

Inspire policy making by territorial evidence



# European and Macro-regional Territorial Monitoring Tool

Service contract

**Final Report - annexes**

Version 14/09/2020

This service contract is conducted within the framework of the ESPON 2020 Cooperation Programme, partly financed by the European Regional Development Fund.

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.

This delivery does not necessarily reflect the opinion of the members of the ESPON 2020 Monitoring Committee.

**Authors**

Efrain Larrea, Andreu Ulied, Oriol Biosca, Jaume Jorba, Dubravka Kruljac, MCRIT - Multicriteri  
Tobias Chilla, Anna Heugel, FAU  
Franziska Sielker, University of Cambridge  
Kosmas Petridis, Hypertech

ESPON EGTC: Sandra Di Biaggio (Project Expert), Johannes Kiersch (Financial Expert),

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

This delivery exists only in an electronic version.

ISBN: 978-2-919795-36-9

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Contact: [info@espon.eu](mailto:info@espon.eu)

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## Abbreviations

EC	European Commission
EGTC	European Grouping of Territorial Cooperation
MRS. ESPON	European and Macro-regional Territorial Monitoring
ESPON	European Territorial Observatory Network
EU	European Union
EUSAIR	EU Strategy for the Adriatic-Ionian Region
EUSALP	EU Strategy for the Alpine Region
EUBSR	EU Strategy for the Baltic Sea Region
EUSDR	EU Strategy for the Danube Region
IDA	International Development Association
IMF	International Monetary Fund
MRS	Macroregional Strategy
OECD	Organisation for Economic Co-operation and Development
ToR	Terms of Reference
UN HDRO	Human Development Report Office of the United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNWTO	United Nations World Tourism Organisation
WEO	World Economic Outlook
WTO	World Trade Organisation

## 1 Work package 1: Participatory approach and dialogue with Steering Committee

Throughout the project implementation, the participatory approach had to be adapted. This modification was decided jointly by the Lead partner, the ESPON EGTC and the experts on macro-regional development from the Universities of Erlangen and Cambridge that joined the project consortium only in March 2020. The background was the following: In the early project phase, a broad range of macro-regional stakeholders were approached by asking for their data needs. Expectations were raised that the tool would allow for monitoring the activities of macro-regions and allowing Priority Areas to monitor towards their individual objectives. This led to high expectations with regard to data availability that did not fit the scope of an ESPON programme project that has to depend to secondary statistical data. The interim version of the EMTM tool provided rather general indicators with little reference to the macro-regional dynamics, and did not reflect the macro-regional governance structure.

This led to major modifications of the project implementation, both in the overall structure of the tool and also with respect to the stakeholder involvement.

Firstly, the tool structure was targeted to political priorities on a *textual* basis. The main structure of the tool allows a representation of the activities and priorities of the macro-regional. At the same time, the selected indicators cannot always be linked to specific cooperation goals due to severe data availability problems. Instead, the indicator selection follows the criteria of preferably good availability also on a fine scale and only secondly of a close link to cooperation goals (for more details see the chapter on the indicator selection in the main report).

Secondly, the modified stakeholder approach limited the focus on a rather small group of 'key stakeholders', i.e. persons with the capacity to steer political debates and to help the project consortium with open exchanges and information. This was done in view of ensuring a long-term understanding and support for the project through key stakeholders.

Based on the initial stakeholder consultations as well as the macro-regional experts' knowledge, stakeholders on different macro-regional level are identified, including National Coordinators, the European Commission, Thematic Coordinators (PACs, AG Leaders...), MRS experts with ESPON experience etc. In the Baltic Sea Region, VASAB played an important role to ensure the links to relevant territorial cooperation processes in the Baltic Sea Region.

More concretely speaking, the following changes applied:

- More focus in the stakeholder involvement: The stakeholder dialogue has now to consider the realistic and concrete options and potential use cases of the EMTM web tool in a stronger way. This means to present the new 'beta version' that will be online in early April and focus the stakeholder dialogue along this proposal. In parallel, concrete questions of data availability will be solved by approaching relevant institutions.
- More continuous stakeholder involvement: Until now, the idea was to address a rather large group of stakeholders via email surveys and the involvement in meetings that take place anyhow. In the remaining project time, it is important to be in touch with a series of stakeholders from all MRS and the European level on a bilateral level. This means to approach a series of key stakeholders via mail, phone and tele conferences to discuss relevant aspects in a continuous way along the beta version of the modified tool.

The participatory approach followed the following objective:

1. Discussion of relevant indicators and ensuring the policy relevance,

2. Discussion of potential use of the tool and identifying stumbling blocks for potential take-ups,
3. Discussion of political narratives and 'hot topics',
4. Promotion of the restructured tool among the stakeholders.

The new strategy turned out to work in practise. It is true that a certain level of frustration was felt in some stockholder groups with regard to the small quantity of really 'new data' in the tool. At the same time, the existing options were appreciated, and the links towards existing activities were appreciated.

The plan was to broaden the stakeholder scope towards the end of the project. Indeed, the steering committee was involved on a continuous basis. The involvement of a broader public, including *all* national representatives and thematic coordinators, turned out to be unrealistic. This has to be seen against the background of a) the systematic restructuring of the whole tool and b) the Covid-19-crisis that hampered all kinds of communicative processes due to the comprehensive travel restrictions and cancellation of numerous events.

The objective remains to develop a practical and operational ESPON European and Macro-regional Territorial Monitoring Tool that helps policy makers to monitor development trends and policy performance.

Against this background, it is important to use the outreach activities of the project to a) ask for further feedback and b) to foresee the possibility to implement critical feedback (at least on a pragmatic level) and c) to allow the Priority Area level to closer align the representation of the PAs towards their needs by e.g. identifying further indicators.

## 2 Work package 3: Data and resources

### 2.1 Data compilation and update

During the development of the project, several data sources have been analysed and considered in order to gather all the relevant indicators to fill in the tool.

As a summary the tasks that have been carried out are the following:

- Linkage between priority areas/horizontal actions/targets in the four macro-regions with relevant indicators
- Incorporation of functional areas
- Analysis of information from HELCOM

In this process of gathering data the consortium has contacted several persons and institutions. Table 1 (in an annex at the end of the document) summarizes these contacts

#### 2.1.1 Linking actions and targets of the strategies to indicators

The main task in relation to indicators has been to propose which indicators can be used for measuring the status of the different priority areas, targets and objectives of the strategies.

The consortium has dedicated time to analyse several data sources in order to find suitable candidates for indicators. This search has included databases, information from European cooperation programmes as well as different projects that are relevant to the macro-regional strategies.

Databases	European programmes	Other sources
<ul style="list-style-type: none"> <li>• ESPON</li> <li>• Eurostat</li> <li>• Worldbank</li> <li>• OECD</li> <li>• UNESCO</li> <li>• IOM</li> <li>• EEA</li> <li>• Biodiversity Information System for Europe</li> <li>• ICAO International Civil Aviation Organization</li> <li>• ICPDR</li> <li>• National Statistical Offices</li> <li>• EURO-Cordex database</li> <li>• KEEP database</li> <li>• HELCOM</li> </ul>	<ul style="list-style-type: none"> <li>• Websites of the Interreg Programmes (CBC and transnational)</li> <li>• Websites of the MRS  <a href="https://www.alpine-region.eu/">https://www.alpine-region.eu/</a>  <a href="https://www.adriatic-ionian.eu/">https://www.adriatic-ionian.eu/</a>  <a href="https://www.balticsea-region-strategy.eu/">https://www.balticsea-region-strategy.eu/</a>  <a href="https://www.danube-region.eu/">https://www.danube-region.eu/</a> </li> </ul>	<ul style="list-style-type: none"> <li>• ESPON Projects</li> <li>• European Parliament</li> <li>• European Commission</li> <li>• COWI-Study</li> <li>• Alpine Convention</li> <li>• JRC</li> <li>• Routes4U Feasibility study</li> <li>• Attractive Danube atlas</li> <li>• AlpInfo2014</li> <li>• Monitoring of road traffic related effects in the Alpine Space and common measures - iMonitraf</li> <li>• ZAMG</li> <li>• Danube Commission</li> <li>• Danube Logistics</li> <li>• UNDP</li> </ul>

In order to establish a meaningful and user-friendly indicator set, the project applies a two-step approach. In a first step, it is necessary to select the most appropriate indicators for a 'long list' and to categorise their potentials and limitations.

This scoping of indicators from the reviewed sources follows the following criteria:

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1. Policy relevance. The selected indicators have to measure in a direct or indirect way the political objectives. This has to consider that some of the political objectives explicitly mention specific indicators (for instance the EUSDR PA1A calls for an “Increase [of] the cargo transport on the river by 20% by 2020 compared to 2010” and Eurostat offers this specific indicator). Other objectives can hardly be linked to quantitative indicators (e.g. PA3 of EUSDR postulating “green tourist products along the Danube Region” for which no specific indicator can be defined).
2. Geographical coverage. We prioritise indicators that include a wider coverage in number of countries, ideally covering all countries included in the different macro-regions. This is especially relevant for non-EU member states that tend to be not included in the European data repositories.
3. Geographical level. The availability of data on regional level is a critical point. NUTS3 is preferred whenever possible, but at least NUTS2 has to be offered as macro-regions are mainly defined at this level. The selection also considers availability at other territorial levels (Functional Urban Areas, Cities, trans-national cooperation areas, cross-border regions). Some of these territorial levels can be derived from NUTS3 indicators, but it is preferred if the indicator already exists for them from an official source.
4. Time coverage. We prioritise indicators that have long time series in order to be able to show trends over time (i.e. preferably indicators available for at least 15 years in order to cover the period before the economic crisis of 2008). A second requirement in terms of time is that the indicators do not have gaps if possible. Moreover, it is useful to have data for the most recent years (“timeliness”), as it happens for certain indicators that they are available with a time lag of several years (meaning that values for recent years 2016-2019 are not available, for instance GDP figures for 2017 have not been available until 2019).
5. Reliability. For the selection of indicators, we give priority to data sources that were already identified on the ToR and the inception phase. These sources are considered to be the most reliable, and include EUROSTAT, ESPON database, JRC database, Keep database and the official national statistical institutes. If necessary, data from other sources such as projects or papers will also be considered.
6. Updating periodicity. Priority is given to indicators that are updated more regularly, ideally on an annual basis, in order to guarantee a proper coverage of future years.
7. Access to the data. Priority is given to data sources that allow automatic retrieval of the data through online web services, as this guarantees that the tool is fed with the most up-to-date values. The second-best option is the possibility to use data as a database, sheet or pdf directly from an online source.

This scoping exercise has led to a broad indicator basis for all modules. At the same time, several indicator sets are not sufficient with regard to the data quality, others tend to be redundant, and for a few priority areas, no statistical data are available at all. This is why in a second step, the data selection, complementation and finalisation has to ensure a good usability of the tool.

In a second step, the mentioned long list is to be developed towards the final monitoring options which means that the following priorities apply: The indicators...

1. ...have to be meaningful in particular with regard to the political objectives of the macroregional strategy and they are sound and reliable with regard to spatial monitoring in general
2. ...have to cover a reasonable level of data availability (at least one indicator on the regional level, at least one level covering the complete perimeter including third countries)
3. ...are not too similar or redundant (e.g. not similar versions of age indices)

During the process there has been an exercise of determining how useful the collected indicators could be. The following figures show the results of this exercise labelling each indicator:

- “Reg+” if complete data on NUTS 2 or 3,
- “Reg -” if incomplete but still meaningful dataset,

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- “Nat+” for complete NUTS0 data set,
- “Nat-“ if uncomplete but still meaningful dataset
- “0” if not realistic to have a meaningful dataset

# European Module



European and Macro-regional Territorial Monitoring Tool

**Figure 1 Assessment of available indicators for the European module**

Short description of MRS (members, perimeter, governance structure)

Pillar 1 - Growth & innovation			Pillar 2 Mobility & connectivity		Pillar 3 - Environment & energy				Governance
AG1: Research and innovation ecosystem	AG2: Economic potential	AG3: Labour market, education and training	AG4: Inter-modality and interoperability	AG5: Connectivity and accessibility to public services	AG6: Natural and cultural resources	AG7: ecological connectivity	AG8: improve risk management	AG9: energy efficiency and renewable energy	
<p><b>Listed AG-Indicators</b></p> <ul style="list-style-type: none"> <li>EU Regional Competitiveness Index (Reg -)</li> <li>Long-term unemployment rate (Reg -)</li> <li>Youth unemployment rate (Reg -)</li> <li>Employment rate (Reg +)</li> <li>Unemployment rate (Reg +)</li> <li>Regional Innovation Scoreboard (Reg +)</li> <li>Patent applications to the European Patent Office (Reg -)</li> <li>GDP (change) (Reg -)</li> <li>Total R&amp;D personnel and investments by sectors of performance, see (0)</li> <li>Gross domestic expenditure on R&amp;D by sector (Nat +)</li> <li>Employment in technology and knowledge intensive sectors (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>EU Digitalisation Index (Nat -)</li> <li>Survival rate of enterprises in industry, construction and services (Business demography by size class) (0)</li> <li>Number of accommodation establishments (Reg -)</li> <li>High-tech patent applications to the EPO (Reg -)</li> <li>Biotechnology patent applications to the EPO (0)</li> <li>GDP per capita (Reg +)</li> <li>Travel And Tourism Direct Contribution To GDP, % (Nat +)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>EU Regional Competitiveness Index (Reg -)</li> <li>Nights spent at tourist accommodation establishments by NUTS 2 regions (Reg -)</li> <li>GDP in tourism: Tourism direct GDP (Nat +)</li> <li>Jobs in tourism: Number of jobs in tourism activities (Nat +)</li> </ul> <p>Potential further indicators:</p>	<p><b>Listed AG-Indicators</b></p> <ul style="list-style-type: none"> <li>Population by age group (Reg +)</li> <li>Proportion of population aged 65 and over (Reg +)</li> <li>Population 65 and older (0)</li> <li>Youth unemployment rate (Reg -)</li> <li>NEET (Reg +)</li> <li>Vocational education (Reg -)</li> <li>Inter-regional Migration (Reg -)</li> <li>Employment change (Reg -)</li> <li>Long-term unemployment rate (Reg -)</li> <li>Ageing index (Persons over 65 / Persons between 0-14) (Reg +)</li> <li>Natural change (Reg +)</li> <li>Net migration (Reg +)</li> <li>People at risk of poverty or social exclusion (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>EU Regional Competitiveness Index (Reg -)</li> <li>Nights spent at tourist accommodation establishments by NUTS 2 regions (Reg -)</li> <li>GDP in tourism: Tourism direct GDP (Nat +)</li> <li>Jobs in tourism: Number of jobs in tourism activities (Nat +)</li> </ul> <p>Potential further indicators:</p>	<p><b>Listed AG-Indicators</b></p> <ul style="list-style-type: none"> <li>Potential accessibility (Reg -)</li> <li>Accessibility to urban centers (0)</li> <li>Volume of passenger transport relative to GDP (Nat +)</li> <li>Share of total employment commuting across national borders (0)</li> <li>Modal split of passenger transport (Nat -)</li> <li>Connectors (two links next cell) (0)</li> <li>Trans-journe goods performance (0)</li> <li>Development of trans-journe traffic flows (0)</li> <li>Availability, Accessibility (Distance, travel time by public transport and private car) of 10 Services of general interest (Reg +) (LAI)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>Households with broadband access (Reg +)</li> <li>Enterprises with broadband access (Eurostat) (Nat -)</li> <li>EU Digitalisation Index (Nat -)</li> <li>Coverage by area (national and rural, coverage by type of connection) (0)</li> <li>Car Travel time to next doctor (Reg +) (LAI)</li> <li>Car travel time to next primary school (Reg -) (LAI)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Population with completed tertiary education (Reg +)</li> <li>Early leavers from education and training (Reg -)</li> <li>Population by educational attainment level (Reg +)</li> </ul> <p>Potential further indicators:</p>	<p><b>Listed AG-Indicators</b></p> <ul style="list-style-type: none"> <li>Forest types (Reg +)</li> <li>Forest area (Reg +)</li> <li>Share of Wooded Area (Reg +)</li> <li>Land cover overview (Reg +)</li> <li>Protected areas for Biodiversity: habitats directive (0)</li> <li>Number of new Cultural Routes (0)</li> <li>Special Protected areas (0)</li> <li>Soil sealing (Reg -)</li> <li>Supply /demand drinking water (0)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>Change in annual mean temperature (Reg -)</li> <li>Mean near surface temperature deviation (0)</li> <li>Greenhouse gas emissions (Nat +)</li> <li>Greenhouse gas emissions by source sector (0)</li> <li>Final energy consumption (Nat -)</li> <li>Share of renewable energy in gross final energy consumption (Nat +)</li> <li>Supply, transformation and consumption of renewable energies (0)</li> <li>Primary production of energy by resource (0)</li> <li>Energy efficiency (0)</li> <li>Overall adaptive capacity to climate change (Reg +)</li> <li>Share of Wooded Area (Reg +)</li> <li>Soil sealing (Reg -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Green Infrastructure (0)</li> </ul> <p>Potential further indicators:</p>	<p><b>Listed AG-Indicators</b></p> <ul style="list-style-type: none"> <li>Primary energy consumption (Nat -)</li> <li>Share of renewable energy in gross final energy consumption (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Primary energy consumption (Nat -)</li> </ul> <p><b>Objectives &amp; Activities</b></p>	<p><b>Listed Indicators</b></p> <p><b>Objectives &amp; Activities</b></p>	<p><b>Further available indicators</b></p> <ul style="list-style-type: none"> <li>Demography / Life expectancy (Reg -)</li> <li>Demography / Gender imbalance (Reg -)</li> <li>Demography / Total population (Reg +)</li> <li>Economy / Human Development Index (Reg +)</li> <li>Mobility / Length of local roads (Reg -)</li> <li>Mobility / People killed in road-transport accidents (Reg -)</li> <li>Poverty / Social Severe material deprivation (0)</li> <li>Poverty / Social Social Progress Index inclusion (Reg -)</li> <li>Poverty / Social Regional Human Poverty Index (Reg -)</li> <li>Poverty / Social Inclusion / Social vulnerability (0)</li> </ul> <p>Potential further indicators: • Aims 2050 mappings (stat):</p>			

**Figure 2 Assessment of indicators for the EUSALP**

Short description of MRS (members, perimeter, governance structure)

Pillar 1 – Connecting the region				Pillar 2 – Protecting the environment			Pillar 3 – Building prosperity			Pillar 4 – Strengthening the region	
PA 1A – Waterways Mobility	PA 1B – Rail-Road-Air Mobility	PA 2 – Sustainable Energy	PA 3 – Culture & Tourism	PA 4 – Water Quality	PA 5 – Environmental Risks	PA 6 – Biodiversity & Landscapes	PA 7 – Knowledge Society	PA 8 – Competitiveness of Enterprises	PA 9 – People & Skills	PA 10 – Institutional Capacity & Cooperation	PA 11 – Security
<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Transport by RW (Nat +)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Share of rail and inland waterways activity in total freight transport (Nat -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Volume of freight by railway (Nat -)</li> <li>% Completion of TEN-T road network corridors (Nat -)</li> <li>Accessibility potential by air (Reg -)</li> <li>Length of other roads (Reg -)</li> <li>Share of buses and trams in passenger transport (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Share of rail and inland waterways activity in total freight transport (Nat -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Share of renewables in gross energy consumption (Nat -)</li> <li>Primary energy production (I)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Primary energy consumption (Nat -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Persons participating in cultural activities in the last 12 months (Nat -)</li> <li>European cultural sites on the UNESCO World Heritage (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Nights spent at tourist accommodation establishments by NUTS 2 regions (Reg -)</li> <li>Number of establishments, bedrooms and bed places by NUTS 2 regions (Reg -)</li> <li>GDP in tourism: Tourism direct GDP (Nat +)</li> <li>Jobs in tourism: Number of jobs in tourism industries (Nat +)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Population connected to urban waste water treatment (Nat -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Flood risk (Nat -)</li> <li>Death related to flooding (N) (Nat +)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Artificial land cover overview (I)</li> <li>Surface of terrestrial sites (I)</li> <li>Air pollutants by source sector (I)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Green infrastructure (I)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Gross domestic expenditures on R&amp;D (Nat -)</li> <li>Patent applications to the EPO (Nat -)</li> <li>Mobile students from abroad (Nat -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Share of total innovation expenditure in high-tech sectors (I)</li> <li>Economic data in high-tech sectors (Nat -)</li> <li>Support for rural development (Nat -)</li> <li>Funding of vocational education (I)</li> <li>Business survival rate (Reg -)</li> <li>Employment of SMEs and large enterprises in industry (Nat -)</li> <li>Employment of SMEs and large enterprises in trade (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Agri-food innovation scoreboard (Reg -)</li> <li>Regional GDP per capita (Reg -)</li> <li>EU Regional Competitiveness Index (Nat -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Long-term unemployment rate (Reg -)</li> <li>Employment rate (Reg -)</li> <li>Youth unemployment rate (Reg -)</li> <li>Vocational education CVT courses and other forms of CVT (Nat -)</li> <li>Employment rate of people by type of disability (I)</li> <li>Activity rate of 15-64 years-old with difficulties in work activities (I)</li> <li>Number of project partners participating in INTERREG IRL (Reg -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Ageing index (Reg -)</li> <li>Population with completed tertiary education (Reg -)</li> <li>Early leavers from education and training (Reg -)</li> <li>Population by educational attainment level (Reg -)</li> <li>Road unemployment rate (Reg -)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Governance effectiveness index (Nat +)</li> </ul>	<p><b>Listed Target-Indicators</b></p> <ul style="list-style-type: none"> <li>Political stability and absence of violence or terrorism (Nat +)</li> <li>Regulatory quality index (Nat +)</li> <li>Control of the corruption index (Nat +)</li> </ul>
Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	Potential further indicators:	<p><b>Further available Indicators</b></p> <p>Demography</p> <ul style="list-style-type: none"> <li>Life expectancy (Reg -)</li> <li>Gender imbalance (Reg -)</li> <li>Net migration (Reg -)</li> <li>Total population (Reg -)</li> </ul> <p>Economy</p> <ul style="list-style-type: none"> <li>GDP at current market prices (Reg -)</li> <li>Human Development Index (Reg -)</li> </ul> <p>Education</p> <ul style="list-style-type: none"> <li>NEET (Reg -)</li> </ul> <p>Employment</p> <ul style="list-style-type: none"> <li>Employment rate (Reg -)</li> <li>Unemployment rate (Reg -)</li> </ul> <p>Environment / Energy</p> <ul style="list-style-type: none"> <li>GHG Emissions (Nat -)</li> </ul> <p>Mobility / Transport</p> <ul style="list-style-type: none"> <li>Length of Local Roads (Reg -)</li> <li>People killed in road accidents (Reg -)</li> </ul> <p>Poverty / Social inclusion</p> <ul style="list-style-type: none"> <li>Severe material deprivation (Reg -)</li> <li>Social Progress Index (Reg -)</li> <li>Regional Human Poverty Index (Reg -)</li> <li>Social vulnerability (I)</li> </ul> <p>Poverty / Social inclusion</p> <ul style="list-style-type: none"> <li>People at risk of poverty or social exclusion (Reg -)</li> </ul> <p>Research, Development and Innovation</p> <ul style="list-style-type: none"> <li>Total R&amp;D personnel and researchers by sectors and innovation, sex (Reg -)</li> </ul>	

**Figure 3 Assessment of indicators for the EUSDR**



Pillar 1 – Save the sea

Better cooperation	Clean and safe shipping	Clear water in the sea	Rich and healthy wildlife
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<p><b>Listed PA-Indicators</b></p> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>Maritime accident victims by region of occurrence and country of registry of vessels (I)</li> <li>By region of occurrence, country of registry of vessels and type of vessels (I)</li> <li>By region of occurrence, country of registry of vessels and category of victims (I)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Water clarity (Reg -)</li> <li>Contaminant discharges (inherent load and others) (Reg -)</li> <li>Eutrophication (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Abundance of Coastal fish key functional groups (Reg -)</li> <li>Abundance of waterbirds in the breeding season (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Abundance of Coastal fish key functional groups (Reg -)</li> <li>Abundance of waterbirds in the breeding season (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>
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Pillar 2 – Connect the region

Fighting cross-border crime	Connecting people in the region	Good transport conditions	Reliable energy markets
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<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Human trafficking in Europe (Nat -)</li> <li>Political stability and absence of violence/Terrorism: Estimate (Nat -)</li> <li>Number of Drug Seizures (Nat -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Multimodal accessibility potential (Reg -)</li> <li>Accessibility potential by road (Reg -)</li> <li>Accessibility potential by rail (Reg -)</li> <li>Accessibility potential by air (Reg -)</li> <li>Functional area: access to cities (I)</li> <li>Passenger transport by type of transport (Nat -)</li> <li>Share of buses and trams in total passenger transport (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Share of buses and trams in total passenger transport (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Road, rail and navigable inland waterways networks by NUTS 2 regions (Reg -)</li> <li>% Completion of TEN-T core network corridors (road, convention at rail, high speed rail, waterways) (Nat -)</li> <li>Victims in road accidents by NUTS 2 regions (Reg -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>Share of rail and inland waterways activity in total freight transport (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Primary energy consumption (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>
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Pillar 3 – Increase prosperity

Deepening and fulfilling the single market	Climate change	Implementation of Europe 2020 Strategy	Improved global competitiveness
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<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Trade by NACE Rev. 2 activity and transportation class (Nat -)</li> <li>Trade of Fisheries and agriculture products (value) (Nat -)</li> <li>Trade of Fisheries and agriculture products (volume) (I)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Potential vulnerability to climate change (Reg -)</li> <li>Environmental impact of climate change (Reg -)</li> <li>Potential economic impact of climate change (Reg -)</li> <li>Combined adaptive capacity to climate change (Reg -)</li> <li>Climate Change Mitigation Index (I)</li> <li>Share of renewables in gross final energy consumption (Nat -)</li> <li>Greenhouse gas emissions (Nat -)</li> <li>Fragmentation index: (landscape fragmentation) (Nat -)</li> <li>New soil sealing (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Employment rate (Reg -)</li> <li>GDP in R&amp;D sector (Nat -)</li> <li>Greenhouse gas emissions (Nat -)</li> <li>Air pollution (PM10) Particulates &lt; 10µm (Nat -)</li> <li>Share of renewable energy sources in final energy consumption (Nat -)</li> <li>Energy efficiency: (I)</li> <li>Early leavers from education and training by sex (Reg -)</li> <li>Population with completed tertiary education (Reg -)</li> <li>People at risk of poverty or social exclusion (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <ul style="list-style-type: none"> <li>Population with tertiary education (25-64 years) (Reg -)</li> <li>At-risk-of-poverty rate (I)</li> <li>Employment in technology &amp; knowledge sectors (Reg -)</li> <li>Gross domestic expenditures on R&amp;D, business (Nat -)</li> <li>Gross domestic expenditures on R&amp;D, total (Nat -)</li> <li>GDP (growth) (Reg -)</li> <li>GDP per capita (p PPP) (Reg -)</li> <li>Unemployment rate, total (Reg -)</li> <li>Net migration rate (Reg -)</li> <li>Total population change (Reg -)</li> <li>Economic dependency ratio (Reg -)</li> <li>Severe material deprivation rate (Reg -)</li> <li>Youth unemployment rate (25-24 years) (Reg -)</li> <li>Human Development Index (Reg -)</li> <li>Labour productivity index (I)</li> <li>Gender inequality (Reg -)</li> <li>Life expectancy (Reg -)</li> <li>Self-assessed general health status (I)</li> <li>Households with access to internet at home (Reg -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>
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Horizontal Topics

Spatial planning	Neighbours	Capacity	Climate
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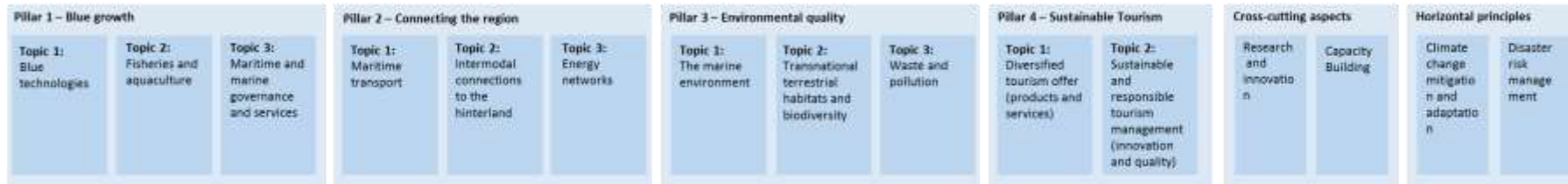
<p><b>Listed PA-Indicators</b></p> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>	<p><b>Listed PA-Indicators</b></p> <p><b>Objectives &amp; Activities</b></p> <p><b>Potential further indicators:</b></p>
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<b>Further available indicators</b>			
<b>Demography</b>	Ageing Index (Reg -)		
<b>Economy</b>	EU Regional Competitiveness Index (Reg -)		
<b>Education</b>	NEET (Reg -)		
<b>Education</b>	Population by educational attainment level (Reg -)		
<b>Employment</b>	Long term unemployment (Reg -)		
<b>Environment / Energy</b>	Green infrastructure (I)		
<b>Environment / Energy</b>	Share of buses and trains in total passenger transport (Nat -)		
<b>Mobility / Transport</b>	Length of local roads (Reg -)		
<b>Mobility / Transport</b>	Severe material deprivation (I)		
<b>Poverty / Social inclusion</b>	Social Progress Index (Reg -)		
<b>Poverty / Social inclusion</b>	Regional Human Poverty Index (Reg -)		
<b>Poverty / Social inclusion</b>	Social vulnerability (I)		
<b>Research, Development and Innovation</b>	Total R&D personnel and researchers by sectors of performance, sex (Reg -)		
<b>Research, Development and Innovation</b>	Regional Innovation Scoreboard (Reg -)		
<b>Research, Development and Innovation</b>	Nights spent at tourist accommodation establishments by NUTS 2 regions (Reg -)		
<b>Tourism</b>	Number of establishments, bedrooms and bed places by NUTS 2 regions (Reg -)		
<b>Tourism</b>	GDP in tourism: Tourism direct GDP (as a percentage of total GDP and its growth rate) (Nat -)		
<b>Tourism</b>	Jobs in tourism: Number of jobs in tourism industries (as a percentage of total jobs and growth rate of jobs, by sex) (Nat -)		

**Figure 4 Assessment of indicators for the EUSBSR**

Short description MRS (members, perimeter, governance structure)



Pillar 1 – Blue growth			Pillar 2 – Connecting the region			Pillar 3 – Environmental quality			Pillar 4 – Sustainable Tourism		Cross-cutting aspects		Horizontal principles																					
Topic 1: Blue technologies	Topic 2: Fisheries and aquaculture	Topic 3: Maritime and marine governance and services	Topic 1: Maritime transport	Topic 2: Intermodal connections to the hinterland	Topic 3: Energy networks	Topic 1: The marine environment	Topic 2: Transnational terrestrial habitats and biodiversity	Topic 3: Waste and pollution	Topic 1: Diversified tourism offer (products and services)	Topic 2: Sustainable and responsible tourism management (innovation and quality)	Research and innovation	Capacity Building	Climate change mitigation and adaptation	Disaster risk management																				
<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• Status of marine fish and shellfish stocks in European seas (0)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• <b>Household consumption of fresh products by European State (0)</b></li> <li>• Consumption of fisheries and aquaculture products (Nat -)</li> <li>• Trade of fisheries and aquaculture products (value) (Nat -)</li> <li>• Trade of fisheries and aquaculture products (volume) (Nat -)</li> <li>• Catches - Mediterranean and Black Sea (from 2000 onwards) (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• Gross weight of goods handled in all ports by direction-annual data (Nat -)</li> <li>• Employment in fishing sector (Nat -)</li> <li>• Employment in the fisheries, aquaculture and processing sectors (measured in full-time equivalents) (Nat -)</li> <li>• Employment by sex, age, time started and economic activity (Nat -)</li> <li>• Regional Innovation Scoreboard (Reg -)</li> <li>• <b>Patent applications to the European Patent Office (0)</b></li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• Trade of fisheries and aquaculture products (value) (Nat -)</li> <li>• Trade of fisheries and aquaculture products (volume) (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• Country level - passengers embarked and disembarked in all ports, by direction (Nat -)</li> <li>• Country level - gross weight of goods transported in/from main ports, by type of traffic (Nat -)</li> <li>• <b>Fishing fleet - Tonnage by ports (0)</b></li> <li>• Fishing fleet (Nat -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• Accessibility indicators by mode (Reg -)</li> <li>• TEN-T network development (Nat -)</li> <li>• Volume of passenger transport relative to GDP (Nat -)</li> <li>• Volume of freight transport (Nat -)</li> <li>• Road freight transport (Nat -)</li> <li>• Rail freight transport (Nat -)</li> <li>• Inland waterways freight transport (Nat -)</li> <li>• Air freight transport (Reg -)</li> <li>• Maritime freight transport (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>• Share of factors and train or trolly passenger transport (Nat -)</li> <li>• Share of rail and inland waterways activity in total freight transport (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• Major oil spill incidents (Nat -)</li> <li>• <b>Seafood production within by region of accession and country of origin of species (0)</b></li> <li>• <b>Oil spill response vessels (0)</b></li> <li>• Final energy consumption (Nat -)</li> <li>• Share of renewable energy in gross final energy consumption (Nat -)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• <b>Listed Trend-Indicators</b></li> <li>• Primary energy consumption (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• <b>Continental shelf index (EU aggregate) (0)</b></li> <li>• Sites designated under the EU Habitats and Birds Directives (Nat -)</li> <li>• <b>Number of species and observations per sea region (0)</b></li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• Nationally designated protected areas (Reg -)</li> <li>• Surface of marine sites designated under NATURA 2000 (Nat -)</li> <li>• Surface of terrestrial sites designated under NATURA 2000 (Nat -)</li> <li>• Forest fires (Nat -)</li> <li>• <b>Marine protected areas in Europe's seas (0)</b></li> <li>• <b>Nutrients in transitional, coastal and marine waters (0)</b></li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>• <b>Green infrastructure (0)</b></li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• <b>Municipal waste by NUTS 2 regions - pilot project data (Reg -)</b></li> <li>• Coverage rate of municipal waste collection by NUTS 2 regions - pilot project data (0)</li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• Nights spent at tourist accommodation establishments by coastal and non-coastal areas and by NUTS 2 regions from 2012 onwards (Reg -)</li> <li>• Nights spent at tourist accommodation establishments by NUTS 2 regions (Reg -)</li> <li>• Arrivals at tourist accommodation establishments by NUTS 2 regions (Reg -)</li> <li>• Number of establishments, bedrooms and bed-places by NUTS 2 regions (Reg -)</li> <li>• Travel and Tourism direct contribution to GDP (Nat -)</li> <li>• <b>Number of enterprises in tourism industries (0)</b></li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>• GDP in tourism - Tourism direct GDP (Nat -)</li> <li>• Jobs in tourism - Number of jobs in tourism industries (Nat -)</li> </ul> <p><b>Potential further indicators:</b></p>	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• <b>Maritime impact - Share of the population of the EU regions living in maritime service areas (Reg -)</b></li> <li>• <b>Waste of ports (0)</b></li> <li>• <b>Marine protected areas in Europe's seas (0)</b></li> </ul> <p><b>Objectives &amp; Activities</b></p> <ul style="list-style-type: none"> <li>• Population with tertiary education (25-64 years) (Reg -)</li> <li>• Employment in technology &amp; knowledge sectors (Nat -)</li> <li>• Gross domestic expenditures on R&amp;D, business (Nat -)</li> <li>• Gross domestic expenditures on R&amp;D, total (Nat -)</li> </ul> <p><b>Listed Trend-Indicators</b></p> <ul style="list-style-type: none"> <li>• Total R&amp;D personnel and researcher (Reg -) by</li> </ul> <p><b>Further available indicators</b></p> <table border="1"> <tr><td>Demography</td><td>Life expectancy (Reg -)</td></tr> <tr><td>Demography</td><td>Ageing index (Reg -)</td></tr> <tr><td>Demography</td><td>Gender imbalance (Reg -)</td></tr> <tr><td>Demography</td><td>Net migration (Reg -)</td></tr> <tr><td>Demography</td><td>Total population (Reg -)</td></tr> <tr><td>Economy</td><td>Regional GDP per capita (Reg -)</td></tr> <tr><td>Economy</td><td>GDP at current market prices (Reg -)</td></tr> <tr><td>Economy</td><td>EU Regional Competitiveness Index (Reg -)</td></tr> <tr><td>Economy</td><td>Human Development Index (Reg -)</td></tr> <tr><td>Education</td><td>Population with completed tertiary education (Reg -)</td></tr> <tr><td>Education</td><td>Early leavers from education and training (Reg -)</td></tr> <tr><td>Education</td><td>NEET (Reg -)</td></tr> <tr><td>Education</td><td>Population by educational attainment level (Reg -)</td></tr> </table> <p><b>Potential further indicators:</b></p>	Demography	Life expectancy (Reg -)	Demography	Ageing index (Reg -)	Demography	Gender imbalance (Reg -)	Demography	Net migration (Reg -)	Demography	Total population (Reg -)	Economy	Regional GDP per capita (Reg -)	Economy	GDP at current market prices (Reg -)	Economy	EU Regional Competitiveness Index (Reg -)	Economy	Human Development Index (Reg -)	Education	Population with completed tertiary education (Reg -)	Education	Early leavers from education and training (Reg -)	Education	NEET (Reg -)	Education	Population by educational attainment level (Reg -)	<p><b>Listed Topic-Indicators</b></p> <ul style="list-style-type: none"> <li>• Potential vulnerability to climate change (Reg -)</li> <li>• Environmental impact of climate change (Reg -)</li> <li>• Potential economic impact of climate change (Reg -)</li> <li>• Combined adaptive capacity to climate change (0)</li> <li>• <b>Climate Change Mitigation Index (0)</b></li> <li>• Share of renewables in gross final energy consumption (Net -)</li> <li>• Greenhouse gas emissions (Net -)</li> </ul> <p><b>Listed Topic-Indicators</b></p>	<p><b>Listed Topic-Indicators</b></p>
Demography	Life expectancy (Reg -)																																	
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Economy	Human Development Index (Reg -)																																	
Education	Population with completed tertiary education (Reg -)																																	
Education	Early leavers from education and training (Reg -)																																	
Education	NEET (Reg -)																																	
Education	Population by educational attainment level (Reg -)																																	

**Figure 5 Assessment of indicators for the EUSAIR**

### **2.1.2 Functional areas**

The tool incorporates different functional areas in order to offer data at geographical levels other than the usual NUTS.

This sub-chapter defines how these elements are addressed on the tool:

#### **Transnational cooperation areas (TNCA)**

These are aggregates of regions from different countries that are defined for the purpose of allocating funds of INTERREG V B program. In general no indicators exist for this geographical aggregation but it is relatively simple to compute indicators for them based on data at NUTS level.

The TNCA are a total of 16 areas of which 12 are located within continental Europe, which consist of aggregates of NUTS0/NUTS2/NUTS3 elements that are known through correspondence tables that define which NUTS regions are part of the TCA.

These correspondence tables are stored in the system and are used to automatically recalculate indicators by carrying out an operation that is predefined in the system, which can be a sum or an average depending on the indicator. As a result the user receives the value of any given indicator for the TNCA that was selected.

#### **Functional Urban Areas (FUA)**

The FUAs consist of a city and its commuting zone and consists of different aggregated LAU2 zones. Some indicators do already exist for this level of territorial disaggregation and are incorporated on the tool directly.

#### **Ports**

A shapefile of European ports is available in the tool as a geographical level to display indicators at that level.

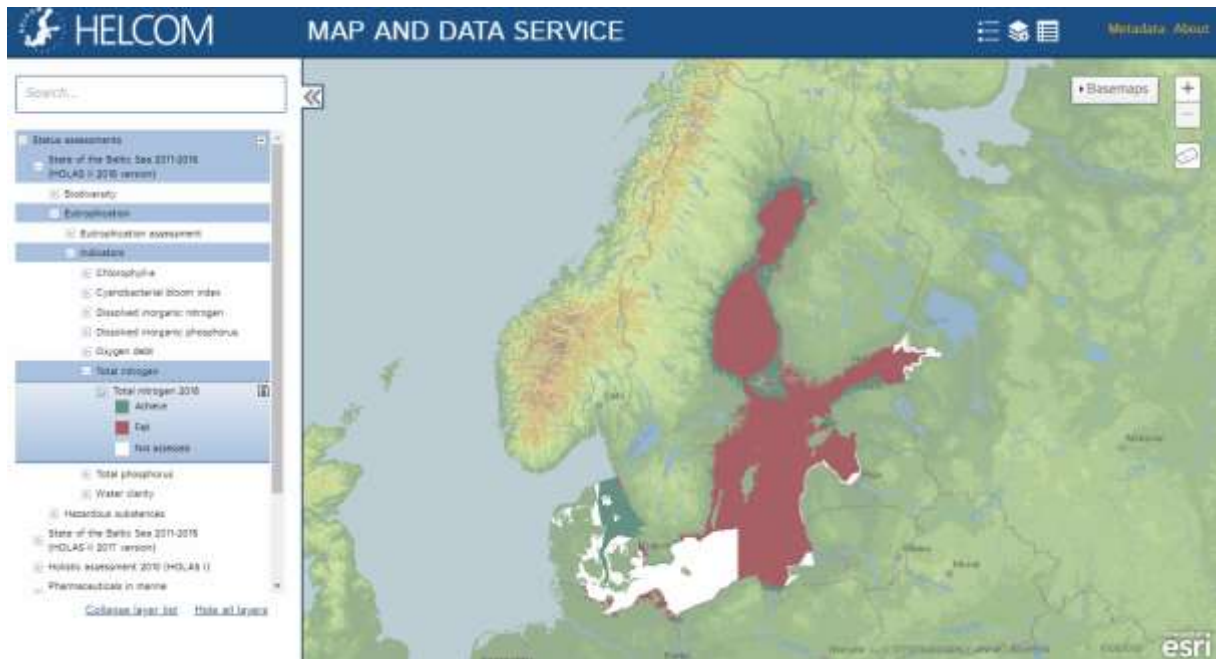
#### **Marine areas**

The system incorporates several different marine areas for displaying indicators of the EEA, HELCOM and others.

### **2.1.3 HELCOM**

One key data repository for the EUSBSR, as identified during the two meetings held with VASAB and EUSBSR, is the HELCOM database which contains information in relation to the status of the Baltic Sea. HELCOM offers a list of indicators at <http://stateofthebalticsea.helcom.fi/>

However, most of the data in HELCOM is in raster format and thus it is not readily compatible with the database envisaged for the MRS. ESPON. To the end of incorporating this data, which is needed for several objectives of the EUSBSR, the system has been fed manually from the basin level tables available in HELCOM reports. A future update of the tool could establish a direct connection to the raster datasets through web services to the HELCOM repository (see Figure 6), using the already set-up structure for obtaining data from external sources. In this way the data of the system regarding these indicators would always be up to date.



**Figure 6 Eutrophication levels measuring total nitrogen in 2018**

**Relevance for the MRS. ESPON:**

HELCOM is the reference source for indicators related to environmental aspects of the Baltic Sea, one of the three main pillar of the EUSBSR. Thus its data has been included as indicators in several objectives of the strategy. The main caveat is that data is available as raster information and not statistical units (Baltic Sea sub-basins).

**2.2 Metadata**

The new tool contains a considerable amount of data that needs to be properly documented in terms of metadata in order to be sure that all elements contained on the system can be properly traced to its origin.

The process of data gathering was already started with this need in mind, meaning that all elements compiled so far are properly referenced to its source.

The MRS. ESPON tool contains two main blocks of data:

- Elements obtained automatically from external sources
- Elements stored locally on the MRS. ESPON database

For elements that are integrated through web services from external sources, the system automatically adds the relevant metadata information from the original source. This means that for ESPON database indicators, we attach to each value its source and metadata exactly as delivered by the web services of ESPON database. The same principle applies to EUROSTAT, which also delivers a set of source and metadata information through a web service that can be attached to each cell of data.

For elements stored locally on the database, we include a reference to the source of the data, which is systematized following the structure proposed by INSPIRE (and which is adopted too by the new version of ESPON database), including always a link to the original document that contains the data. This source might be an online source or a document that has to be downloaded.

Metadata is delivered to the user in two different ways:

- As a comprehensive table with all sources for a given map or graphic when the user downloads the data table behind a map or a graph.
- As small summary table shown as a tooltip when the user clicks on the Metadata info button on any map



Figure 7 Example of metadata window on a map in the tool

### 3 Annex on contacts and efforts for obtaining data

Given the fact that the tool covers a wide geographical area and the tool includes many indicators at NUTS2/3 level, there has been a need to obtain information from many sources beyond the main data providers (such as ESPON Database, EUROSTAT, World Bank, OECD, JRC).

To that end the stakeholder consultation has provided valuable contacts to obtain data throughout the project development.

Next table summarizes the direct contacts that were made to obtain direct feedback on data availability:

**Table 1 Contacts established for data gathering**

Contact	Relevance for the MRS. ESPON
<b>Gustav Norlen – BT2050 (ESPON)</b>	<b>Indicators for the EUSBSR</b>
<b>Constanze Metzger – Routes4U project</b>	<b>Indicators on cultural routes for the whole EU</b>
<b>Anna Heugel – Alps2050 (ESPON)</b>	<b>Indicators for EUSALP</b>
<b>Carsten Schürmann – PROFECY (ESPON)</b>	<b>Indicators on accessibility at LAU2 level for the whole EU</b>
<b>Blaz Barboric – Attractive Danube Atlas</b>	<b>Indicators for the EUSDR</b>
<b>Jean Dusart – JRC Danube platform</b>	<b>Indicators for the EUSDR</b>
<b>Janis Turlajs – Jana Seta / VASAB cities report</b>	<b>Indicators at LAU2 level for EUSBSR</b>
<b>Giannantonio Ballette – COWI</b>	<b>Indicators for the COWI reports</b>
<b>Irina Karelina – Leontief Centre</b>	<b>Indicators for Russia (EUSBSR)</b>
<b>Miroslav Veskovic – JRC</b>	<b>Indicators for the Balkans and especially Serbia</b>
<b>Dmitry Kamenetsky – HELCOM</b>	<b>Indicators on environment for the Baltic Sea</b>
<b>Davide Autieri – JRC</b>	<b>Technological integration of data from the JRC platform</b>
<b>Marc Pfister - Federal Office for Spatial Development (ARE)</b>	<b>Indicators for Switzerland</b>

In parallel to these contacts, the consortium has been continuously scrutinizing the different data portals of national statistical institutes. Currently MRS. ESPON contains data extracted manually from the following sites and integrated in the local database of the tool. Direct links to the data sources for each specific value are available on the maps of the tool through the territorial unit tooltip:

Site	Address
<b>Swiss Federal statistical office</b>	<a href="https://www.bfs.admin.ch/bfs/en/home.html">https://www.bfs.admin.ch/bfs/en/home.html</a>



<b>Liechtenstein office of statistics</b>	<a href="https://www.llv.li/">https://www.llv.li/</a>
<b>Albanian institute of statistics</b>	<a href="http://www.instat.gov.al/en/Home.aspx">http://www.instat.gov.al/en/Home.aspx</a>
<b>Bosnian Statistical agency</b>	<a href="http://www.bhas.ba/">http://www.bhas.ba/</a>
<b>Serbian Statistical office</b>	<a href="https://www.stat.gov.rs/en-US/">https://www.stat.gov.rs/en-US/</a>
<b>Kosovo Agency of statistics</b>	<a href="https://ask.rks-gov.net/en/">https://ask.rks-gov.net/en/</a>
<b>Montenegro Statistical office</b>	<a href="https://www.monstat.org/eng/">https://www.monstat.org/eng/</a>
<b>North Macedonia Statistical office</b>	<a href="http://www.stat.gov.mk/Default_en.aspx">http://www.stat.gov.mk/Default_en.aspx</a>
<b>Moldovan Bureau of statistics</b>	<a href="https://statistica.gov.md/index.php?l=en">https://statistica.gov.md/index.php?l=en</a>
<b>Ukrainian Statistics service</b>	<a href="https://ukrstat.org/en">https://ukrstat.org/en</a>
<b>Russian Federal statistics service</b>	<a href="https://eng.gks.ru/">https://eng.gks.ru/</a>
<b>Belarussian National statistical portal</b>	<a href="https://www.belstat.gov.by/en/">https://www.belstat.gov.by/en/</a>



### **ESPON 2020 – More information**

ESPON EGTC

4 rue Erasme, L-1468 Luxembourg - Grand Duchy of Luxembourg

Phone: +352 20 600 280

Email: [info@espon.eu](mailto:info@espon.eu)

[www.espon.eu](http://www.espon.eu), [Twitter](#), [LinkedIn](#), [YouTube](#)

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.