Thematic navigation area.** This area is the part of the screen in which the user can navigate through the contents of the ESPON ATLAS and can select the contents to be displayed.
- **Content display area.** This area will cover most of the screen and is devoted to display the contents selected in the thematic navigation area of the atlas.
- **Functional navigation area.** This part offers basic functions to the user such as a print option, an export option for the selected map and its underlying data.

Figure 4. Division of the screen of the digital version in different functional areas

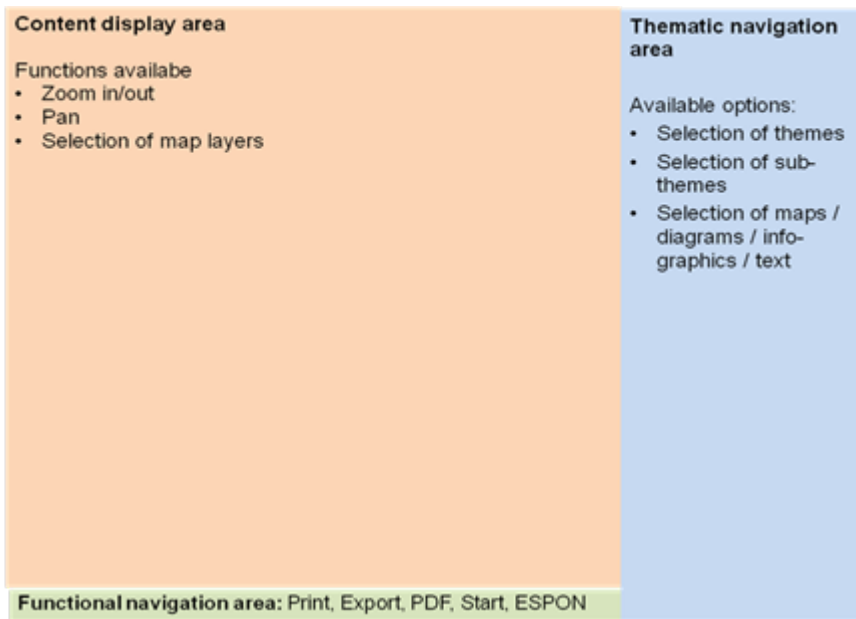
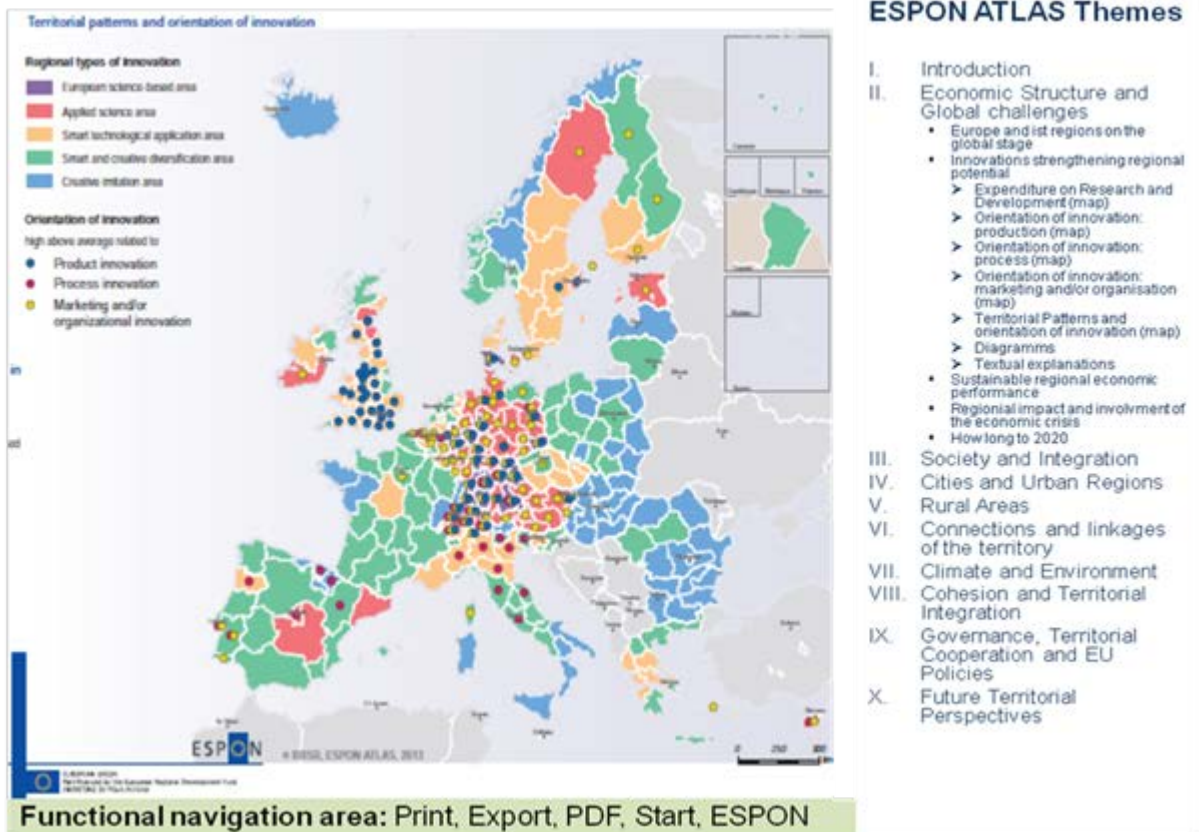


Figure 5. Sample screen of the digital version (final design to be decided later)



2. Further development of style and structure

2.1 The search for the style of communication and cartography

In the project specification of the ESPON ATLAS the TPG is asked to include in his Interim Delivery a final version of the Table of Content of the atlas, examples of 5-10 pages of the atlas which present the style of communication and the cartography envisaged for the entire atlas. Furthermore the digital version should be presented in form of a prototype. This content or style related activities are accompanied by the reporting of realised and planned activities and a work plan until the Draft Final Report.

However, in a meeting of the project group with the ESPON Coordination unit on 25th of January 2013 it was concluded that the ATLAS project cannot develop the deliveries as foreseen due to the interferences related to communication strategies and to cartographic languages developed in parallel in other ESPON activities and projects.

In the preparation of the Interim Report deliveries, the TPG presented at that meeting its ideas related to graphic and cartographic communication of the ESPON ATLAS and a proposal of a redesigned ESPON map layout that will better fit the needs of an atlas.

The TPG and the CU agreed that the ESPON ATLAS, published in between two programme periods, might be used in the ESPON communication strategy as bridge between the “old” graphic appearance and map design and the new one to be elaborated in the preparation of the new programme period. The ESPON ATLAS as one of the outstanding ESPON products in the transition phase must reflect these new graphic developments of the programme.

Related to the communication strategy and cartographic design different ESPON activities are running in parallel. The ESPON ATLAS project is asked according to the project specifications to elaborate and introduce appropriate ideas in the Interim Report, the ESPON CU commenced also a service contract on the layout and graphic design of ESPON publications, and an action started under Priority 3 aiming at the elaboration of a modernised ESPON cartographic language.

The ESPON CU decided that these three activities should be interrelated and the exchange of ideas of the three activities should be envisaged. The ESPON ATLAS will in its final version be based on the communication style and the cartographic representation developed in the guide on ESPON cartographic language.

This means for the ESPON ATLAS project in fact that the presentation of example pages of the atlas in the report are to be seen as first design proposals. This has to be understood as input into the exchange of ideas on communication and cartographic style from the ESPON ATLAS project side.

This is suitable for some selected pages showing the project ideas of how the ESPON ATLAS might look like, it is not suitable, and this is also one outcome of the January meeting of the TPG and the CU, to build the base for the prototype of the digital version of the atlas. The work to elaborate a software for this prototype based just on a design proposal and rework the product afterwards again in the final communication style would be in fact a waste of time and personnel resources.

Instead of a prototype of the digital atlas version, this Interim Report will introduce the basic concept and illustrate the functionalities related to content, menu and user guidance.

2.2 Elaboration of the structure of the ESPON ATLAS

The ESPON ATLAS is supposed to offer a synoptic territorial representation of the European territory based on empirical findings, analytical results and policy recommendations elaborated in the framework of ESPON projects. At the end of the ESPON 2013 programme the atlas will summarise territorial structures and trends, as well as territorial impacts of political activities. In some respect it will be a winding up the ESPON 2013 programme, being a worthy representative of all ESPON projects and their activities. But to some extent it will be also the bridge to or maybe the overture for the future ESPON 2020 programme.

The ESPON ATLAS project has to consider two challenges. The range of ESPON projects has to be taken into account appropriately and the thematic range has to be oriented along the policy relevant themes and the actual policy debate. The project is asked to be flexible in this respect taking into account recent developments and demand.

In the Inception Report, the project outlined a draft version of the Table of Content to be responsive to this plea of flexibility. On the basis of this first outline of the structure, a meeting with the ESPON Monitoring Committee in December gave the opportunity to clarify the demand for territorial information and to further develop the Table of Content. Taking into account the remarks, suggestions and recommendations of this ESPON ATLAS workshop with the Monitoring Committee the Table of Content has been reshaped.

Due to the fact that some of the chapters are still waiting for the analytical findings of on-going ESPON project, a draft final version of the basic structure of the Table of Content is now being presented. On the way to the final product modification and readjustments will be necessary to mirror the thematic outline with the ESPON results.

The sketches of the contents of chapters presented in this report are based on the findings of the ESPON projects and do not give reference to any specific map or illustration. For the chapters dealing with results of projects delivering their findings later only the intended thematic range is presented. The content of these chapters might be subject of changes later on.

Before presenting the revised Table of Contents of the ESPON ATLAS some remarks concerning changes to the previous version are given below.

The discussions concerning the structure of the atlas showed that a reader not that involved in the ESPON context might need some kind of introduction to the somewhat specific ESPON findings related to territorial questions. Due to this, the TPG decided to have some more general information for each theme dealing with the main policy issues of that theme, including elementary territorial findings to guide the reader to the more specific chapters.

The revision of the Table of Content amended with the inclusion of projects which recently delivered their DFR of FR showed that one theme was not yet covered in the atlas, the living conditions in Europe. This theme has been newly integrated, although at the moment in a first stage of content related outline.

Finally, the wording of headings of the recent version is significantly less catchy as it was in the Inception Report.

2.3 The Table of Content and its elements

Introduction

- Scope of the ATLAS

Economic Structures and Global Challenges

- **Introduction**

A map of GDP per capita (most recent) of the European regions will illustrate the basic economic disparities in Europe between less developed regions and concentration of economic power. This will prepare a short review on economy and political documents (TA 2020 etc.)

- **Europe and its regions on the global stage**

This chapter intends to place Europe on the World map. The base concept is to start from a global viewpoint, where Europe as a whole can be seen in the light of other major economic coalitions, or countries, and following this, the maps and figures will focus on the global linkages of the European regions. Maps and figures illustrate the economic performance of the continent compared to the world regions. By the orientation of enterprises that analyses will focus on the location of Asian, North American subsidiaries, the globalisation of European stock exchanges, and the weight of Europe in the FDI flows. Regarding trade issues, the chapter shall present the trade flows of the old continent with the World, and the geography of trade of European regions/nations (e.g. Chinese orientation, openness to extra-EU).

- **Regional economic structure**

The base map of the chapter illustrates the industrial transition typology of the Typology Compilation project. Beside this map, other maps of complex typologies show the differences in the ESPON Space. The results of the TEDI and EDORA projects illustrate the regional classifications of Europe's economy (degree of economy success, dominant sectors). On the basis of the FOCI project the chapter presents the economic structures of LUZ.

- **Regional economic performance**

The long-term development of the regional economies will be presented in this chapter. The measurement will be mainly in terms of GDP (based on approaches of the SIESTA project) amended by more aggregate information as developed in the composite Lisbon performance indicator (Territorial Observation no. 3).

- **Territorial patterns of innovation**
The role of innovation and R&D for the European regions will be topic of the reflections in this chapter. The expenditure for R&D on the basis of recent data will be reflected in the light of the EU2020. Results from the KIT project will serve to identify the orientation of innovation in the regions.
- **Regional dimension of the economic crisis**
The analysis of the GDP developments before and after crisis will show the effects on the regional development and on the process of convergence. The development of employment and unemployment will outline the persistence of the crisis and/or decline as well as the recovery. Information on public debts will round up the information and global aspects will be integrated (ECR2 results will be considered spring 2014)
- **Where European regions stand - Policy synopsis**
To be developed

Society and Integration

- **Introduction**
The introduction of the theme will include basic figures, especially a map about the population density in the ESPON area, including preferably also the absolute numbers of inhabitants in dots. The text of the introduction will refer to the political documents that cover questions of society and integration, in particular the TA 2020.
- **Demographic change**
The chapter about the demographic change will feature the typology of population development which was developed by the DEMIFER project. In addition, smaller maps will compare the natural and the migratory development and show the influence of migration on demography. The development of fertility will be shown as well.
The trends in Europe will be compared with trends in other important world regions. If available, migration flows from outside of Europe will also be included.
The richness of information on migration offers the opportunity to give more space to different aspects of migration pattern and to include a separate chapter about migration and mobility.

- **Age structure**
In the chapter about age structure, the replacement ratio and the dependency ratio will be shown. In addition, changes in the population groups will be shown.
- **Education and labour force**
This chapter will present the share of persons with tertiary education, but also information on education on lower levels (enrolment in schools) and background information (spending on education, student-teacher ratio etc.). Since there are big gender gaps in the labour market participation, maps will also show the unemployment rates of men and women.
Provided that this information is available from ESPON, skills of the labour force and the employment by level of education will be shown. The impact of migration on the age structure will complete this information
- **Labour market**
This chapter will provide detailed information about the labour market like the unemployment rate in general and more specific data like the youth unemployment rate.
- **Poverty and integration**
This chapter will depend highly on results from the TIPSE project, which will present its Draft Final Report end of 2013. It will show poverty rates, changes of household income and intra-regional disparities.
- **Social cohesion - policy synopsis**
To be developed

Cities and Urban Regions

- **Introduction**
Topographic information and a representation of the European city landscape showing the cities by population size will introduce the topic. The importance of city population and their development in different size groups in Europe and in global comparison will enrich the findings.
- **Metropolitan regions in Europe**
This chapter will be dedicated role of metropolitan regions, the development of cities and their embeddedness in the wider territorial context including first tier and second tier cities and will deal with the economic orientation and power of cities. (TIGER, GaWC, FOCI, SGPTD).

- **European poles of global integration**
The sum and concentration of the functional importance of metropolitan areas will be presented in respect to economic and political decision making. Mapping of Europe in the World network (TIGER, GaWC) will illustrate the position and connectivity of European cities in the world.
- **Intra-metropolitan structures and developments**
Intra-metropolitan structures and are in focus in this chapter. The role of region in city development and vice versa the role of city in regional development for the economic development in its border regional context will be outlined. The relations between cities and their surrounding regions (FOCI, BEST METROPOLISES, POLYCE)
- **Small and medium-sized cities**
This chapter will deal with the roles and functions of small and medium sized towns, their potentials and barriers for development and their contribution to a more balanced territorial development (based on TOWN and DFR spring 2014)
- **Urban Europe – policy synopsis**
To be developed

Rural Areas

- **Introduction**
Starting with the typology of rural areas, the introduction will deal with the main tendencies of land use changes and its foreseeable impact on the rural society, economy and the environment. Introduction also gives an overview of the financial emphases in the Member States concerning CAP pillar II resources (share of 4 axes) (EDORA, Figure2) as well as the overall impact of CAP by type of regions (urban, rural, intermediate) (TIPTAP).
- **Unique characteristics and potentials of rural territories**
This chapter will present on one hand the urban-rural typology worked out in the EDORA project. This project integrates three types of rural typologies: the Dijkstra - Poelman Urban-Rural Typology, the structural typology and the performance typology. On the other hand it describes another typology capturing land use changes and its connections to the type of regions as well as the process of change (EU-LUPA). Concerning green economy relevant outcomes of the GREECO project are expected, which are the regional profile of green activities at the NUTS 2 level and a qualitative analysis on the potential of green economies at the regional level.

- **The main challenges of changing landscapes in Europe**
Based on the EU-LUPA project, this chapter will present the typology of land use change elaborated for the better understanding of land use patterns and related changes in Europe. This typology goes beyond the thematic perspective and intends to integrate different sector views. Maps will depict hotspots of landscape changes, which are taking place mainly due to the effects of globalization and its effect on the global division of labour.
- **Integrated territorial approach to urban-rural relations**
No maps were found for this chapter. However Priority 2 of TA2020 (Encouraging integrated development in cities, rural and specific regions) describes the diversity and importance of urban-rural interdependence. Through the graphs of the FOCI project, the impact of urban development on natural and agricultural land can be described.
- **Challenges for specific types of rural areas**
This chapter, based on the results of the GEOSPECS project, will show the presence of geographical specificities identified in LAU2 units. The main focus is on sparsely populated and poorly connected areas, and their relation to urban core centres. The positive and negative effects of the identified specificities combine and contribute to produce unique local and regional preconditions for social and economic development.
- **Rural areas - Policy synopsis**
To be developed

Linkages and Accessibility

- **Introduction**
Transport infrastructure and the resulting degrees of accessibility are considered to be key components of the competitive position of cities and regions and also of the quality of life of their inhabitants. The introduction of the theme focuses on the expectations stated in key policy documents concerning the role of transport infrastructure for regional development. The base map of the introduction will present the European transport infrastructure networks.
- **Regional linkages to the world**
Seen from an accessibility perspective, the integration of European regions in the global economy is very heterogeneous. In particular for passenger travel, huge differences exist between European regions in terms of linkages to global destinations and global accessibility. Maps included (based on TRACC and TIGER) will show travel time and costs to global destinations for passenger and freight, global travel and freight connectivity of regions and the main global orientation of airports
- **European centre and periphery revisited**

European accessibility indicators provide assessments of the attractiveness and competitiveness of European regions in the European context based on their location and their integration in the transport networks. Traditional and new types of accessibility indicators developed in TRACC form the base of this chapter and allow an up-to-date assessment of the situation and also the analysis of trends over time. A focus of this chapter will be on the issue of centre and periphery in Europe.

- **Local and regional accessibility patterns**

Local and regional accessibility indicators developed in TRACC and some Priority 2 projects provide the base for an analysis of restrictions and opportunities for daily life of population and economic actors provided by the transport infrastructure. This chapter will be based on maps showing access to entrance points of high-level networks and freight terminals; a Europe-wide comparative map showing results for the seven TRACC case study regions will be the main map of the chapter.

- **Access to information**

Good connectivity via transport infrastructure is an important factor for regional development. However, broadband connection as provider of virtual access to information has grown significantly in importance during the last two decades. This chapter will address the current state and recent development in this kind of linkages and accessibility.

- **Linkages and accessibility - Policy synopsis**

To be developed

Climate and Environment

- **Introduction**

Europe is facing significant environmental changes of which climate change has become one of the most challenging issues. The introduction of the theme will discuss this from a territorial point of view. A map of the CORINE land cover map (CLC 2006 V16 or updated) will show the physical starting point of the European territory.

- **Land use change**

The amount of land use changes have been addressed in some ESPON projects, in particular in EU-LUPA. This chapter will provide a brief analysis of land types and their challenges. The main map will be based on typologies and hot spots of land use change.

- **Sea use change**
Not only land use is changing; Europe's seas are belonging to the maritime areas worldwide that are extremely used by humans. The ESTADOR project has provided unique insights into the European Seas, maps from this project form the base of this chapter.
- **Climate change**
Regions in Europe are differently affected by climate change and at the same time have different opportunities to utilise adaption and mitigation in their strategies. This chapter will present the contribution of ESPON CLIMATE to these issues by focussing on the impacts of climate change on European regions, the adaptive and mitigative capacities of regions and the resulting vulnerability of regions.
- **Greening of the economy**
Developing a green economy is high on the agenda to respond to the environmental challenges. This chapter will present main results of GREECO on the current state of the green economic performance of regions and of their potentials to develop a green economic base.
- **Climate and environment - Policy synopsis**
To be determined

Living Conditions in Europe / Regional Qualities

The TPG decided on this additional theme on its meeting in February 2013. It will give information about public services and infrastructure. The information will probably largely be taken from the projects SeGi and ATTREG, supported where necessary from information from other pieces.

The detailed structure of this theme will be part of the activities in the coming months. Up to now first chapters are thought to deal with

- **Services of general interest**
- **Infrastructure**
- **Attractiveness of places**
- **Living conditions - Policy synopsis**
To be determined

Integrated View to Territorial Development

- **Introduction**

The main territorial development challenges of Europe will be depicted from an integrated view. This shall reflect not only economic but cohesion and EU2020 Strategy aspects, too. Since the economic performance is a significant indicator of integration, and it is also a crucial element of cohesion, this aspect will form a background basis in this chapter. A recapitulative map needs to be selected to present the overall content of the theme. It can be the presentation of a complex map such as GERD (Gross Expenditure on Research and Development) as percentage of regional GDP, and/or a synthetic map on EU2020 indicators. The figures on regional disparities of economic performance can also be included as another important point of view. The introduction text shall summarize the necessity and relevance of the EU2020 and its linkages with the ESPON researches.

- **Smart, sustainable and inclusive growth**

This chapter will be based on the results of SIESTA project and will focus on the ESPON 2013 results in relation with the following priorities of the Europe 2020 Strategy; smart, sustainable and inclusive growth. In the case of 'smart growth', maps will present the situation and the changes of expenditure on R&D with a possible comparison with the GDP. Labour productivity is also an important aspect, thus the human resources of R&D, the Internet penetration and other important factors of smart growth might also be included to this chapter. The targets of sustainable growth will illustrate the national or regional differences of renewable energy consumption, the changes in GHG emission, or the energy intensity. In the case of 'inclusive growth' the chapter shall focus on early school leavers from education or training, employment rate, the graduated population and the risk of poverty. Most of the map candidates will present the selected indicators in the light of EU2020 targets, and of course the aggregated EU2020 index can be also included.

- **Territorial cohesion**

This subtopic will depict the process of convergence or divergence in territorial cohesion according to the outcomes of the relevant ESPON 2013 projects. Selected figures shall present the spatial disparities of indicators on territorial cohesion. As for key indicators (the combinations of GDP per capita, unemployment rate etc.), the chapter intends to present the regional (NUTS-3) disparities by country. Maps shall illustrate the discontinuity of economic performance and the spatial structure of cohesion oriented scenario in 2030. The subchapter must also focus on special indicators that won't be presented in other chapters and have significant relevance to cohesion such as life expectancy.

- **Territorial diversity**

This topic intends to highlight the different geographic specificities of Europe identified by the ESPON 2013 program. The maps will present not just the sparsely populated, mountainous or peripheral regions, islands and island states, but also the openness of border territories and the population potentials of Europe. Important emphases of the chapter are the typology of regional economies and the regional classification by naturalness.

- **Sustainable environmental development**

This chapter shall summarize the development activities related to environmental issues. Although this area is slightly covered in various/some projects, there are some researches which include different aspects of these topics. A potentially good approach can be to align environmental potential maps which serve as a basis for such kind of developments. The SIESTA project focuses more on this issue and contains suitable solar energy potential, wind or photovoltaic potential (etc.) maps. Since GREECO also deals with green economy and environmental challenges this can be an even more important project in this chapter. According to the interim report urban waste water treatment, soil sealed area, regional adaptation to climate change maps can be selected for map candidates. Upcoming reports can and shall broaden the aspect of the chapter.

- **Integrated territorial development - Policy synopsis**

To be developed

Governance, Territorial Cooperation and EU Policies

- **Introduction**

The Introduction can review the accession waves of the European integration process, and will also involve the candidate and Schengen countries. This shall give an overall aspect of EU progression on governance, cooperation and policies. The introduction will also summarize the EU headline targets regarding the mentioned areas with a high emphasis on the EU2020 strategy priorities and main targets.

- **Territorial dimensions of different policies**

In this chapter a detailed overview will be presented on the assessment process of the territorial impact of EU Directives. Figures shall describe the Logical Chains from Directives to Exposure Fields, the Regional Exposure and Regional Sensitivity Matrix and finally the Territorial Impact Matrices. On the base of the ARTS project some examples will depict the regions under the influence of given directives. Thus maps will illustrate the effect on air and noise pollution by environmental protection Directives, or the connection between transport's directives and employment. Multi-level governance - managing functional territories and ensuring balanced coordination.

- **Multi-level governance - managing functional territories and ensuring balanced coordination**

In this subchapter the project team is waiting for the results of a governance related project called TANGO. From the Interim report the team summarized the potential and scheduled factors which are the followings; a typology map on territorial governance across Europe, the typologies of spatial planning and the indicators for 'good' territorial governance.

- **Territorial cooperation towards the long term objectives of territorial cohesion**

This chapter will have a focus on map candidates about five types of territorial cooperation (from twinning city to transcontinental TC) according to proximity and coverage. Theoretical and empirical model of successful co-operations (determinant factors and impacts) will be depicted by figures. The maps of this topic intend to illustrate the spatial patterns of Interreg programmes and twinning cities. The number of project partners and twinning cities agreements are compared to the regions' population and GDP. Thus the correlation between territorial cooperation and the level of economic development can be identified accordingly. As an additional aspect, the chapter wants to illustrate the types of Europe's regions according to their dominant territorial cooperation character.

- **Policy contribution to economic, social and territorial cohesion**

On the basis of the TIPTAP project this chapter will analyse the territorial impact of two EU policies. In the case of Common Agricultural Policy, maps shall illustrate the territorial impact on single dimensions (economic growth, tourism diversification). As for the new Transport Policy, this dimension will include the combination of economic growth and market opportunities. The aggregated territorial impacts of both cases on regions can be presented according to the results of the TIPTAP project.

- **Governance, Territorial Cooperation and EU Policies - Policy synopsis**

To be developed

Future territorial perspectives

- **Introduction**
- **Transport scenarios**
 - TIPTAP
 - ET2050
 - TRACC results
- **Climate scenarios**
- **Scenarios for 2030 and 2050**
 - ET2050
- **European territorial vision 2050**

Addendum

- The ESPON network putting ESPON partners on a map and a network analysis of research cooperation.

References

This part will list contributions and references, as well as a glossary. To which extent it could be used to transport additional information related to basic territorial representation and question of visualisation has to be approached in the future steps of the project.

3. The shape of the ESPON ATLAS

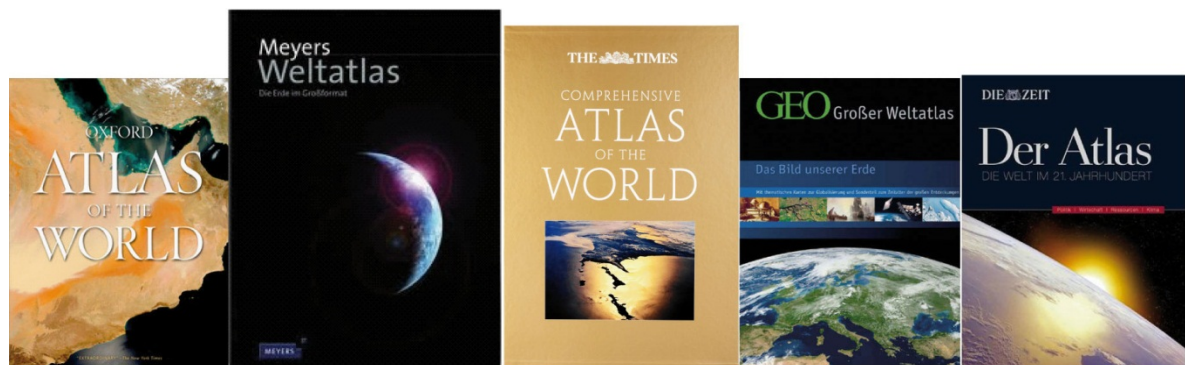
3.1 Style of communication

The format of the ESPON ATLAS

The format is the first question to be answered when developing the presentation of information in atlas form because page layout and the size of maps and illustrations are closely related. The appearance and format of a book influences its visibility in the bookshelf, the more colourful or the bigger the size the easier it could be detected in the line with others. Size follows function, the format of an atlas orients in general on the intended use. A brief survey of selected atlases categorised by function outlines the related formats.

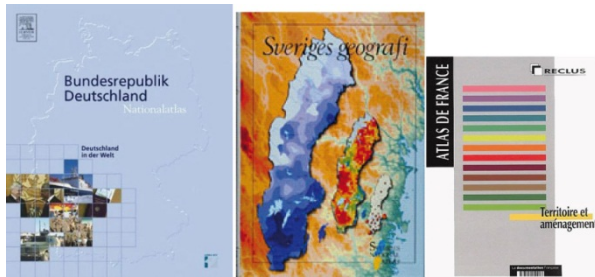
World atlases

World atlases in the form of universal atlases and prestigious in their character have the biggest format. They are developed from the very beginning as a geographic reference book. In present times, the thematic maps gain more importance. The average size of these atlases is around 40 cm in height and 30 cm in width. The Meyers Weltatlas and the Times Comprehensive Atlas of the World reach 47 x 36 cm respectively 45 x 31 cm.



National atlases

The next category of atlases is constituted by national atlases. With an average size of 34 x 26 cm in height and width they are a bit smaller than the world atlases, but still reflecting in their size the related national importance of the product, underlining in most countries that they are published in several thematic volumes.



School atlases

School atlases form a broad category of atlases. On average they have a height of 31 cm and widths of 23 cm. School atlases are quite unique in size, the deviation is rather small. The Alexander Weltatlas from Germany has the largest format with 34 x 25 and with about A4 format of 29 x 21 the Hungarian Student Atlas (“Középiskolai földrajzi atlasz”) is the smallest.



Thematic atlases

Thematic atlases are rather different in size. The average of the small sample is around 30 x 23 cm reaching from the Luxemburg Atlas with 35 X 34 cm over the nearly quadratic Atlas of the Metropole Ruhr with 31 x 29 cm down to the thematic more illustrative Larousse Atlas geopolitique with 22 x 19 cm paperback print.

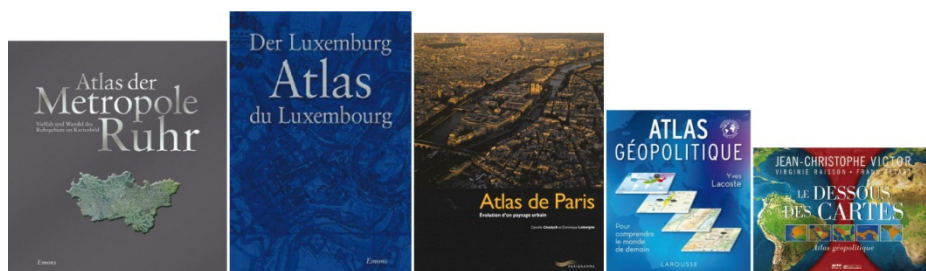


Table 1 Sample of atlas formats

| World Atlases | Height | Width |
|--|-------------|-------------|
| Oxford Atlas of the World 19th edition | 37,8 | 28,9 |
| Dierke International Atlas | 33,6 | 24,8 |
| GEO Großer Weltatlas | 37,6 | 29,0 |
| Meyers Weltatlas | 46,8 | 35,8 |
| The Times Comprehensive Atlas of the World | 45,0 | 31,0 |
| DIE ZEIT - Der Atlas | 39,4 | 30,6 |
| Average | 40,0 | 30,0 |

| National Atlases | Height | Width |
|-----------------------------------|-------------|-------------|
| Germany - National Atlas | 36,4 | 30,4 |
| Sweden - National Atlas | 35,4 | 25,4 |
| France - Reclus - Atlas de France | 29,0 | 22,8 |
| Average | 33,6 | 26,2 |

| School Atlases | Height | Width |
|--------------------------------|-------------|-------------|
| Oxford School Atlas | 29,2 | 22,8 |
| Philips Modern School Atlas | 28,8 | 23,0 |
| Alexander Schulatlas | 34,4 | 24,8 |
| Diercke Weltatlas | 29,6 | 23,8 |
| Grote Bosatlas | 30,5 | 21,5 |
| Atlas Bordas College | 31,2 | 24,8 |
| Schweizer Weltatlas | 31,4 | 24,2 |
| Großer Kozenn Atlas | 32,5 | 23,5 |
| Atlante storico scolastico | 30,6 | 23,2 |
| Középisikolai földrajzi atlasz | 28,6 | 20,6 |
| Uus Maailma atlas | 31,8 | 22,6 |
| Libers Atlas för gymnasiet | 30,7 | 24,2 |
| Atlas du 21ème Siècle | 34,0 | 24,5 |
| Average | 31,0 | 23,3 |

| Thematic Atlases | Height | Width |
|-----------------------------------|-------------|-------------|
| Atlas der Metropole Ruhr | 31,0 | 29,0 |
| Luxemburg Atlas | 35,0 | 24,0 |
| Atlas de Paris | 31,8 | 25,4 |
| Larousse Atlas geopolitique | 22,0 | 19,0 |
| Le dessous des cartes | 23,8 | 17,4 |
| Pengiuin State of the World Atlas | 24,0 | 19,0 |
| Soil Atlas Europe | 41,6 | 29,9 |
| Average | 29,9 | 23,4 |

This brief check of atlas formats shows that the format A4 is in fact not used for any atlas. The choice of the size of an atlas depends on the intended use and the kind of representations.

The ESPON projects provide plenty of territorial information, but the ESPON ATLAS will have only limited space. The ESPON ATLAS 2006 has shown that

an ESPON map fills a full page of an A4 landscape page in a suitable size to show small regions also in a visible manner. If one wants to put some additional information in graphic form on the same page, the format one has to consider more and more detaches from A4.

Based on these considerations the ESPON ATLAS team favours a quadratic format for the ESPON ATLAS in a height and width of 30 cm. Such a format offers the opportunity for a broad openness to graphic possibilities and for interesting combinations of maps, graphics and text.

Graphic style

The ESPON ATLAS is understood as a unique product using the existing ESPON results, citing, but not repeating the maps of the ESPON projects as such.

The intended use and dissemination in a broader context of policy makers, stakeholders, scientists, students and broader public suggests to use a less scientific presentation of ESPON information and to present existing and also newly created results in a more graphical way, e.g. in form of infographics.

Citing from the Wikipedia, "information graphics or infographics are graphic visual representations of information, data or knowledge intended to present complex information quickly and clearly. They can improve cognition by utilizing graphics to enhance the human visual system's ability to see patterns and trends. The process of creating infographics can be referred to as data visualization or information design".

3.2 A proposal for a transitory ESPON map design

As mentioned earlier, the ESPON Atlas 2013 will be published in the transition phase between the "old" and the "new" ESPON programme.

In the last ten years the ESPON map design has established as 'figurative mark' with a distinct recognition value. It was furthermore an example for the successful implementation of a corporate map design within a research network with different cartographic skills of the people involved.

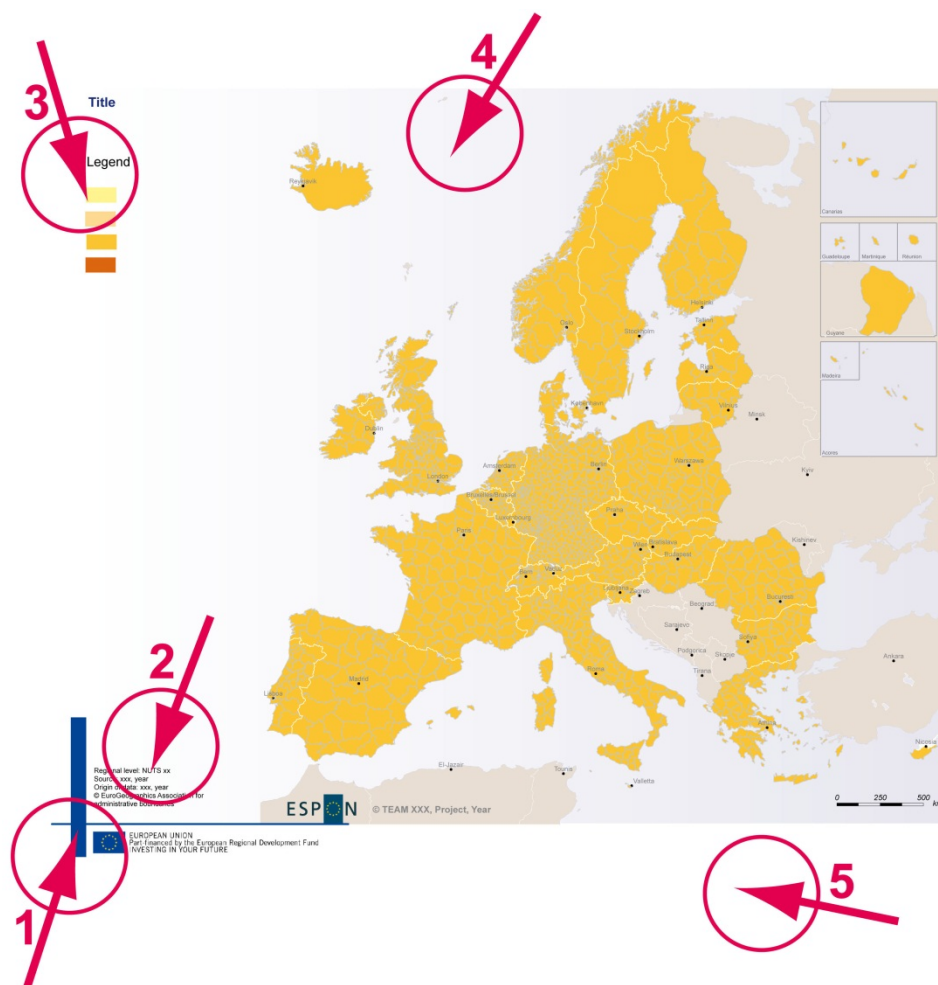
The ESPON map design worked very well in the intended use in reports and presentations with mainly one map on one page. The former ESPON Atlas 2006 has shown that it worked also with several maps on one page, but the visual "heavenliness" in the graphic appearance increases with rising numbers of maps and blue edge strips. Especially the new ESPON ATLAS ambition to use more maps of smaller size on one page demands a bit more visual lightness related to the map design.

The blue edges of the map define the map space on the page very well and give the ESPON map visual footing.

The map proposal for the ESPON ATLAS project tries to avoid a potential ornateness by too many blue edge strips without abolishing the introduced map brand element in total.

A map needs some graphic anchor on the page. Instead of having two strips on each side of a map, the ESPON ATLAS project proposes to have a vertical blue edge strip at the lower left corner of the map, in width a reference to the old design but clearly reduced in height. A thinner horizontal line connects this left margin of the map with the ESPON logo in the map (see Arrow 1 in Figure 6)

Figure 6. ESPON ATLAS map design proposal



- 1: Short blue edge strip with thinner horizontal line connecting ESPON logo and map
- 2: Field for basic information on data sources, geometry as integral part of the map
- 3: Legend field
- 4: Map background and sea with colour range from white to blue, leaving white space for legend and information
- 5: Space for information in ESPON 2013 map design, now integrated and no longer seperated from map content

The map extent will be opened to the left side creating space between the left margin of the map and the anchor corner built by the crossing of the blue edge strip and the line connection to the map. The space offered will be the place for the basic information on data sources etc. (see Arrow 2 in Figure 6). By this the important information will be an integral part of the map. In the former map design, this information was placed in fact outside the map and sometimes cut off for presentation purposes (see Arrow 5 of Figure 6).

The title of the map and the legend will be placed in the upper left corner of the map creating the visual corner of the map (see Arrow 3 of Figure 6).

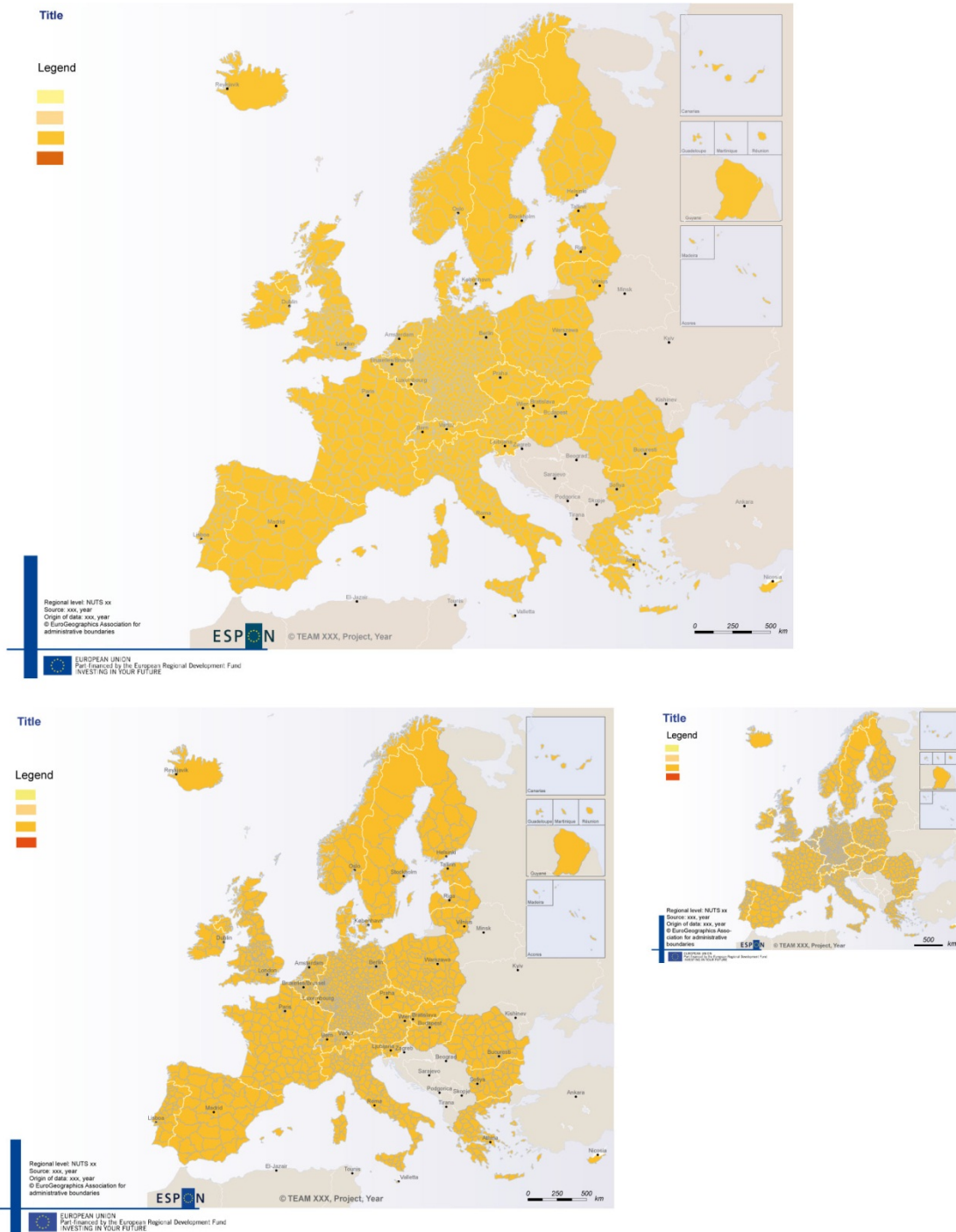
The background of the map, including the sea will be built with a colour range from white, in the legend and information area to blue on the right side, ending in the colour used in ESPON maps up to now.

The map design for the ESPON ATLAS has been elaborated in three different sizes to fit the layout specifications.

The “big” map fit on the right side cover around 4/5 of the page, but leaving space for further additional infographics at the bottom and on the left side of the map. The ‘medium’ size map covers the width of two columns; the “small” map with reduced topographic information fits the marginal column of the left page. The latter one is planned to be used in series of, for example, three small maps to illustrate interrelated aspects of one topic or time series. The small maps are in character more illustrative. Legends will be, if the topic allows, harmonised, which means that all three maps might have the same legend.

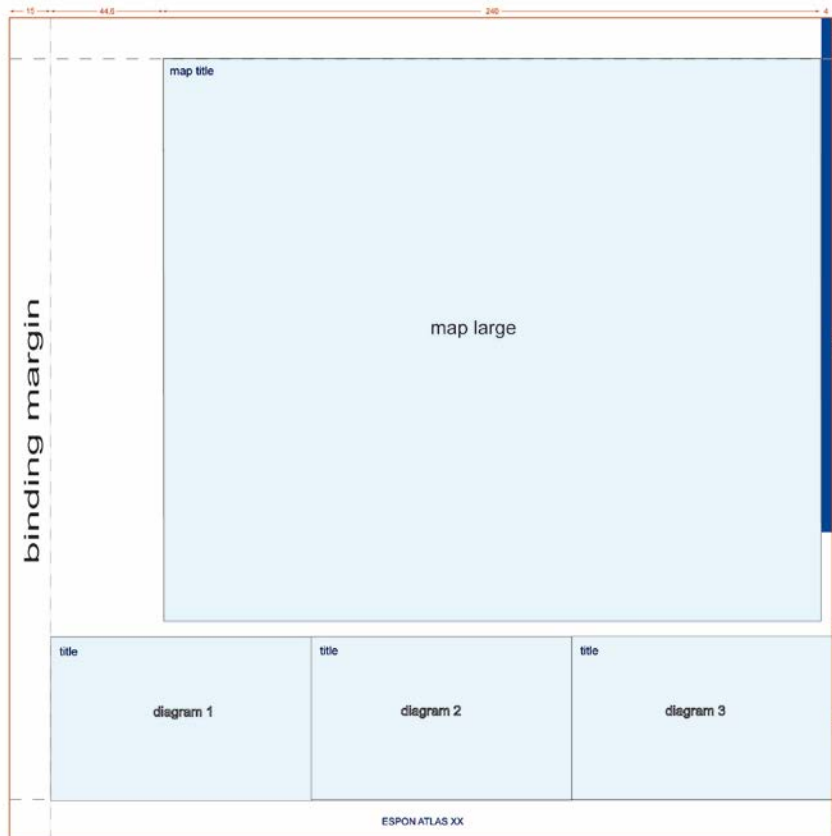
Figure 7. ESPON ATLAS maps of different sizes

The maps are reduced in size by 50%



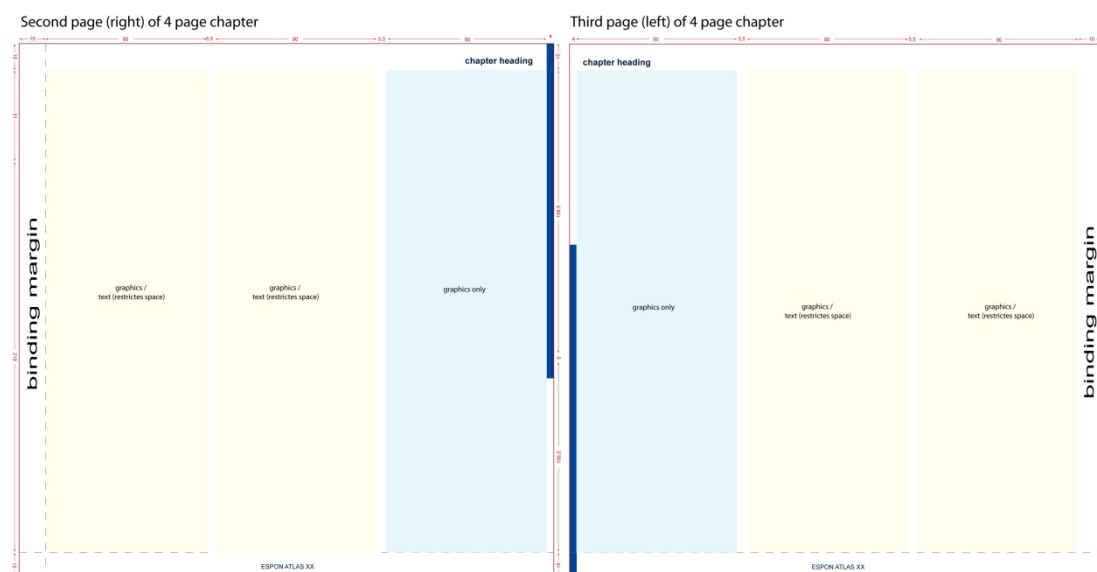
The last page of a chapter will always be a right-hand page. It will contain a large synoptic map as main component. The chosen format of the ESPON ATLAS will allow including additional information under and may be also besides the map, preferably in graphic form, dealing with further thematic aspects or deepening the map content.

Figure 9. Print space last page of chapter



Some chapters of the ESPON ATLAS will have four pages reflecting the importance in the territorial political discussion for that topic and respecting the related amount of information available from ESPON projects. In those cases, the synoptic summary with the “big” map will be on the fourth page. The second and third page will give space to more information, the size for additional text per page will orient on that of the first page. The two inner columns to the binding margin are available for graphic information, maps and text (see Figure 10). The two outer columns of the pages are restricted to maps and infographics only because the blue edge strips serving as side closings will conflict with text columns.

Figure 10. Print space pages 2 and 3 in 4 page chapter



3.4 ESPON ATLAS online version

The contents of the paper version of the ESPON ATLAS will be transferred to an interactive digital version. This digital ESPON ATLAS will be implemented as part of the ESPON website, i.e. for a HTML web browser. An offline version of the online version can also be put on a CD-ROM and might be attached to the printed paper version.

The objective of the online version is to provide access to the contents of the atlas in a user-friendly and interactive way by using a second communication medium. Compared to the paper version the digital version of the ESPON ATLAS will offer added-value as it will allow to access all information of the atlas in a way driven by the information need of the user as it enables more detailed insights into the maps and diagrams and its underlying data, and as it enables to use the downloadable maps and diagrams of the atlas for other purposes, e.g. for presentations, for teaching at schools or universities or for publications.

For the development and implementation of the digital version of the ESPON ATLAS, particular attention is given to three guiding principles:

- **Legibility.** Digital products for the visualisation of information very often overload the screen with too much elements, thus confusing the user and reducing the motivation to access and use the information provided. The design principle for the digital version of the ESPON ATLAS will be that of keeping the screen layout as simple and consistent as possible but at the same time allowing for smart use of it. A trade-off will be sought between the requirement to display the contents of the atlas as largely as possible on the screen and the necessity to provide the essential navigation tools. A clear visible language to be developed by including the main elements of the ESPON corporate identity will support this principle.
- **Usability.** The user guidance through the digital ESPON ATLAS will be developed in a way that is obvious and self-explanatory with a clear and consistent conceptual structure. Navigation through the digital atlas will be intuitive by using appropriate symbols. A clear structure, moderate visual clues and easily recognizable links will help users to find their path to fulfil their information needs. At any place in the digital Atlas, the users will clearly see what functions are available. As well, the users shall well understand the contents of the atlas and shall feel comfortable with the way they interact with the system. As far as possible the Web Content Accessibility Guidelines will be considered.
- **Functionality.** The digital version of the ESPON ATLAS will be organised in a way that all elements of the paper version (e.g. maps, diagrams, text, underlying data and information) will be accessible and can be visualised. However, the digital Atlas will offer a range of additional functions. It will contain a search function to easily go to the requested information. It will be possible to navigate between the various elements but also to navigate on the different maps provided with pan, zoom or reset functions. As the ESPON ATLAS will include also complex maps with different information layers, it will be possible in the digital version to decompose the map into the different layers to view only part of the information. Embedded in the digital atlas are also options to download all datasets forming the base of the atlas and to download the maps as high-resolution bitmaps in standard formats (e.g. PNG or JPEG).

It should be noted that the digital version of the ESPON ATLAS developed in this project will contain thematically very broad and comprehensive information from the ESPON projects that can be accessed and extracted by the user in various ways. However, the digital ESPON ATLAS will not be an online mapping-tool that would allow the user for instance to change map colours, legend classes or to combine any indicators to be displayed in map form. This type of functionalities will be part of other ESPON tools such as the ESPON HyperAtlas or the ESPON Online Mapping Tool to be developed in a

parallel project. So, in contrast to those other tools several decisions on the way the information is presented are pre-defined and will not be left to the users, i.e. the maps are fixed. However, apart from the predetermined cartography, the user is free to access all maps, search, navigate (e.g. pan, zoom, reset) and visualise various elements of the atlas (i.e. maps, text, supporting data and information) in an interactive way.

Following the principles stated above the screen of the digital atlas version will be divided into three broad functional areas (Figure 6 and 7):

- **Thematic navigation area.** This area is the part of the screen in which the user can navigate through the content of the ESPON ATLAS and can select the contents to be displayed. This can be done by selecting first the theme, than the sub-theme and eventually the map, diagram, infographic or text:
- **Content display area.** This area will cover most of the screen and is devoted to display the contents selected in the thematic navigation area of the atlas. After having a map on the screen the user has different functions to zoom in or out, to pan or in case a map has several layers to select individual map layers.
- **Functional navigation area.** This part offers basic functions to the user such as a print option, an export option for the selected map and its underlying data, an option to export the corresponding chapter as PDF and links to the start screen of the atlas and to the ESPON homepage.

Figure 11. Division of the screen of the digital version in different functional areas

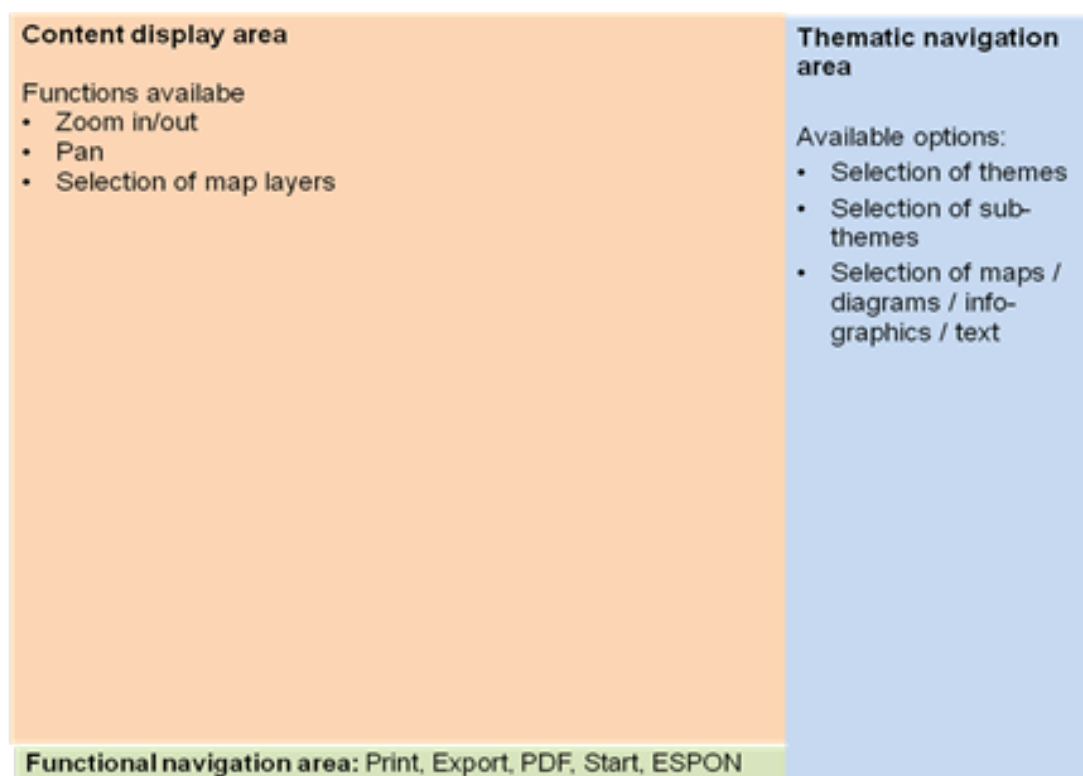
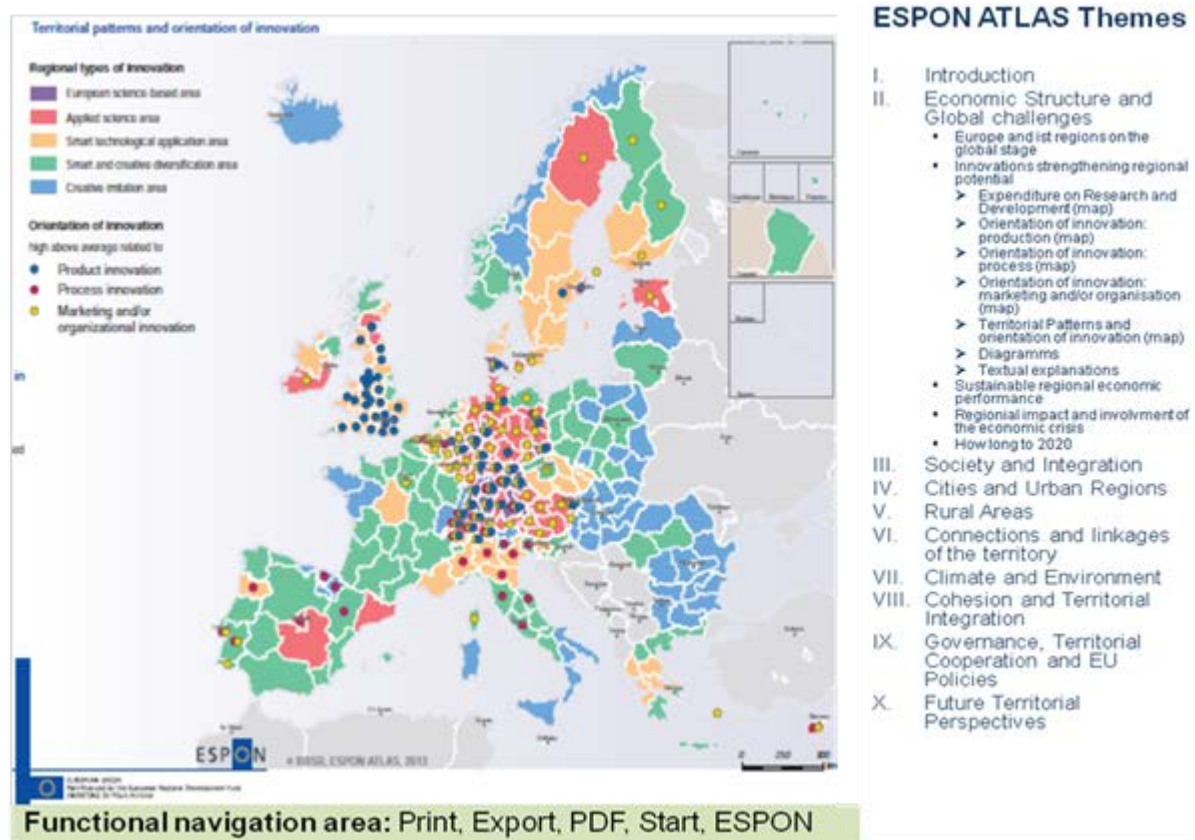


Figure 12. Sample screen of the digital version (final design to be decided later)



4. Sample Chapters of the ESPON Atlas envisaged

Two chapters of the envisaged ESPON ATLAS have been chosen to illustrate the concept developed and the style of the communication and cartography.

They are in fact thought as ready for final editorial work examples based on ESPON information available from final reports and represent two possible ways to deal with information on two respectively four pages.

A detailed view in the proposed format of 30 X 30 cm will be given in the annex to this interim report.

4.1 Europe and its regions on the global stage

Figure 13. Chapter Europe and its regions on the global stage – page 1

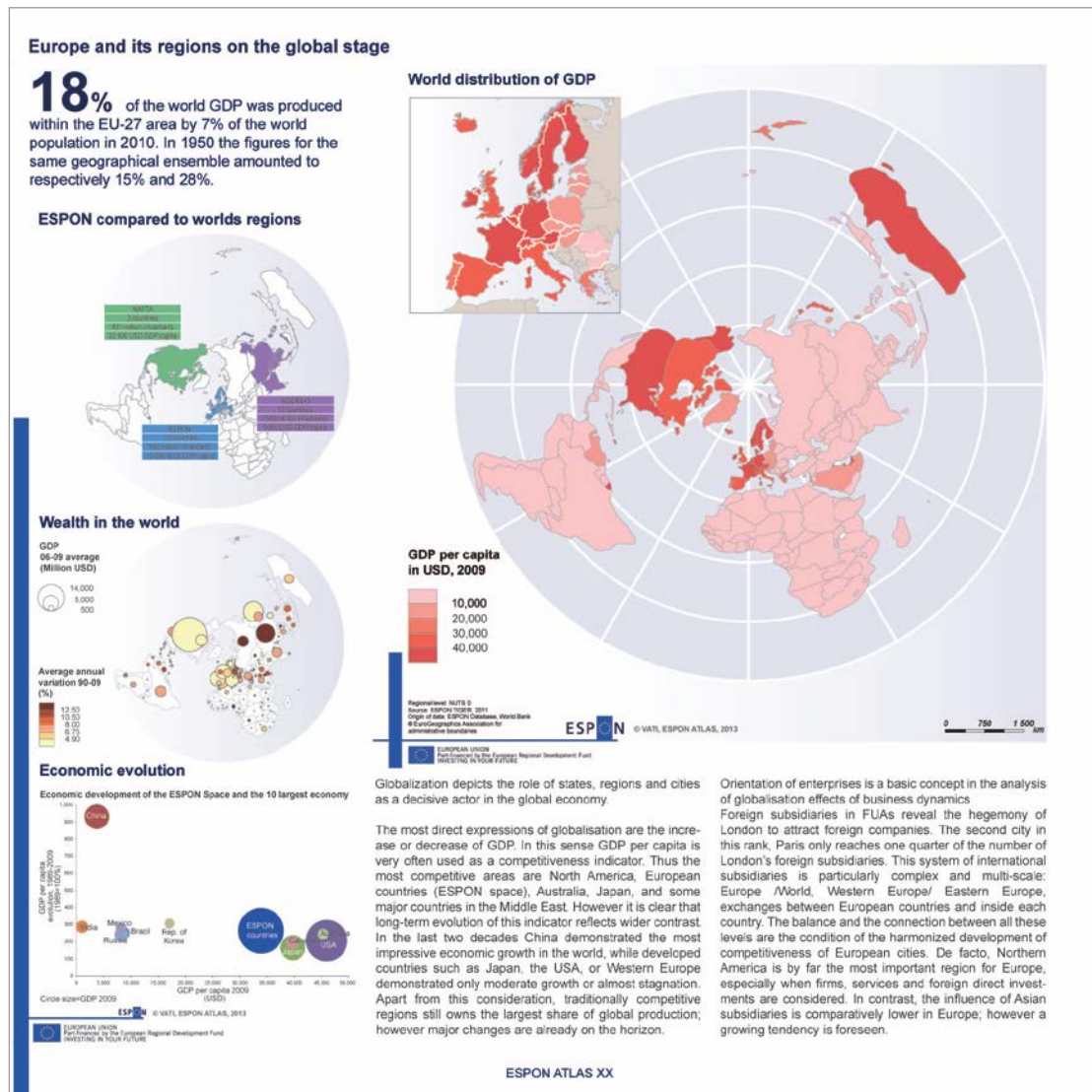


Figure 14. Chapter Europe and its regions on the global stage – page 2

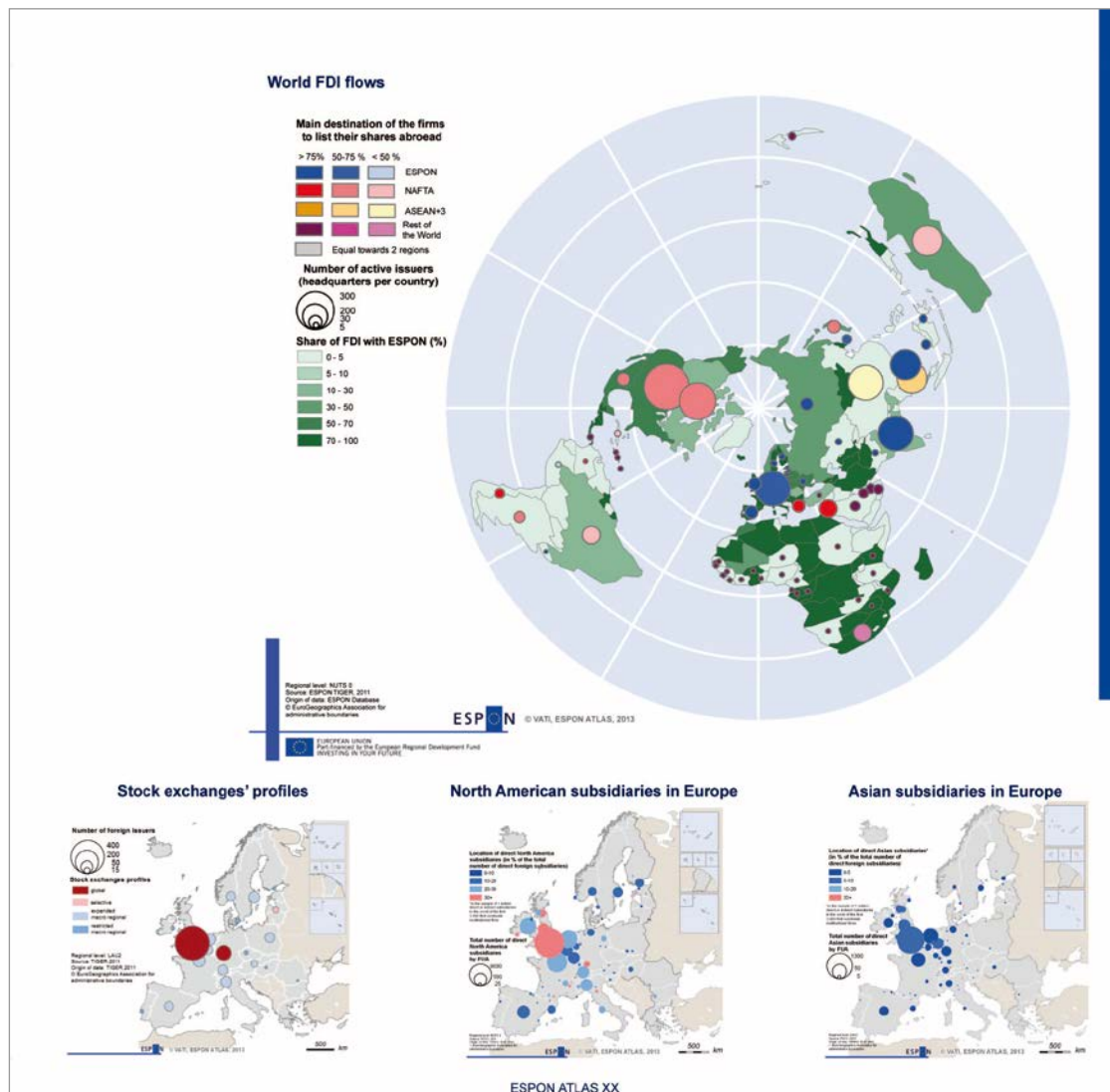


Figure 15. Chapter Europe and its regions on the global stage – page 3

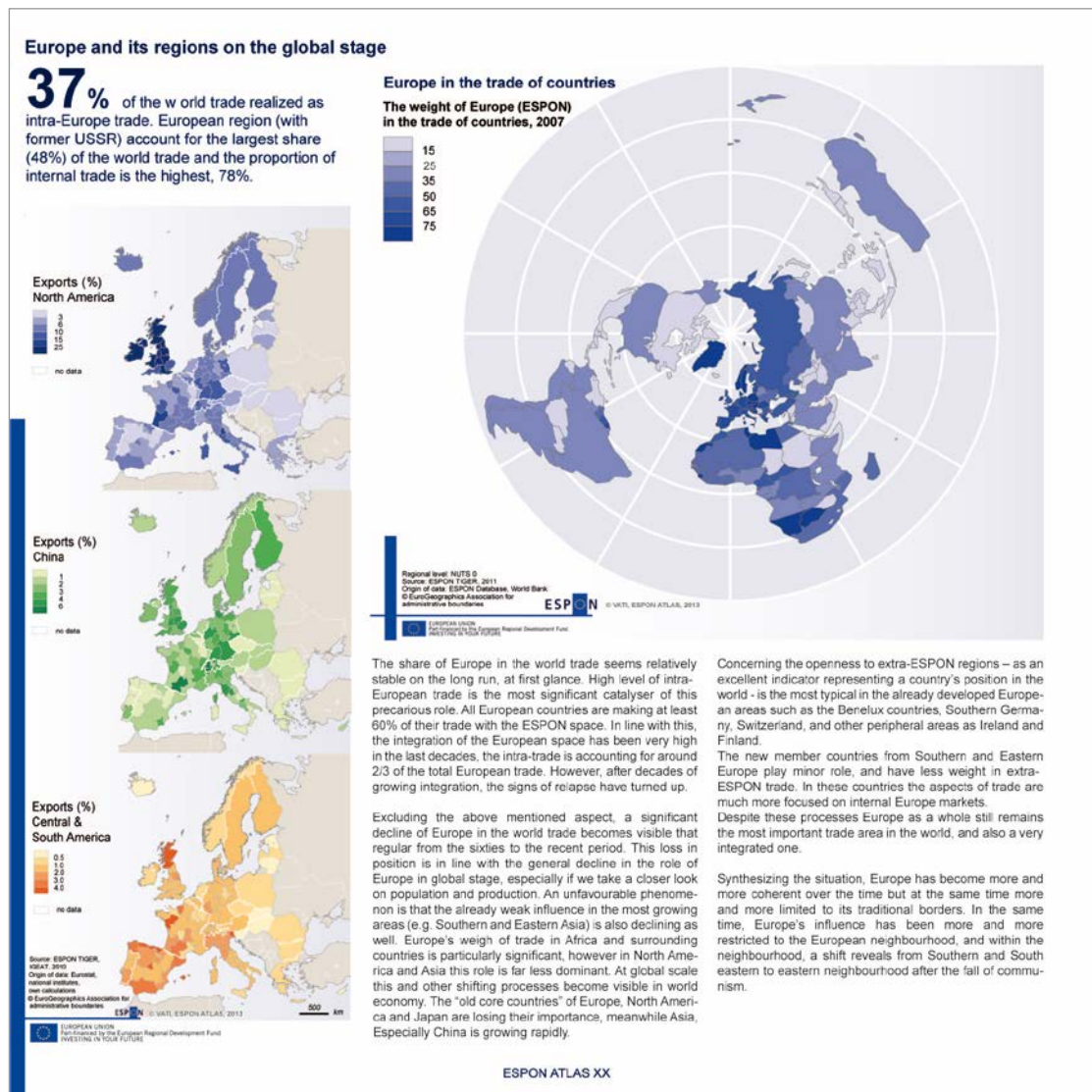
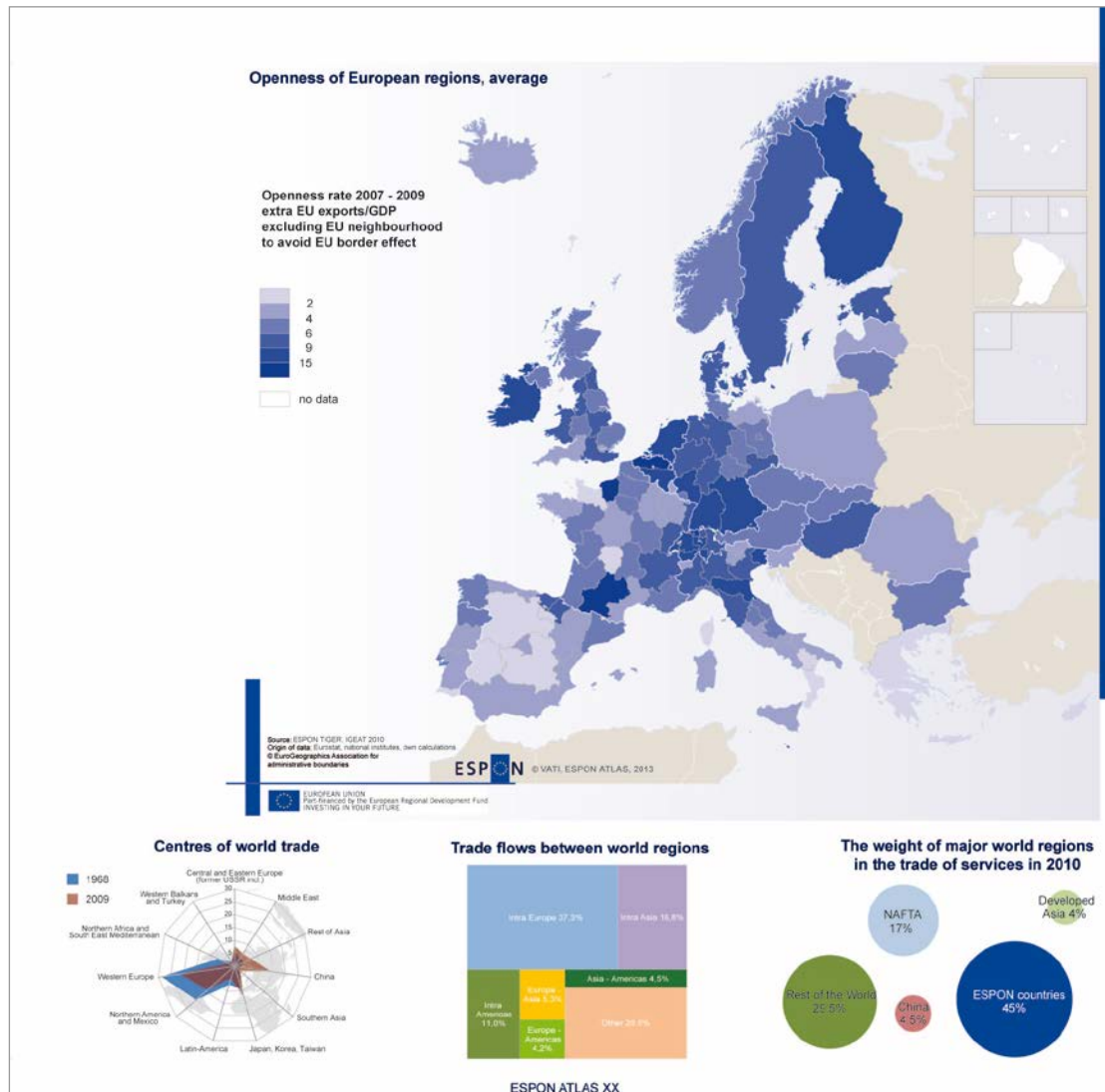


Figure 16. Chapter Europe and its regions on the global stage – page 4



4.2 Territorial patterns of innovation

Figure 17. Chapter Territorial patterns of innovation – page 1

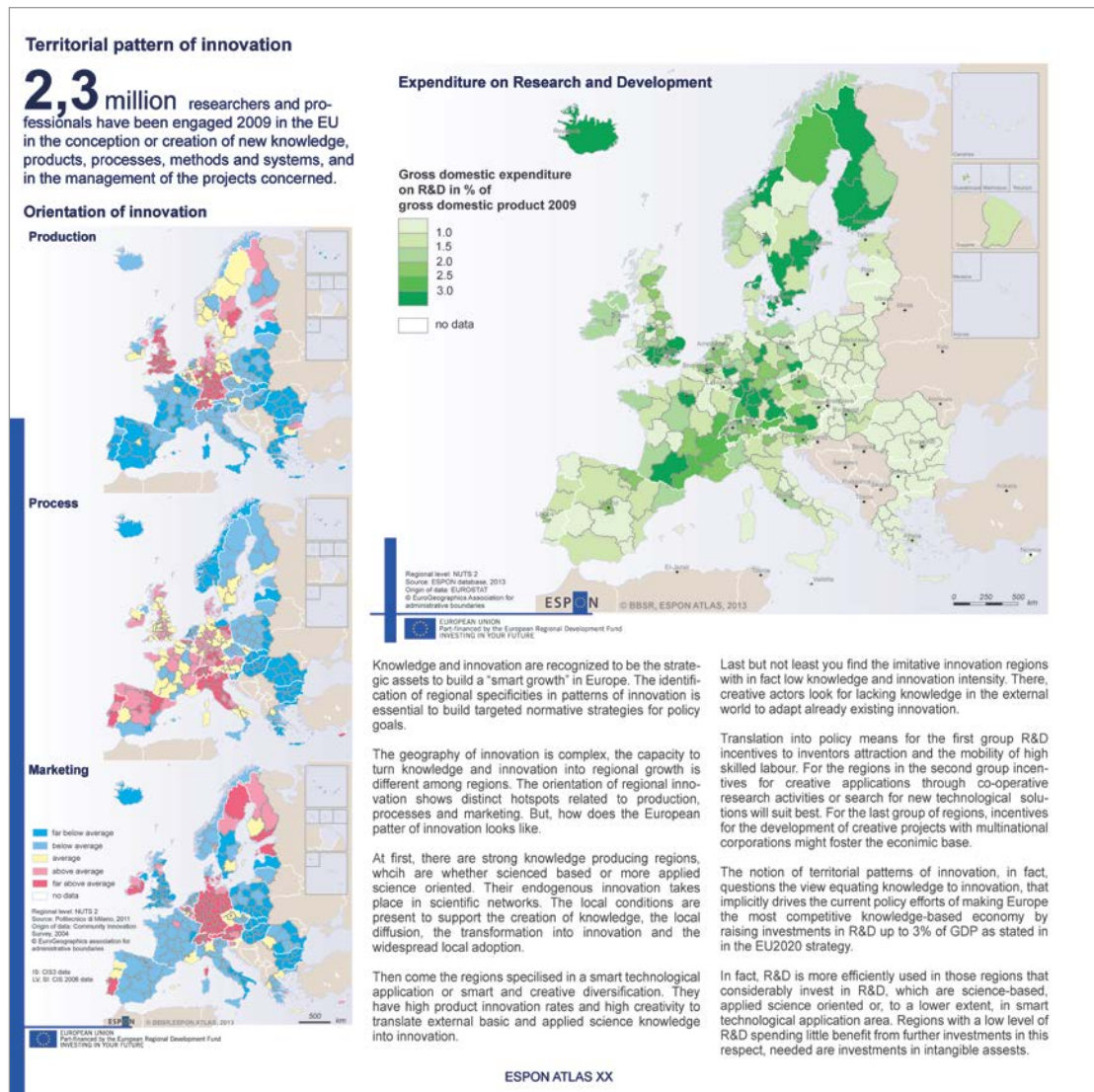
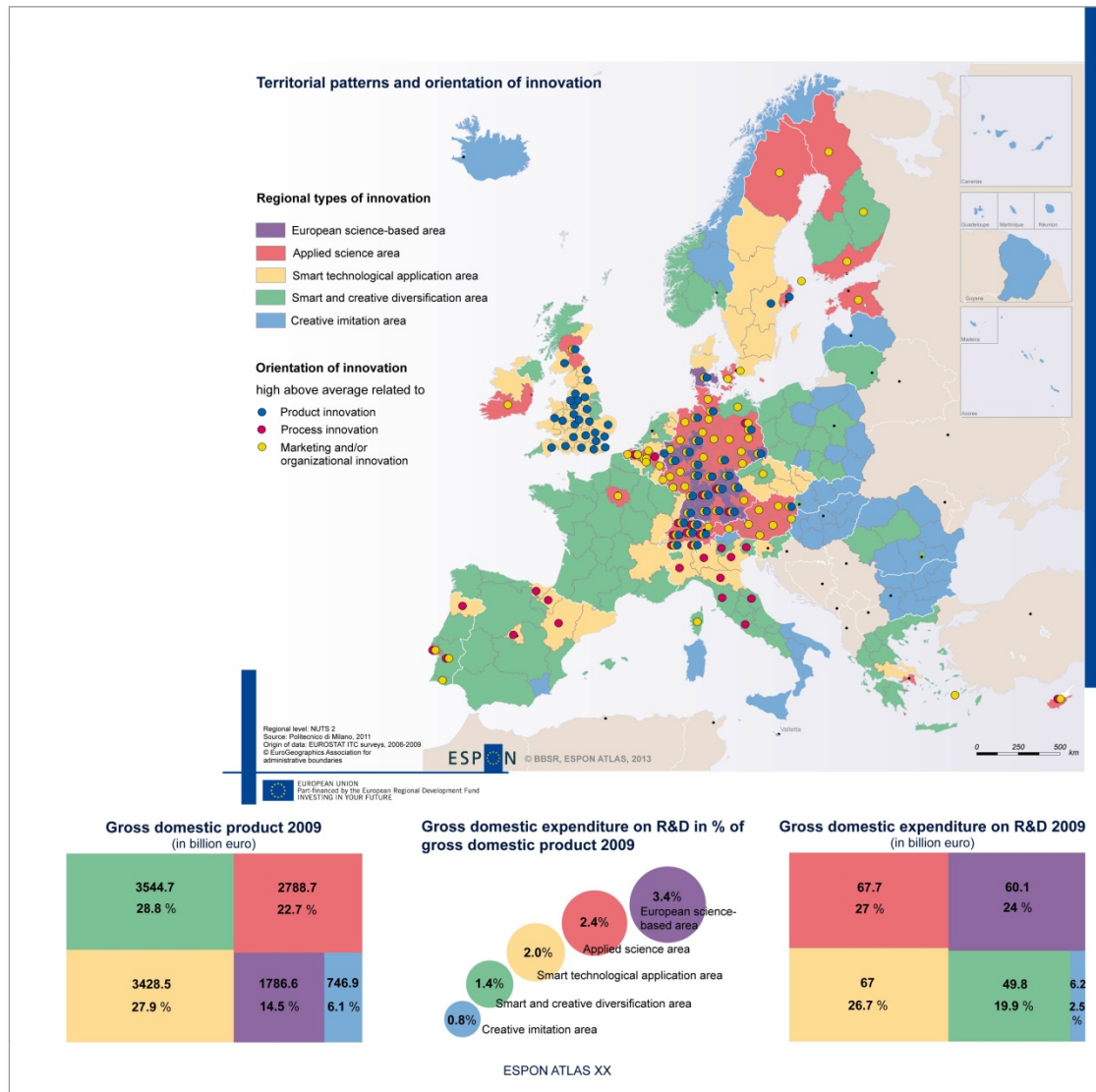


Figure 18. Chapter Territorial patterns of innovation – page 2



5. Project activities

5.1 Activities related to the Interim delivery

Meeting of the TPG the 8th and 9th of November 2012 in Dortmund

Main subject of the meeting was the preparation of the Interim Report. On the basis of the Table of Content a further concretisation of map ideas was elaborated and the list of map candidates was updated. This was done independently from the at that time upcoming meeting with the ESPON Monitoring Committee (see chapter 5.3).

On the basis of a review of existing printed atlases and info graphic publications the format and the appearance of the ESPON ATLAS was discussed. The online review of interactive atlases provided the basis for the elaboration of the intended functionalities of the digital version of the ESPON ATLAS.

Related to the delivery of examples of 5-10 pages of the atlas including maps and texts that present the style of communication and cartography envisaged for the entire atlas the project team decided to use the meeting with the CU planned in January 2013 (see chapter 5.2) to discuss a design proposal for the atlas and the maps to be elaborated for that date.

Three sample chapters (Europe and its regions on the global stage, regional economic performance, and territorial patterns of innovation) were selected and the division of work was discussed. It was decided that the chapter on innovation will be used to present the communication and map style.

The meeting also served to develop a response to the demands of the CU related to map kit and map files and access to project data not yet included in the ESPON database.

Furthermore the harmonisation of project software infrastructure was agreed to facilitate the exchange of files and products and the project intra-net platform was introduced for further activities.

Meeting of the TPG the 21st and 22nd of February 2013 in Bonn

On the basis of the discussion with the ESPON Monitoring Committee (see chapter 5.3) the Table of Content was revised and the overall structure was modified, ending in the Table of Content introduced in chapter 2.2 of this report. Furthermore, the meeting was used to discuss in detail chapter by chapter the selection of maps and illustrations possible in respect of the ESPON projects and the precis of content was formulated for the sub-chapters. Also first investigations of additional non-ESPON information to be used in the atlas were discussed.

The final content of the sample chapters (Europe and its regions on the global stage, regional economic performance, and territorial patterns of innovation) was agreed. For the preparation of the sample chapter it was agreed that an ESPON ATLAS map template will be produced on the basis of the ESPON map kit to be provided by the LP. Related to future coordination of the map production the original idea of creating an ESPON ATLAS geo-database was abandoned in favour of having distinct map files instead.

The appearance and the functionalities of the digital version of the Atlas were discussed and agreed on the basis of a presentation of the responsible partner.

The procedures of the activities towards the DFR were discussed. It was agreed to divide the chapters according to the availability of project results roughly in three parts. For each of the package of chapters the story lines will be elaborated first, including the data acquisition and provision (see work plan in chapter 6).

The TPG agreed to deliver the DFR in April 2014 on the basis of ESPON results coming from final reports of the projects at the respective dates of delivery.

In parallel the need and possibilities for updating of information will be evaluated. The actual update of information will be done in between the DFR and the delivery of the Final Report, the atlas to be printed. By this it is guaranteed that the most recent data will be used in the end.

5.2 Activities related to the coordination with the ESPON CU

TPG meeting with the ESPON Coordination Unit (CU) 25th January 2013

The meeting with the ESPON CU was mainly dealing with the information on the project proceedings related to the Table of Content and the exchange of ideas related to the further steps of activity.

From the side of the project group, the meeting was thought to discuss and potentially agree on the ideas developed so far concerning the ESPON ATLAS format and the communication and cartographic style before starting production of the sample chapters of the Interim Report.

The TPG expressed the opinion that the questions related to the layout, the graphic and cartographic style should be clarified before the actual production of maps and illustration could be started. The print format defines the page layout. The number of illustration depends for example on the page size, as do the maps. Furthermore, the TPG stated that dealing with the layout and design questions it is not just thought as preparatory activity to avoid double work in producing maps and rework them afterwards in a new design; it is

also a project action to meet the expectations laid down in the project specification.

The TPG presented the proposed format and design of the atlas including the communication style using more infographic instead of scientific illustration and the map design, based on the former ESPON map design.

It was emphasised both from the TPG and the CU that the ESPON ATLAS, published in between two programme periods, might be used in the ESPON communication strategy as bridge between the “old” graphic appearance and map design and the new one to be elaborated in the preparation of the new programme period.

The ESPON CU informed on the activities related to graphic design and the specifications and the deliveries of the ESPON Cartographic Language project. It became clear that the Cartographic Language project started much later than expected; it had been expected to deliver its final results in spring 2013, but will now provide results in December 2013 only. If the TPG waits for these results, it will not have enough time for possible changes before the delivery of the DFR in April 2014. In addition, the ESPON CU informed the TPG that it would yet have to hire a company to produce an ESPON layout for the remaining programme period. It was agreed that there will be a joint meeting with the CU, the ATLAS project team, the graphics company and the Cartographic language project where the cooperation and the timing will be discussed in detail.

Additional topics of the meeting were dealing with the ESPON Database and Mapkit. The CU offered support in relation to data provision from the projects and the possibility to have access to an off-line version of the ESPON database. It was agreed that the TPG will not contact the projects directly, but ask the CU for data. If the data is not available at the CU, the CU will take care of getting the data from the respective ESPON project.

Furthermore the project group formulated the request for a more generalised geographic map geometry to be used especially for policy synopsis maps to underline their more territorial than regional character.

Both the CU and the TPG saw the necessity of meeting more often than originally planned to discuss the progress of the atlas. To keep travel costs within limits, these meetings will often take place with the Lead Partner only, the other TPG members taking part only if their work is concerned.

5.3 Activities related to the dialogue with stakeholders

The ESPON ATLAS project joined the meeting of the ESPON Monitoring Committee in Paphos (Cyprus) on the 4th of December 2012 for a workshop discussion on the Table of Content of the atlas outlined in the Inception Report.

The TPG presented the proposed structure for the ESPON ATLAS as well as the way the TPG intends to go about implementing the project. This was followed by an intensive and lively discussion with the MC members about the proposed Table of Content, who very much appreciated and welcomed the Atlas. The MC members had several requests for clarification of (sub-)chapter headings, updates of older projects' data and the usability of maps and also very country-specific questions. They made a number of suggestions regarding the wording of headings and the contents and for updates of project data.

The TPG discussed the feedback given in this meeting in detail on its subsequent meeting in February 2013 (see chapter 5.1), where an updated Table of Contents was produced that reflects the discussions with the MC.

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