STUDY ON MACROREGIONAL STRATEGIES AND THEIR LINKS WITH COHESION POLICY

Data and analytical report for the EUSAIR

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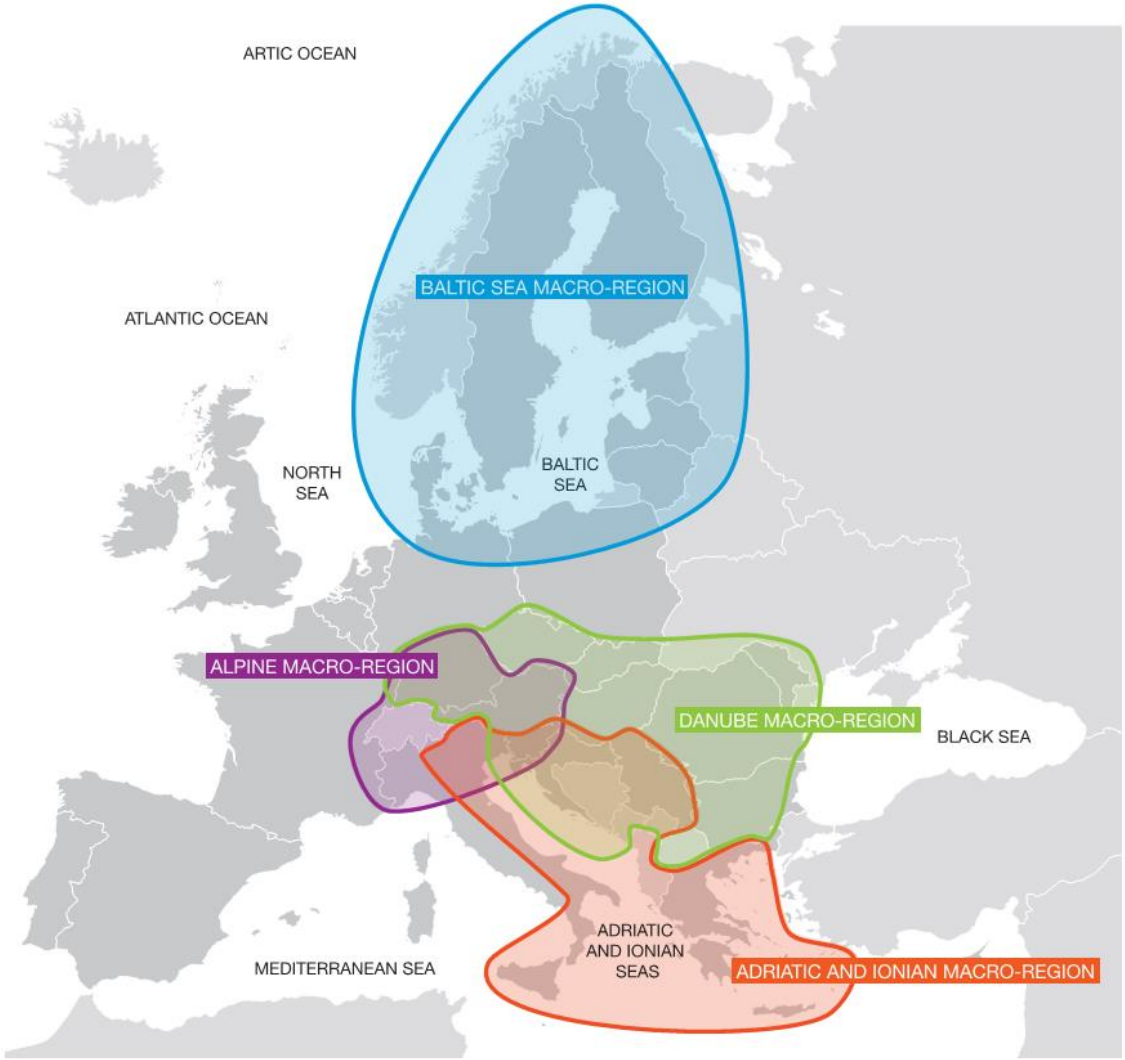

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CONTENTS

APPENDICES

List of Abbreviations

Abbreviation	Stands for
AG	Action Group
AP	Action Plan
BSAP	Baltic Sea Action Plan
BSLF	Baltic Sea Labour Forum
BSN	Baltic Science Network
BSR	Baltic Sea Region
BSR Stars	PA Innovation (EUSBSR) flagship
BUP	Baltic University Programme
CBC	Cross Border Cooperation
CBSS	The Council of the Baltic Sea States
CEF	Connecting Europe Facility
CF	Cohesion Fund
CISE	Common Information Sharing Environment
DG	Directorate-General
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
ECTS	European Credit Transfer System
ECVET	European Credit system for Vocational Education and Training
EFTA	European Free Trade Association
EMFF	European Maritime and Fisheries Fund
ERASMUS+	EU Programme for Education, Training and Sport
ERDF	European Regional Development Fund
ESF	European Social Fund
ESIF / ESI funds	European Structural and Investment Funds
ETC	European Territorial Cooperation
EU	European Union
EUSAIR	European Union Strategy for the Adriatic-Ionian Region
EUSALP	European Union Strategy for the Alpine Region
EUSBSR	European Union Strategy for the Baltic Sea Region
EUSDR	European Union Strategy for the Danube Region
EWTCA	East West Transport Corridor Association
HAC	Horizontal Action Coordinator (EUSBSR)
HELCOM	Baltic Marine Environment Protection Commission
HLG	High Level Group
IALA	Navigation in the IMO, International Association of Marine Aids to Navigation and Lighthouse Authorities

ICPDR	International Commission for the Protection of the Danube River
IHO	International Hydrographic Organisation
IMO	International Maritime Organisation
MA	Managing Authority
MRS	Macro-regional strategy/-ies
MS	European Union Member States
MSFD	Marine Strategy Framework Directive
NCs	National Coordinators
NCM	Nordic Council of Ministers
NDEP	Northern Dimension Environmental Partnership
NEFCO	Nordic Environment Finance Corporation
NGO	Non-governmental organisation
NUTS	Nomenclature of territorial units for statistics
OP	Operational Programme
OVI	Objectively Verifiable Indicators
PA	Policy Area / Priority Area / Pillar / Action area
PA Education	Policy Area Education (EUSBSR)
PA Innovation	Policy Area Innovation (EUSBSR)
PA Nutri	Policy Area Nutrition (EUSBSR)
PA Safe	Policy Area Safety (EUSBSR)
PA Transport	Policy Area Transport (EUSBSR)
PAC	Policy / Priority Area Coordinator
RDP	Rural Development Programme
S2W	School to Work (PA Education (EUSBSR) flagship)
SG	Steering Group
SME	Small and medium-sized enterprises
SWD	Commission Staff Working Document
TEN-T	The Trans-European Transport Networks
TO	Thematic objective
TNK	Transnational Component
TSG	Thematic Steering Group
VET	Vocational Education and Training
WFD	Water Framework Directive

1 Introduction to the Report

Data and analysis report for Task 1 and Task 2

The 'Study on macro-regional strategies and their links with cohesion policy' consists of four task, which are summarised and concluded upon in the Final Report. The first two tasks (**Task 1** and **Task 2**) have been reported on individually, and the present report contains the **data and analysis** for these two tasks for the European Union Strategy for the Adriatic and Ionian Region (**EUSAIR**).

Structure of the report

This report begins with a brief section presenting the EUSAIR, followed by

- the first major part (section 2) of the report, which contains the data and analytical report for **Task 1**, i.e. a description and an analysis of the overall context of the Adriatic and Ionian macro-region;
- thereafter, the second major part (section 3) contains the data and analytical report for **Task 2**, analysing the overall achievements of the EUSAIR and an evaluation of its contribution to strengthening the territorial cohesion objective of the EU. Task 2 is divided into the following four sub-tasks:
  - **Task 2a**: Review of the EUSAIR
  - **Task 2b**: Achievements of the EUSAIR
  - **Task 2c**: Comparison of objectives of the EUSAIR with achievements
  - **Task 2d**: EUSAIR and ESIF

1.1 The EUSAIR – Background

The European Commission has in cooperation with the eight countries and stakeholders prepared the EU Strategy for the Adriatic and Ionian Region (EUSAIR). The third macro-regional strategy builds on the experiences and learnings from the existing macro-regional strategies (EUSBSR and the EUSDR.

The members of the strategies consist of four EU Member States and four (potential) candidate/pre-accession countries and the strategy intends to address the current differences in economic and administrative capacity of the region. The EUSAIR overall aim is to enhance the level of interconnection among the EU Member States and the non-EU countries, and at increased EU integration.

This is attempted by addressing the common challenges and opportunities of the region through cooperation and coordination, thereby looking for potential synergies. The strategy has four transnational/transboundary areas: blue growth, transport and energy networks, environmental quality and sustainable tourism – with the objective of promoting "economic and social prosperity and growth in the region by improving its attractiveness, competitiveness and connectivity".[1]

Eight members of the Adriatic and Ionian Region are part of the EUSAIR as shown in the list below.

Table 1-1 Countries and key features of the EUSAIR

Countries and regions	Key features
Four EU Member States • Croatia • Greece • Italy (14 regions) • Slovenia Candidate and potential candidate countries: • Albania • Bosnia and Herzegovina • Montenegro • Serbia	• Representing 70 million inhabitants or nearly 14% of the EU population • 4 EU Member States as well as 4 non-EU members

[1] http://www.adriatic-ionian.eu/about and COMMISSION STAFF WORKING DOCUMENT, Supportive Analytical Document, accompanying the document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS concerning the European Union Strategy for the Adriatic and Ionian Region {COM(2014) 357 final} {SWD(2014) 190 final}, SWD(2014) 191 final

Figure 1-1: The EUSAIR by NUTS2/Statistical Regions

The EUSAIR strategy includes four thematic pillars and a number of topics under each pillar, which are implemented through actions, as well as two cross-cutting aspects applicable across all pillars.

Table 1-2 EUSAIR: objective, policy areas and horizontal actions

Thematic pillars	Topics	Actions	Cross-cutting aspects
1. Blue Growth	1. Blue technologies 2. Fisheries and aquaculture 3. Maritime and marine governance and services	No specific progress described in the progress report	Strengthening R&D, Innovation and SMEs Capacity building, including communication
2. Connecting the Region	1. Maritime transport 2. Intermodal connections to the hinterland 3. Energy networks	No specific progress described in the progress report	
3. Environmental Quality	1. The marine environment 2. Transnational terrestrial habitats and biodiversity.	No specific progress described in the progress report	
4. Sustainable Tourism	1. Diversified tourism offer 2. Sustainable and responsible tourism management	No specific progress described in the progress report	

Strategy and action plan

The strategy and first action plan was adopted by the Council in October 2014. The action plan builds on the experiences from the EUSBSR and EUSDR, incorporates the Maritime Strategy for the Adriatic and Ionian Seas, and is meant to "serve as a source of inspiration for the bodies in charge of turning the Action Plan as it now stands into a concrete tool for implementing the Strategy".[2]

Governance

Governance of the EUSAIR consists of a number of actors and institutions as listed in Table 1-3. The Thematic Steering Groups and the Pillar Coordinators are key implementers of the strategy.

Table 1-3 Roles and responsibilities in the EUSAIR[3]

Actors/roles	Description
EUSAIR Governing Board (GB)	Coordination level – Coordinates work of the four TSGs, provides strategic guidance for management and implementation of the strategy, co-chaired by the European Commission. Includes: › National coordinators › Pillar Coordinators. › Commission services: DG REGIO, DG MARE and DG NEAR. Other Directorates-General (DGs) may participate as appropriate. › A representative of the European Parliament. › A representative of the Committee of the Regions accompanied by a representative of its Adriatic-Ionian Interregional Group. › A representative of the European Economic and Social Committee. › The Permanent Secretariat of the Adriatic-Ionian Initiative. › Representatives of the Managing Authority of Interreg ADRION and of the EUSAIR Facility Point under the programme.
National Coordinators	Two formally appointed representatives of each country (from MoFA and the national authority responsible for EU funds)
Pillar Coordinators of policy areas/horizontal actions (PAC and HAC)	Coordinate the pillars – 2 formally appointed officials from an EU-MS and a non-EU state (except for pillar 2, which has 4 coordinators), chairing the Thematic Steering Groups.
Thematic Steering Groups (TSG)	Implementation level – Implement the strategy in relation to the respective pillars, considering which projects/action best contribute to achieving the strategy's objectives.

[2] COMMISSION STAFF WORKING DOCUMENT, Action Plan, Accompanying the document: COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS concerning the European Union Strategy for the Adriatic and Ionian Region; SWD(2014) 190 final

[3] Roles and responsibilities of the institution implementing EUSAIR

STATE OF THE MACRO-REGIONS

EUSAIR (TASK 1)

2 State of the Macro-Regions (Task 1)

2.1 Introduction to Task 1

This report presents the results of Task 1 of the 'Study on Macro-Regional Strategies and their links with cohesion policy' for the Adriatic and Ionian Sea Macro-regional Strategy. Three other reports of the same structure cover the remaining three macro-regions: the Baltic Sea, the Alpine and the Danube Strategy.

This report provides an '*indicator-based description and analysis of the overall context of [the] macro-regions*'[4]. This report aims further to provide a context that is detached from the Macro-regional Strategy concept and does not provide an evaluation of the Macro-regional strategies objectives; which is addressed in the Task 2 report. The description and analysis is structured along four specific headlines: macro-economic overview; macro-regional integration; competitiveness; and the political, institutional and governance context. There is a chapter on each of these dimensions, followed by a synthesised meta-analysis. Prior to these indicator-based chapters, the report provides a brief methodological overview.

For each indicator that is described, the report first provides a graphical illustration of the indicator values. This is followed by a description and analysis of the indicator values in question.

[4] The study Specifications

2.2 Methodological Framework for Task 1

2.2.1 Macro-regions

The Macro-Regional Framework

The concept of Macro-regions refers to a grouping of regions that principally share a common functional context, such mountains, sea-basins, or river-basins, and '*in which the priorities and objectives set out in the corresponding strategy can be properly addressed*'[5]. While this grouping of territories into macro-regions thus follows a functional logic, it remains an artificial construct in terms of a governance or territorial unit. Therefore, contextual information for a macro-region as a whole is not readily available. This is reflected in the fact that no selection of relevant information is available on an aggregated level.

The family of reports under Task 1 aims at filling this gap. They seek to provide a set of relevant information that closes this gap and draws valid inferences on the overall context of the macro-region in question.

Indicators to provide an overall context of the Macro-regions

More specifically, the context of the macro-regions is described through a set of indicators on four dimensions (macroeconomic overview, integration, competitiveness and the institutional / governance context). The four types of indicators provide a research framework upon which the Task builds, and essentially reflect the EU's principal policy of Economic-, Social-, and Territorial Cohesion as follows:

- **Macroeconomic indicators** reflect the (socio) economic context of the individual economies as well as the macro-region as a whole. Further, they also serve as overview indicators on the overall social- and economic cohesion.
- **Macro-regional economic integration indicators** describe the intensity of cooperation, integration and (economic, cultural) exchange among the countries of a macro-region, and essentially reflect the state of territorial cohesion.
- **Competitiveness indicators** provide a more detailed insight into the (broadly defined) competitiveness of countries and macro-regions on various aspects. These indicators provide inference on factors that affect the three Cohesion objectives.
- **Political, institutional and governance indicators** mirror the political state of a macro-region in terms of governments' accountability or effectiveness of legislation. These indicators mirror the likely capacity to effectively pursue interventions on the economic, social as well as territorial cohesion.

[5] Study specifications

The reports provide a picture of the status of the macro-region in question, of the developments inside the macro-regions and when possible (i.e. data allows) a comparison of the current results with the results of the past. The family of Task 1 reports thus explores and analyses the overall context of the four existing Macro-Regional Strategies (MRS), namely the EU Strategy for the Baltic Sea Region (EUSBSR), the EU Strategy for the Danube Region (EUSDR), the EU Strategy for the Alpine Region (EUSALP) and the EU Strategy for the Adriatic and Ionian Region (EUSAIR). The analysis is thus as such detached from the contents of each of the macro-regional strategies. Rather, it focuses on the comparable assessment of the socioeconomic and macro-regional integration status within the macro-regions, as well as on the comparable investigation of their performance regarding competition and efficient institutions and governance.

2.2.2 Indicator Analysis

Choosing macro-regionally relevant indicators

A first step of Task 1 focused on the construction of a set of indicators which are relevant to macro-regions on a macro-regional level. For this, indicators were first identified by the consultant, and the final selection was done in close cooperation with DG REGIO. Consultations with DG REGIO and members of the Steering Committee served to ensure an eventual comprehensive and relevant picture of the macro-regions.

Emphasis on regional indicators where possible

For the identification of indicators statistical units had to be considered. Given that the macro-regions in some cases consist of regions and not entire countries, the geographical level of the analysis is principally conducted at level 2 of the Nomenclature of territorial units for statistics (NUTS-2), as defined by the EU. However, in some cases data are not available at NUTS-2 level of aggregation but at NUTS-1 level or country level only. In these cases the missing information for the NUTS-2 level has been substituted by data from the first available aggregation level above it, i.e. if statistical information on a measure was available at NUTS-1 level, the same performance measure was assumed to apply at the NUTS-2 level. For some variables only country-specific information was available. This applies for example to the macro-regional integration indicators.

The statistical units for regions outside the EU were chosen according to the countries' own aggregation at NUTS-2 level (equivalent to SR3[6]) as defined by the EU. Only very few data were available at a level comparable with the NUTS-2 level of the EU. Furthermore, most analysed countries outside the EU are quite small, and most data for the regions outside the EU have therefore been chosen at country level of aggregation.

[6] The NUTS classification is defined only for the Member States of the EU. Eurostat, in agreement with the countries concerned, also defines a coding of statistical regions (SR) for countries that do not belong to the EU but are either candidate countries, potential candidate countries or countries belonging to the European Free Trade Association (EFTA). Eurostat and Serbia have not yet agreed on statistical regions for the country.

The main sources of data used in this report are the Eurostat-Database supplemented with data from the World Bank Database, OECD, UNCTAD, COMTRADE, EEAA, ESPON project. Most NUTS-2 data are published with a time lag of one or two years. In order to create a common basis across the macro-regions and the themes, the description and analysis are generally based on data available for the year 2015 or the latest available data for all considered regions. When possible, a comparison is provided between the latest available year data and the data for 2008 for the Baltic Sea and Danube macro-regions. The year 2008 also is the year just before the creation of these two macro-regional strategies. For the two newer macro-regions, the Alpine and Adriatic Ionian macro-regions it is the year 2011 that is compared to 2015. The year 2011 is the year just before the creation of the Alpine and Adriatic Ionian macro-regions and it offers a timespan long enough in order for changes to become visible.

Each of the quantitative and qualitative indicators identified as best describing the socio- economic context, integration, as well as the competitiveness, institutional and governance situation of the four macro-regions was subject of an assessment against the RACER framework. RACER stands for "Relevant, Acceptable, Credible, Easy, Robust" and enables a judgement on each indicator's properties and qualities. Each RACER criterion has been assessed on a three-level scoring scale (green: criterion completely fulfilled; orange: criterion partly fulfilled; red: criterion not fulfilled). Based on the strengths and weaknesses of each of the quantitative and qualitative indicators across all the RACER criteria, a list of indicators was selected out of a pool of indicators considered.

The indicators which complied with all RACER criteria (green overall) have been definitely included into the set of selected indicators; those, which did not comply with all RACER criteria (a mix of green, red and yellow) and were not of high importance for the considered macro-region have been left outside.

2.2.3 Composite Benchmarks

As it is not possible to monitor all dimensions of a macro-region with one single indicator, a larger number of indicators has been selected. An additional challenge is that a macro-region's picture comprises the four dimensions (macro-economic, macro-regional integration, competitiveness and political-institutional- governance) but each dimension cannot be captured by one single quantitative indicator.

Composite Indices

In order to cope with this challenge, all indicators with a common theme have been aggregated into composite indices. Composite indices bundle separate (component) indicators into one index which allows the values of the whole bundle expressed as only one measure[7]; examples of such indices are the Human Development Index, Environmental Sustainability Index, and stock

[7] See http://www.investopedia.com/terms/c/compositeindex.asp

indices like the NASDAQ Index. In the course of gathering indicator data, the data have been grouped into sets of related indicators according to appropriately identified themes. Themes have been chosen so that the indicators together represent an "essential feature" of and within a macro-region. The individual indicators have been aggregated without any weights and each composite index hence represents the unweighted average of all indicators.

Composite Benchmarks

Different indicators generally apply different scales, such as percentages, currencies or categorical data (e.g. chemical status of waterbodies). The aggregation of such different scales only makes sense for comparable variables. Each indicator therefore needs to be normalised (to a common scale) before these can be combined into a composite index. For this aggregation, the proprietary '*emb*' model (*equilibrated medial benchmarking*) has been applied[8].

The benchmarking analysis focuses on the four macro-regions and the four dimensions inside each macro-region compares countries and/or NUTS-2 regions inside the individual macro-region based on a common reference framework of EU countries. The reference framework for each component indicator or composite index is delineated by the "top performer" of EU28 countries (benchmarked at 150), the "lowest performer" (50) and the median performer(s) at 100[9]. A high benchmarking score always reflects a more "desirable" situation. Taking unemployment rates as an example, higher scores reflect lower unemployment rates. In this way, the benchmarking results can always be read as showing whether – and to what extent – they are above or below the median in the EU at country level. This common framework enables observations to be made across different regions, even though the main focus remains within each macro-region.

The benchmark is always scaled on a country level against all EU28 Member States. The benchmarking score hence indicates a country's or a region's relative position to all EU28 countries. This means in turn that one can observe values above 150 and below 50 in the cases summarised in the table below.

[8] For the Proprietary Method of constructing indices from multiple indicators refer to: Fink, M. *et al.* (2011), *Measuring the impact of flexicurity policies on the EU labour market*, IHS Research Report, commissioned by DG EMPL (Employment, Social Affairs and Inclusion).

[9] The median is the point in a dataset in which a split of that dataset results in two sets with an equal number of data points. See http://www.investopedia.com/terms/m/median.asp for more details

Table 2-1: Cases with benchmarking scores above 150 and below 50

Case	Explanation
Regional analyses (NUTS-2 level)	A NUTS-2 region may out-/underperform its country. Such as Stockholm (SE), performing higher than Sweden as a whole.
Non-EU countries	A non-EU country is not included in the benchmarking scale. Thus, a country like Ukraine may score above 150 or below 50, as they are not included in the scaling.
Macro-regional Integration analyses	Countries that are stronger/weaker integrated in a macro-region than the EU's 'top performing'/'bottom performing' country is integrated in the EU28 (see paragraphs below). For example, Germany's trade integration with countries in the Danube region comprises only a small share of its trade with all EU28 countries and is at the same time lower than that of the EU's 'bottom performer'.

Integration Indices

The chapter on integration includes new integration indices. These IHS-proprietary indices cover respectively Labour Integration (three indices plus a composite of these 3 components), Capital Integration (Foreign Direct Investment (FDI), Energy Integration, and Trade Integration. Each of these seven indices is constructed on a similar principle, which is outlined as follows.

When the amount or value of labour, capital etc. supplied by a country to another country (a 'partner'), or, equivalently, received from a partner, increases, it can be said that the level of integration between the two has increased. Considering a particular group of countries, the focus is on the bilateral flows between them. For the task of estimating integration within macro-regions, i.e. between individual countries belonging to the macro-region in question, the first step is the development of a "Bilateral Flow Matrix", as shown in the table below.

Table 2-2: Energy Integration Example (Baltic Sea), energy exports (kTOE)

Partner	Denmark	Germany	Estonia	Latvia	Lithuania	Poland	Finland	Sweden
Denmark	0.0	1,917.4	0.0	0.0	0.0	0.0	505.6	3,503.5
Germany	3.5	0.0	0.0	0.0	0.0	916.5	0.0	0.0
Estonia	0.0	0.0	0.0	522.7	0.0	0.0	25.6	0.0
Latvia	0.0	0.0	0.4	0.0	293.9	0.0	0.0	0.0
Lithuania	0.0	0.0	79.7	14.4	0.0	51.4	0.0	0.0
Poland	0.0	251.7	0.0	0.0	5.6	0.0	0.0	1.7
Finland	0.0	0.2	432.8	0.0	0.0	0.0	0.0	0.1
Sweden	477.6	168.3	0.0	0.0	0.0	302.0	1,484.4	0.0

Immediately, certain strong relationships between certain country-pairs are visible. What such a table of absolute values does not make clear is the 'importance' of a bilateral relationship for a specific country. A second step

therefore converts the data to a relative share of all its exports (or foreign investments, migration flows, remittances) (in worldwide).

Table 2-3: Energy Integration Example, Share of total exports to partner country (in %)

Partner	Denmark	Germany	Estonia	Latvia	Lithuania	Poland	Finland	Sweden
Denmark	0.0	11.8	0.0	0.0	0.0	0.0	3.1	21.5
Germany	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Estonia	0.0	0.0	0.0	24.8	0.0	0.0	1.2	0.0
Latvia	0.0	0.0	0.0	0.0	13.8	0.0	0.0	0.0
Lithuania	0.0	0.0	0.9	0.2	0.0	0.6	0.0	0.0
Poland	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
Sweden	2.6	0.9	0.0	0.0	0.0	1.6	8.1	0.0

The new integration index provides a common basis for measuring integration in each of the four macro-regions, just as the case for every other indicator considered in this study. Given that the number of countries in the macro-regions vary, the total share of e.g. energy exports to the macro-region would grow with the number of member countries. Therefore, to provide a measure of integration that is not affected by the size of a macro-region, the chosen measure for each country's degree of integration within its macro-region is its per partner share (ppShare); i.e. the average flow to a destination country.

Table 2-4: Energy Integration Example, resulting per partner share

Partner	ppShare
Denmark	5.21
Germany	0.22
Estonia	3.72
Latvia	1.98
Lithuania	0.23
Poland	0.18
Finland	0.83
Sweden	1.90

Benchmarking Integration Indices

In the case of integration indices, the procedure to establish the benchmark is identical in formation as for the other indices, except that in this case the bilateral flow matrix is 28 x 28 for the EU28. Thus, the benchmark is defined by the average share that each Member State exports to the EU28 countries. This results in a per partner share of each Member State, but to the whole EU28, instead of a macro-region.

In other words, using the per partner share as a unit of measure enables the degree of integration within each macro-region to be benchmarked against the degree of integration in the EU as a whole. This provides a deep insight into the question of whether the common geographical basis (and more) for the macro-regions is actually, and to what extent, of particular relevance compared to the

entire setting of all EU countries, which may in general cover a more or less contiguous area, but which course also comprise (even more) multiple regional contexts.

As mentioned in Table 2-1 above, there are many cases found to score well below 50 or well above 150. This is entirely consistent: The reason, expressed mathematically, is that the two-dimensional flow matrices gives rise to country index values in macro-regions that are not subsets of the EU index; for non-integration indices, in contrast the (EU) country indicator values form by definition a subset of the EU28.

Illustrative Maps

Each composite index is accompanied by a figure that consists of two maps and one bar chart. Both maps show the composite index values for each NUTS region in differing colour schemes. The first map provides a coloured illustration of the scores on a scale from 50-150 and reflects how a given region performs on the EU28-wide level (i.e. 100 reflects the EU28 median). Any regions scoring outside this defined range are displayed as 50 or 150.
The scale of the second map is in turn defined by the lowest and highest composite index scores found for the macro-region and seeks to highlight the differences between the high and low performing regions of that macro-region more clearly. As a result, the range of this scale depends on the maximum and minimum scores for each individual composite index in a given macro-region.
The bar chart identifies the two regions with the highest and lowest composite index scores in each country, accompanied by the (benchmarked) scores of the index's components. The colouring scale ranges from 50 to 150.

Digital Toolbox

Synchronous to this report, a digital toolbox has been developed. The digital toolbox comprises a set of data files for each of the four macro-regions. Each file contains data sheets for each indicator used to assess the context of the macro-regions. As mentioned above, data has been organised separately for the appropriate NUTS regions and countries in each of the four macro-regions, and each indicator, or composite, corresponds to an excel sheet for each macro-region. The excel sheets have been grouped according to the four dimensions (macro-economic, macro-regional integration, competitiveness and political-institutional- governance). Furthermore, within each dimension, sheets have been grouped according to agreed aggregated compositions i.e. as composite indices).

An index page (usually on the first data sheet of each file) will enable users to directly find the data sheet for a named indicator (by clicking on an excel hyperlink).

A second set of excel files has been established for documenting the results of the benchmarking process. There is a file for each individual macro-region. This contains datasheets corresponding to indicators, grouped according to the above-mentioned four dimensions. Within these, they are further grouped according to the agreed aggregated composition of composite indices.

2.3 Macroeconomic Overview

In this chapter the overall macroeconomic state of the macro-region is assessed through analyses focused on three major themes: economic performance, employment, and social equality. The macroeconomic indicators are used to reflect the (socio) economic context of the individual economies as well as of the macro-region as a whole.

The table below provides an overview of the indices that are presented in this chapter:

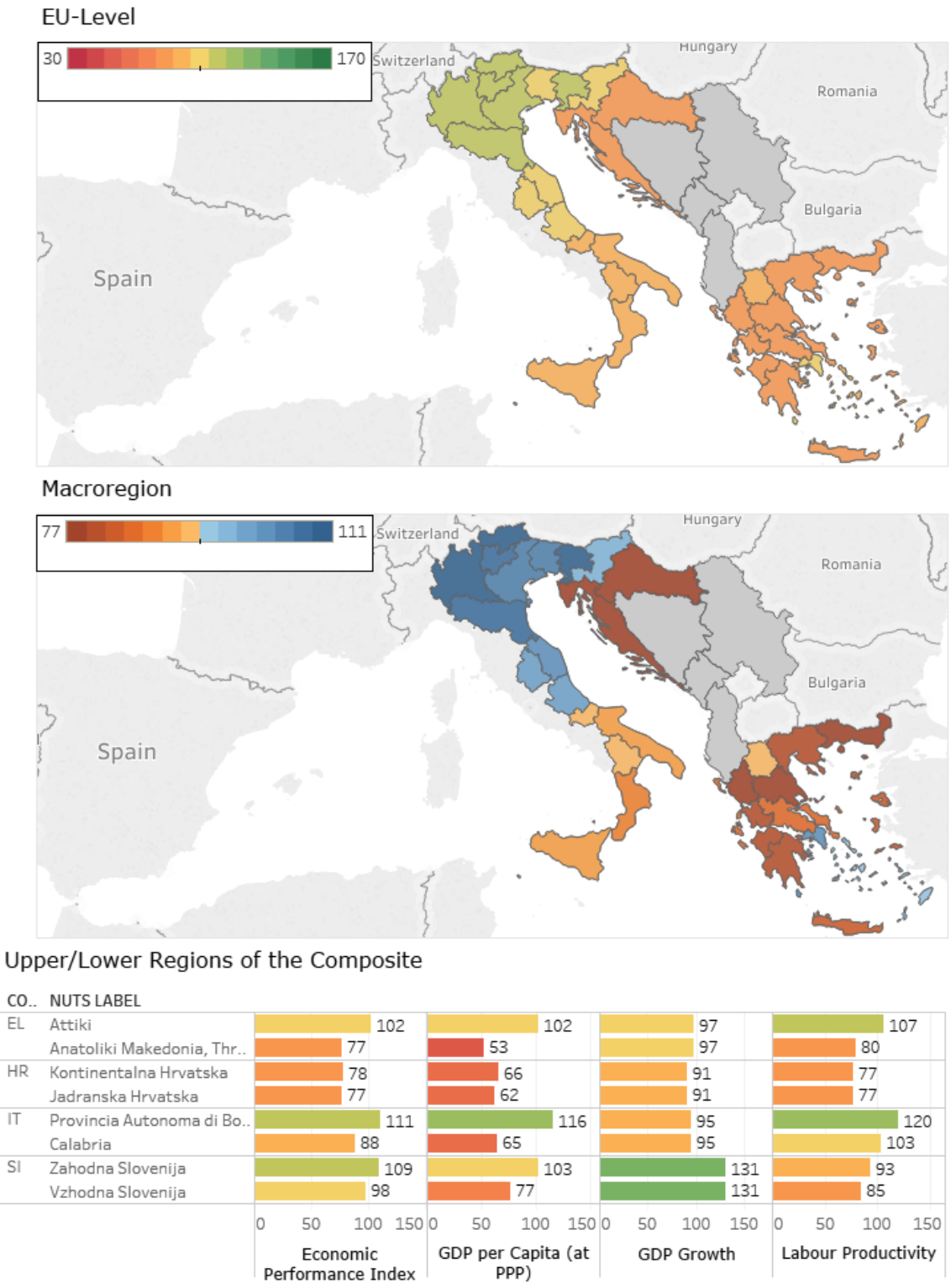
Table 2-5: Overview of macro-economic overview indicators

Composite	Economic performance indicators	Employment indicators	Social progress indicators
Components	GDP/capita	Employment index	Social progress index[10]
	GDP growth	Unemployment rate	
	Labour productivity	Youth unemployment	
		Long term unemployment	
		Economic activity rate	
		Employment rate	

[10] A composite index based on 53 indicators covering basic human needs, conditions for well-being and opportunity to progress

2.3.1 Economic Performance

Figure 2-1: Economic Performance by NUTS-2 in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-1: Explanation of indicators: 'Economic Performance'

To assess the economic performance on NUTS-2 regions inside the macro-region three indicators: regional Gross Domestic Product (GDP) per capita (at purchasing power parity), Real GDP growth rate and Labour Productivity have been bundled into one composite indicator: Economic performance index.

Regional gross domestic product (GDP) is used for the measurement and comparison of the economic activity of regions. It is the most important indicator used in the EU's regional policy for the selection of regions eligible for support under the investment for growth and jobs goal of the EU. GDP is the standard measure of the value of the production activity (goods and services) of resident producer units.[11] For this indicator regional data are available with a time lag of two years. Thus regional GDP data for the reference year 2015 have been released at the beginning of 2017. Real GDP is usually a proxy for economic prosperity. GDP per capita, however, does not reflect the equality of distribution of that prosperity, so it is not representative for many social issues.

The real percentage-growth rate of gross value added (i.e. Real GDP growth) allows the identification of the most and less dynamic regions in the EU and the non-EU regions inside the macro-region.

Labour Productivity has been calculated as Regional Gross Value Added (GVA) per employee. According to the OECD, Labour Productivity measures "how efficiently production inputs, such as labour and capital, are being used in an economy to produce a given level of output." Productivity is considered a major source of economic growth and competitiveness. It is used as a main indicator to assess a country's performance and to perform international comparisons. Over time a country's ability to raise its standard of living depends to a great extent on its ability to raise its output per worker. There are different measures of productivity.

An investigation of growth-generating economic activities on the regional level requires the availability of relevant regional indicators. Compared to data on the national level, the availability of regional data is much more limited. Moreover, regional data are published with sizable time lags which in the case of national accounts may amount to two years.

The composite indicator Economic performance shows a mixed picture regarding the economic development of the NUTS-2 regions of the Adriatic/Ionian macro-region (see Figure 2-1). The North-Western part of the macro-region performs well; i.e. above the EU28 median performance. The Eastern part of the macro-region belongs in contrast to those regions performing below the EU28 median.

Overall, it can be seen that the economic performance differs between the urban and rural regions. Concerning urban regions all the highest performers in 2011 and 2014 are the three NUTS-2 regions in Northern Italy (Provincia Autonoma di Bolzano, Lombardia, and Provincia Autonoma di Trento). Urban regions in the middle range are the Italian NUTS-2 regions located in the Northern and Central

[11] https://www.oenb.at/en/Statistics/Standardized-Tables/Economic-and-Industry-Indicators/Economic-Indicators/nominal-gpd-growth-expenditure-side.html

part of the country (e.g. Emilia-Romagna, Veneto, Friuli-Venezia Giulia), but also in the regions Attiki in Greece and Zahodna Slovenija in Slovenia. All of these are urban regions with a high population density. The lowest performers in the macro-region are all located in Greece, Croatia, and Albania[12]. These are regions with a high share of rural population.

The ongoing fiscal consolidation and credit constraints in Greece as a result of the debt crisis, with contracting consumption and investment is thus mirrored in declining economic performance when measured by the composite index. Croatia was confronted with a six year recession, following the economic crisis and the country has experienced negative GDP growth over the entire period from 2009 to 2014. The long lasting recession was due to deep structural problems and difficulties in adjusting the economy after the initial recession. In Slovenia, the value of this indicator exhibits a decline for the NUTS-2 regions. This is due to a long lasting banking crisis in Slovenia.

As the data available for the EU candidate and potential candidate countries for the investigated indicators (Table 6) differ from the data available for the EU-countries in the macro-region, these data have not been included in the composite indicator. The data are presented and analysed below. No comparable data were available for the candidate and potential candidate countries for the indicator labour productivity.

Table 2-6: GDP per capita in (potential) candidate countries

	GDP per capita (current prices) (EUR)		GDP per capita in PPS (%, EU-27=100)	
	2011	2014	2011	2014
Albania	3,191	3,440	29	28
Montenegro	5,211	5,436	41	39
Serbia	4,619	4,635	36	35
Bosnia and Herzegovina	3,432	3,641	29	28

Source: Eurostat.

As the table above shows the non-EU countries in the macro-region show much lower levels of GDP per capita compared to the EU countries. At the same time GDP per capita decreased slightly in all countries in 2014 compared to 2011.

This was due to the modest GDP performance of these countries with low and negative growth rates (Table 2-7). All these countries need to implement structural reforms and improve their business and investment environment in order to boost GDP growth and make progress in the convergence process.

[12] Albania is not part of the composite index due to incomplete data. However, Albania exhibits a real GDP per capita (at purchasing power parity) benchmark of 29 and a GDP growth close to the EU28 median.

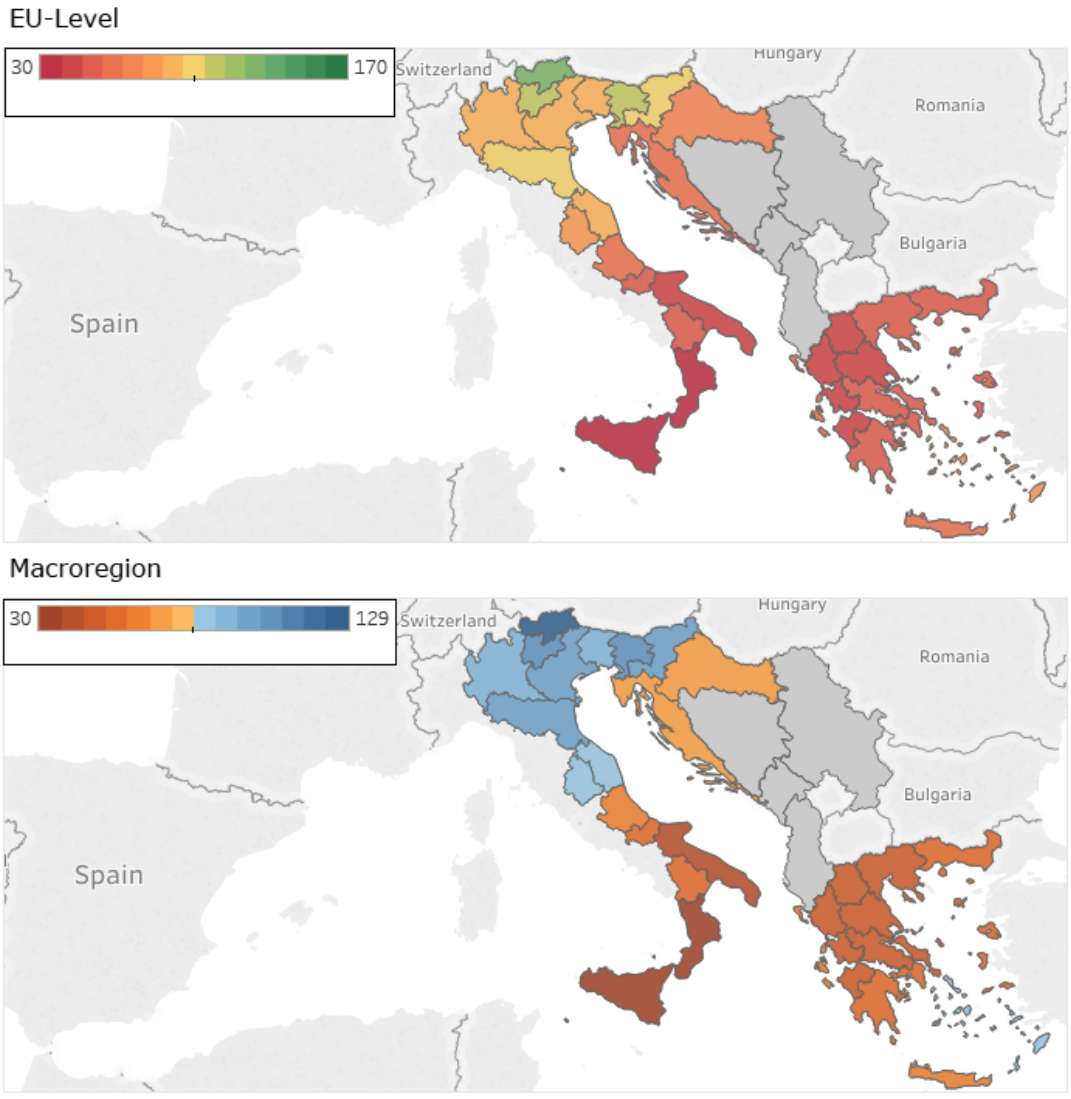
Table 2-7: GDP Growth rates in (potential) candidate countries, in %

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Albania	7.5	3.4	3.7	2.5	1.4	1.1	2.1	2.2	3.5
Montenegro	6.9	-5.7	2.5	3.2	-2.5	3.3	:	3.4	2.5
Serbia	5.4	-3.1	0.6	1.4	-1.0	2.6	-1.8	1.8	4.7
Bosnia and Herzegovina	5.6	-2.7	0.8	1.0	-1.2	2.5	1.1	3.0	2.0

Source: Eurostat, ebrd, wiiw.

2.3.2 Employment

Figure 2-2: Employment by NUTS-2 in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-2: Explanation of the indicator: 'Employment'

Labour market statistics are crucial for many EU policies. There are significant labour market disparities within the EU territory as well as in candidate/neighbour countries. The first figure on the left shows the employment situation from the perspective of a composite index based on the following indicators: i) Economic activity rate, which describes an economy's ability to attract and develop a great share of human capital from its population; ii) Employment rate combined with Unemployment Rate, providing useful information about the ability to utilize available labour; iii) Youth unemployment rate, as an indicator showing the match between the existing skills within the young people and the employment opportunities offered by the regional economies; iv) and Long term unemployment rates, which indicate inefficient labour markets. More elaborate descriptions of the composite indicator can be found in the methodology.

Judged by the composite indicator, most regions of the macro-region are confronted with employment challenges in 2015. Thus, within the EU as a whole, the lowest values of the employment composite index are seen in the NUTS-2 regions of Greece and Croatia; in most of Italy; and in one region of Slovenia. In the macro-region, there are only three NUTS-2 regions with a value above the EU-median: Bolzano/Bozen and Trento (IT) and Zahodna Slovenija (SI). Furthermore, a couple of NUTS-2 regions in Italy (Lombardia, Veneto, Friuli-Venezia Giulia, and Emilia-Romagna) as well as the region Vzhodna Slovenija (SI) show values which are only slightly below the EU-median. Italy exhibits a dramatically non-cohesive picture, with Calabria (IT) scoring worse in several aspects than the EU's "bottom"-performing Member State. On the other end of the scale, Bolzano/Bozen (IT) shows solid performances. Comparing the indicator values of 2015 with those for 2011 furthermore shows a deterioration of the performance in all the regions in the macro-region.

The performance below the median in these regions can be attributed to low activity and low employment, and high unemployment rates. These are to a certain extent due to the economic and financial crisis, but also the deeper structural problems in the Greek and Italian economy can be argued to have an impact. By tradition, the participation of female workforce is low in these countries. Many regions in Greece, Italy, and Croatia are also confronted with high youth unemployment rates. Youth unemployment rates are higher than 50 % in regions in Greece and Italy and higher than 40 % in Croatia. Following the economic and financial crisis, Croatia was confronted with a six year lasting recession. The return to growth was achieved in 2015.

As for the EU candidate and potential candidate countries for three of the above indicators (Table 2-8) the definitions differ from those for the indicators available for the EU-countries in the macro-region, these countries have not been included in the composite indicator. The data are presented and analysed below.

The candidate countries Montenegro, Albania and Serbia, and potential candidate Bosnia-Herzegovina show a similar pattern as Italy, Croatia and Greece with low activity and employment rates and high unemployment. The lowest employment rates among these countries can be found in Bosnia-Herzegovina with 39 % in 2015, the highest in Albania and Serbia with 53 % and 52 % respectively. The unemployment rates show double digit values in all candidate and potential candidate countries, with the highest in Bosnia-Herzegovina (28 %). The highest youth unemployment rates were recorded in Bosnia-Herzegovina (62 % in 2015) and in Serbia (43 % in 2015).

Table 2-8: Employment and Unemployment in (potential) candidate countries

	Economic activity rate		Unemployment		Youth unemployment		Long term unemployment		Employment rate	
	2008	2015	2008	2015	2008	2015	2008	2015	2008	2015
Albania	62.0	64.2	13.0	17.1	27.2	39.8	8.5	11.3	53.8	52.9
Montenegro	61.2	62.6	16.8	17.5	:	37.6	13.4	13.6	50.8	51.4
Serbia	62.7	63.7	13.6	17.6	35.2	43.2	9.7	11.3	53.7	52.1
Bosnia and Herzegovina	53.5	54.6	23.5	27.9	47.5	62.3	20.3	22.8	40.7	39.2

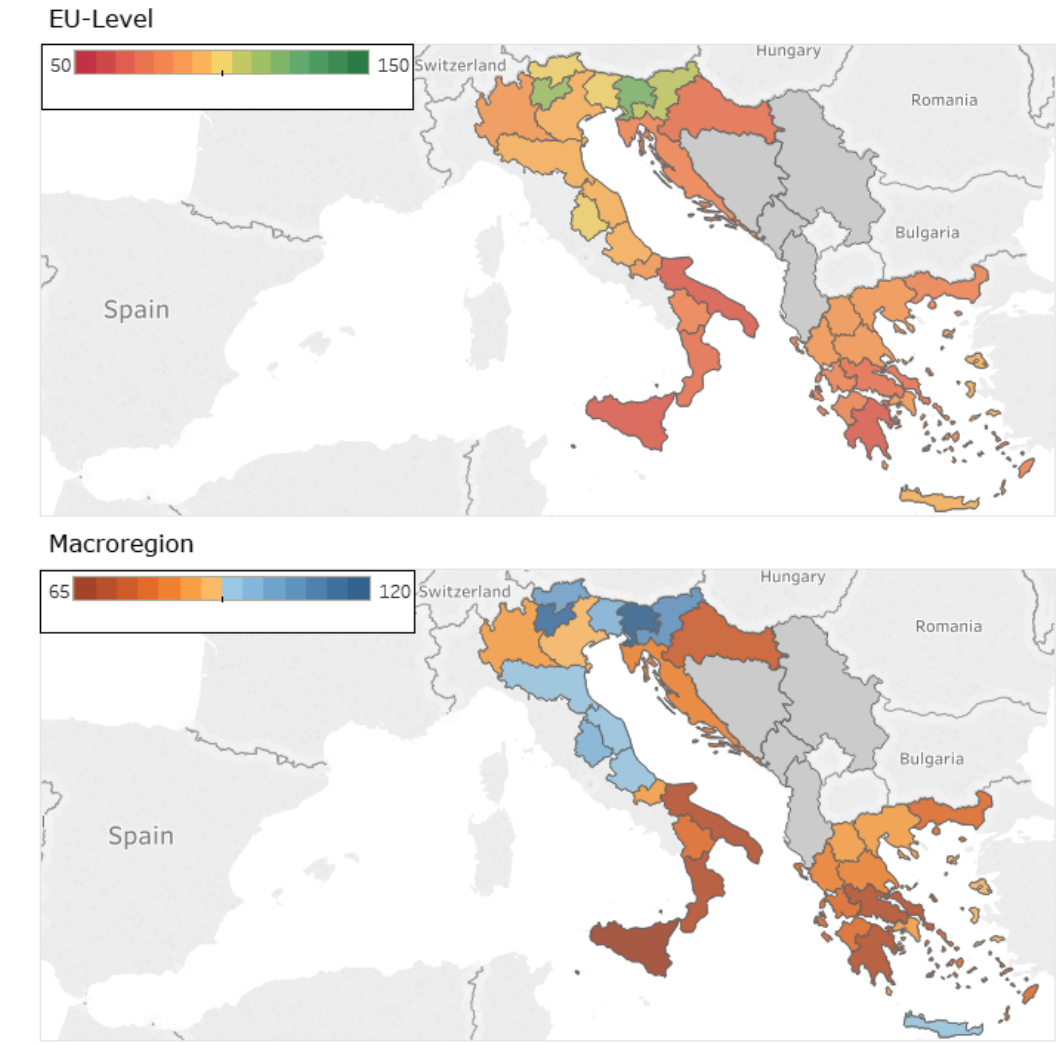
Source: Eurostat.

For the Western Balkan countries all three unemployment indicators show high levels. Moreover, they also exhibit a rising trend from 2008 to 2015 which hints to persistent structural problems on the labour markets of these countries. These may be due to a mismatch between the available qualifications and the requirements of the employers and also to an active informal job market. The economic activity and employment rates are relatively low, whereas a gender gap can be observed. These rates are significantly lower for women compared to men. This is due to the traditional role of women and low availability of childcare facilities in these countries. In all Western Balkan countries informal employment is high accounting to at least 30%.[13]

[13] International Labour Organization (2011): A comparative Overview of Informal Employment in Albania, Bosnia and Herzegovina, Moldova and Montenegro. URL: http://www.ilo.org/wcmsp5/groups/public/@europe/@ro-geneva/@sro-budapest/documents/publication/wcms_167170.pdf

2.3.3 Social Progress Index

Figure 2-3: Social Progress Index by NUTS-2 in 2016, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-3: Explanation of the indicator: 'Social Progress Index' [14]

The Social Progress Index measures the extent to which countries provide for the social and environmental needs of their citizens.
The Social Progress Index from 2016 bases on fifty-three indicators that cover the fields of Basic Human Needs (Nutrition and Basic Medical Care, Water and Sanitation, Shelter, Personal Safety), Foundations of Well-Being (Access to Basic Knowledge, Access to Information and Communications, Health and Wellness, Environmental Quality), and Opportunity to Progress (Personal Rights, Personal Freedom and Choice, Tolerance and Inclusion, Access to Advanced Education). A ranking of the values of Social Progress Index shows the relative performance of the countries included. For the purpose of this Task, this index has been re-scaled this report's format.

Social progress and economic development exhibit overall a correlation. Those regions with the highest GDP per capita in the Adriatic-Ionian macro-region are thus also the macro-region's best performing regions in the Social Progress Index. That is, Provincia Autonoma di Bolzano/Bozen, Provincia Autonoma di Trento, Friuli Venezia Giulia, and Umbria in Italy with scores in the range of 93 to 113 points. These regions register the highest scores for the indicators Basic Human Needs and Foundations of Wellbeing. The lowest scores are to be found in the NUTS-2 regions Sterea Ellada, Peloponnisos in Greece and Puglia, Calabria and Sicilia in Italy with scores around 65 points. The indicators 'Foundations of Wellbeing' (i.e. 'Access to Information and Communication' and 'Environmental Quality') and 'Opportunity' ('Personal Rights') are responsible for the low index scores in these regions. These are also the regions with the lowest level of economic development. A correlation between the GDP per capita and performance on social progress can be noticed for these regions. The remaining Greek and the Croatian regions show a slightly better performance with scores in the range of 70 to 93 points.

The Adriatic-Ionian macro-region is diverse when it comes to Social Progress. Overall, there is a notable correlation with economic development. The benchmarking scores range between 65 and 120, which implies that no region is a particularly high or low performer. The macro-region as a whole lags generally behind that of the EU28 countries, which also implies that from a social cohesion perspective the Adriatic-Ionian macro-region is behind.

The Regional Social Progress Index exists also in a global form and on a country basis. The global and regional version are however not comparable, and the

[14] The index is published by the nonprofit organization Social Progress Imperative. A custom version for the EU regions has been developed in cooperation with the European Commission. See http://www.socialprogressimperative.org/custom-indexes/european-union/

scores base further on a different scale. [15] Serbia and Montenegro score 72.42 and 70.69 (out of 100 points) on the Social Progress Index respectively.

2.4 Macro-regional Economic Integration

The emergence of the "new trade theory" (Krugman, 1979)[16] in late 1970 with its emphasis on economies of scale put economic integration in the centre of economic debate. According to this theory, companies in small countries tend to exhibit relatively high average costs, while companies in large countries can profit from lower average costs due to size advantages. [17]

As a result, regional integration represents an important national policy alternative for small economies in order to overcome the small size handicap. By joining a regional integration agreement, companies from a small domestic economy may enlarge and be better prepared to face competition from countries with larger domestic economies.[18]

However, while regional integration gives rise to new opportunities, new challenges may appear. These may take the form of strong restructuring at microeconomic level, with some companies disappearing and other companies growing bigger and becoming successful in international competition.[19] In the restructuring process, relatively large and strong companies overtake their weaker competitors. An important role in this respect play mergers and acquisitions involving companies from different countries. Foreign direct investment (FDI) represents thus a channel in the integration process. Companies with foreign participation, which are usually involved in vertical production networks, are also responsible for a large share of exports and

[15] The Global Social Progress Index has the same methodological framework as its regional counterpart used for the EU Member States. The scoring of the Regional and Global version are however not comparable due to a different normalisation. The provided values are therefore in the original Social Progress format, and not comparable to the benchmarked results. The scale of the original format is 0-100.
https://www.socialprogressindex.com/;
http://ec.europa.eu/regional_policy/sources/information/maps/methodological_note_eu_spi_2016.pdf

[16] Krugman, Paul R. (1979): Increasing returns, monopolistic competition, and international trade, URL: http://www.sciencedirect.com/science/article/pii/0022-1996(79)90017-5.

[17] Gustavson, Patrick & Koko, Ari (2004): "Regional Integration, FDI and Regional Development. European Investment Bank". In: *Papers of EiB-Conferences*, Vol. 9, No. 1, pp. 122, Luxembourg.

[18] Gustavson, Patrick & Koko, Ari (2004): "Regional Integration, FDI and Regional Development. European Investment Bank". In: *Papers of EiB-Conferences*, Vol. 9, No. 1, pp. 122, Luxembourg.

[19] Gustavson, Patrick & Koko, Ari (2004): "Regional Integration, FDI and Regional Development. European Investment Bank". In: *Papers of EiB-Conferences*, Vol. 9, No. 1, pp. 122, Luxembourg.

imports. However, integration may also lead to trade diversion and erosion of sovereignty.[20]

In the context of the EU's long-term objectives, this chapter provides a context on the territorial cohesion of the macro-region, which is one of the three cornerstones of Cohesion Policy next to economic and social cohesion[21] , as well as the degree to which the Single Market[22] is fulfilled within the macro-region.

For this analysis, various indicators have been chosen to provide a context of integration. The table below lists the chosen indicators. The macro-regional economic integration indicators chosen describe the intensity of cooperation, integration and (economic, cultural) exchange among the countries of the macro-region.

Table 2-9: Overview of Macro-regional economic Integration indicators

Composite	Components
Labour Integration	Intra macro-regional migration
	Mobile students from abroad
	Workers' Remittance
Trade Integration	Share of exports to macro-region out of total exports
Capital Integration	Inward FDI stocks
Energy Integration	Exports of energy
Accessibility	Multimodal
	Road
	Rail
	Air
Territorial Cooperation	Number of organisations participating in INTERREG-IVB

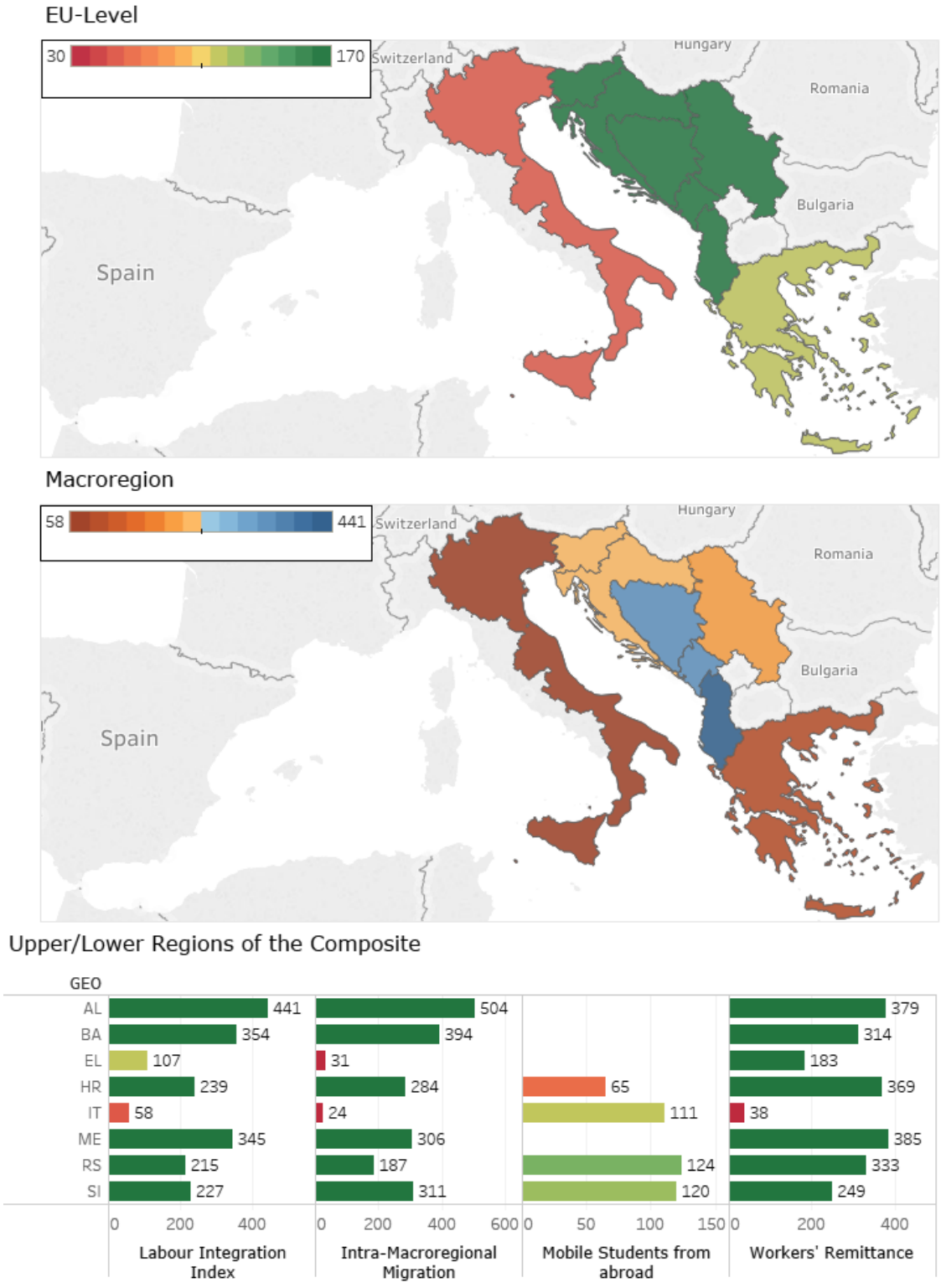
[20] https://www.globalpolicy.org/nations-a-states/political-integration-and-national-sovereignty-3-22.html

[21] Territorial Cohesion, http://ec.europa.eu/regional_policy/en/policy/what/territorial-cohesion/

[22] The European Single Market, https://ec.europa.eu/growth/single-market_en

2.4.1 Labour Integration

Figure 2-4: Labour Integration by country in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-4: Explanation of the indicator: 'Labour Integration'

To get a picture on the status of labour integration in the macro-regions three indicators are selected: a) Bilateral estimates of migrant stocks in 2013, b) Bilateral Remittance Estimates for 2015 using Migrant Stocks, Host Country Incomes, and Origin Country Incomes (millions of US$) (October 2016 Version) both indicators provided by the World Bank and the c) Share of mobile students from abroad by education level, sex and country of origin, provided by Eurostat have been used to create a composite indicator.

Data on Migration and remittances are based on the Migration and Remittances Factbook 2016 published by the World Bank. It provides a comprehensive picture of emigration, immigration, and remittance flows for 214 countries and territories, and 15 country groups, drawing on authoritative, publicly available data. The data are collected from various sources, including national censuses, labour force surveys, and population registers.

According to the "Recommendations on Statistics of International Migration" by the United Nations Statistics Division (1998), "long-term migrants" are persons who move to a country other than that of their usual residence for a period of at least one year, so that the country of destination effectively becomes their new country of usual residence. "Short-term migrants" are persons who move to a country other than that of their usual residence for a period of at least three months but less than one year, except for the cases where the movement to that country is for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment, or religious pilgrimage (UN Statistics Division 1998).

A new notion of remittances introduced in the sixth edition of the IMF Balance of Payments and International Investment Position Manual (BPM6)[23] is starting to be used by many countries (IMF 2010a). According to the new definition, personal remittances are the sum of two main components: "compensation of employees" and "personal transfers". Personal remittances also include a third item: "capital transfers between households," but data on this item are difficult to obtain and hence reported as missing for almost all countries.

Compensation of employees[24], unchanged from BPM5, represents "remuneration in return for the labour input to the production process contributed by an individual in an employer-employee relationship with the enterprise." The definition of "personal transfers," however, is broader than the old "worker's remittances" – it comprises "all current transfers in cash or in kind made or received by resident households to or from non-resident households." Therefore, "personal transfers" include current transfers from migrants not only to family members but also to any recipient in their home country. If migrants live in a host country for one year or longer, they are considered residents, regardless of their immigration status. If the migrants have lived in the host country for

[23] IMF (2013): Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual (*BPM6*). URL: https://www.imf.org/external/pubs/ft/bop/2007/pdf/appx5.pdf
[24] *See footnote above*

less than one year, their entire income in the host country should be classified as compensation of employees.[25]

Share of mobile students from abroad enrolled by education level, sex and field of education refers to students from abroad enrolled in tertiary education (level 5-8) in percentage of all students.

In the Adriatic Ionian macro-region the highest labour integration within the countries in the macro-region can be observed for Albania, Bosnia-Herzegovina, Montenegro, Croatia, Slovenia and Serbia. In these countries, the values of the integration index lie above the median for the macro-region and also well above the EU-median. In Greece, the value is below median for the macro-region but still above the European average. Italy exhibits the lowest labour integration with the countries in the macro-region with a value far below both the median of the macro-region and EU-median value[26].

A close look at the migration, remittances and students' mobility flows inside the macro-region, discloses some interesting integration patterns. Statistical evidence shows that geographical proximity, historical and cultural ties and language advantages play an important role for labour integration. Family and friends network that migrants already have in the destination country is another contributing factor (Taylor, 1986)[27]. Thus there is a high degree of integration between Albania on the one side and Greece and Italy on the other side; there is a high degree of labour integration between Bosnia-Herzegovina on the one hand and Croatia, Serbia and Slovenia on the other hand; integration is the highest between Montenegro on the one hand and Serbia and Croatia on the other hand. Serbia is highly integrated with Croatia, Italy and Slovenia while Slovenia has the most ties with Croatia and to a lower extent with Serbia.

Italy's labour integration with the other countries of the macro-region is very low whereas labour integration is high among the countries of former Yugoslavia. Data reveals that the flow of migrants takes place to a larger extent from East to West (Italy, Greece) or from the new EU Member States and the candidate and potential candidate countries to the old EU Member States. The flow of remittances follows an opposite direction. Statistical evidence shows that historical and family ties and language advantages prevail in the migration decision (as can be seen e.g. for the countries of former Yugoslavia).

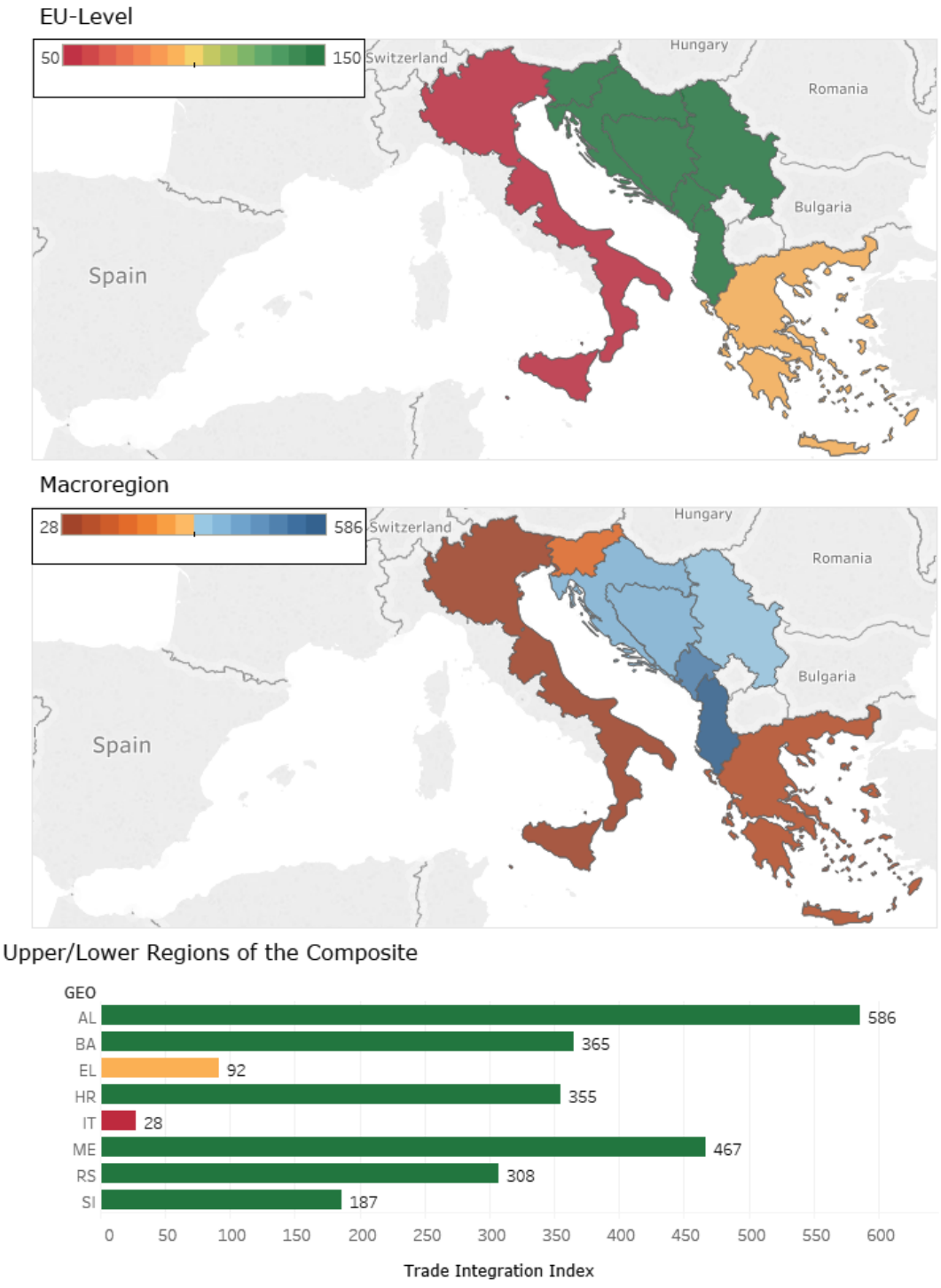
[25] IMF (2013): Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual (*BPM6*). URL: https://www.imf.org/external/pubs/ft/bop/2007/pdf/appx5.pdf

[26] There were no data on students' mobility available for Greece

[27] Taylor, J. Edward, 1986. Differential migration, networks, information and risk. In: Stark, Oded (Ed.), Migration, Human Capital and Development. JAI Press, Greenwich, CT

2.4.2 Trade Integration

Figure 2-5: Trade Integration by country in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-5: Explanation of the indicator: 'trade integration'

To measure Trade Integration, the analysis benchmarks a country's share of exports to the macro-region out of its total exports. The result of the benchmark thus indicates the degree to which a country is able to sell its goods in the macro-region, and what importance the single market concept has on a macro-regional scale.

Next to the high economic importance of the macro-region associated with a high indicator score, the 'functional' definition of a macro-region through a common geographic feature is manifested through economic evidence.

The data was obtained from the COMTRADE Database of the United Nations, which provides comprehensive trade data.[28]

The (potential) EU candidate countries score high on the benchmark, as these are geographically secluded by EU countries. Albania has the highest trade integration within the countries of the Adriatic Ionian macro-region. A share amounting to nearly 70% of Albania's exports have as destination the other countries in the macro-region (corresponding to a benchmark of 586; which is higher than the top performer in the EU28), of the majority is destined for Italy. Montenegro follows with a share of 59% (and score of 467), with Serbia as the main trading partner.
The lowest trade integration in the macro-region present Italy and Greece. Only about 3% of the Italian and 18% of the Greek exports go to the other members of the macro-region. Due to its large size, the Italian economy has a more diversified pool of trade partners compared to the small countries in the macro-region, which explains the comparably very low benchmarking score. The Greek economy did in turn not yet recover from its economic crisis. With a share of exports to the macro-region amounting to 26.5%, Slovenia is the least integrated in this macro-region.

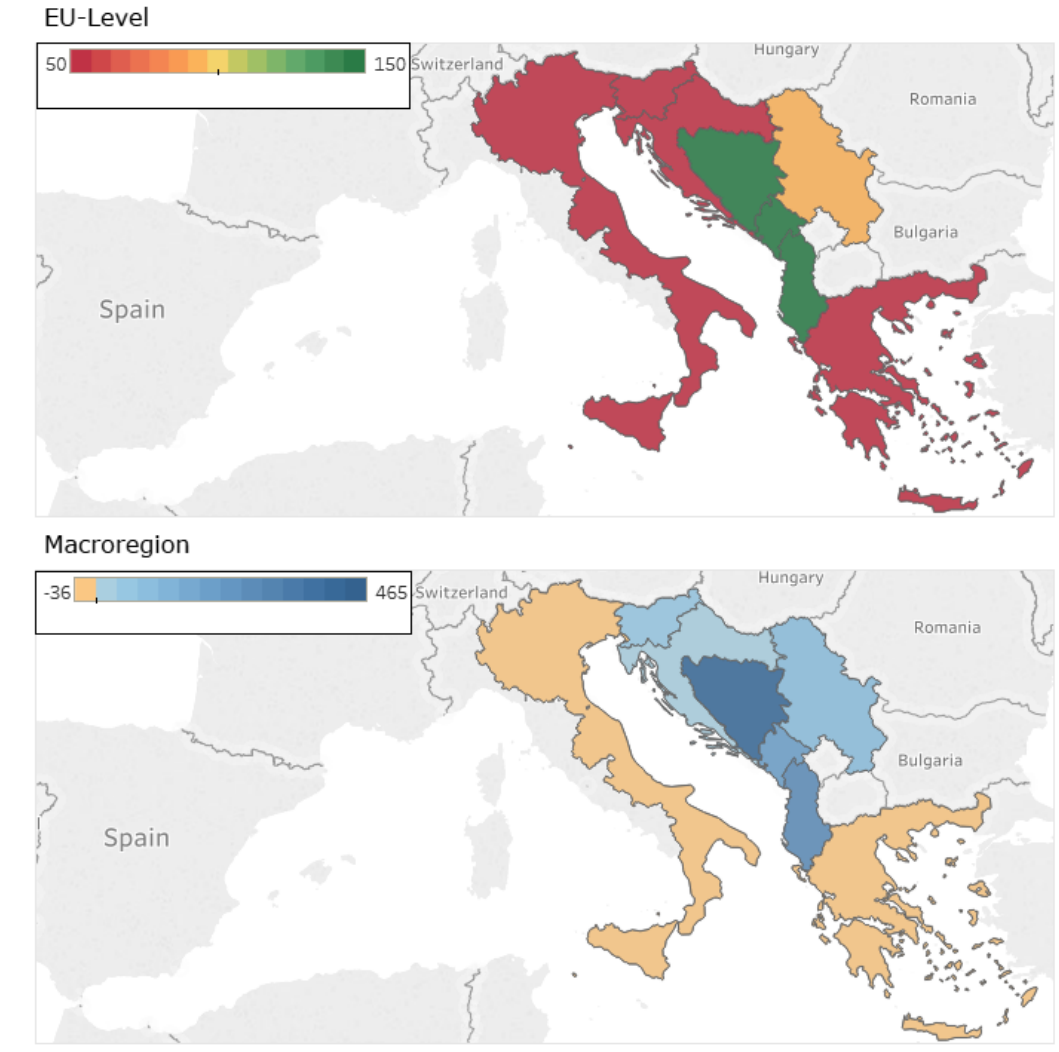
Another group of countries (Croatia, Serbia, and Bosnia-Herzegovina) exhibit shares of macro-region's exports in total exports amounting to about 44%. Italy is in all three cases the main trade partner. Within their own geographic region, all three countries are further important trade partners for each other, due to the historical relations between these countries. In the context of EU accession, the strong integration of the (potential) candidate countries among each other as well as with the EU broadly indicates that the 1st EU acquis chapter of 'Free movement of goods' may be fulfilled.[29] Trade integration increased since 2011 for Greece, Croatia, and Montenegro and remained at the same level for Slovenia.

[28] UN COMTRADE, URL: https://comtrade.un.org/

[29] See EU Neighbourhood Policy, Conditions for membership, EU Acquis, URL: https://ec.europa.eu/neighbourhood-enlargement/policy/conditions-membership/chapters-of-the-acquis_en

2.4.3 Capital Integration

Figure 2-6: Capital Integration by country in 2012, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-6: Explanation of the indicator: 'Capital Integration' [30] [31]

The Capital Integration among the countries of this macro-region is measured through foreign direct investment (FDI). The ability of a country to attract FDI indicates the economic attractiveness of a region (Grozea-Helmenstein et al, 2017). When using this concept, one has to differentiate between outward FDI (domestic companies investing in a foreign country) and inward FDI (foreign companies investing in the domestic country) as well as between flows (the annual stream of investments) and stocks (the aggregated volume of all past investments minus depreciation and repatriation) (Grozea-Helmenstein et al, 2017). For the underlying analysis inward FDI stocks of 2012 were therefore used, as these are in fact a moving, weighted average of flows that depreciate over time. The data have been provided by Eurostat.

Among various hypotheses aiming to explain the pattern of foreign direct investment, according to the classical theory of comparative advantage relative factor endowments and initial conditions are important factors in attracting FDI to some locations rather than others (Bhagwati, 1987)[1]. This is in line with the FDI pattern which can be observed in the macro-regions, with some countries being more attractive to foreign investors compared to others.

The Capital Integration is measured on a country level. When considering the integration of countries that are only partially in the macro-region, the inward FDI stock (and thus benchmarking) of only the applicable regions may be higher if one assumes that inward FDIs are higher in closer geographical proximity (Folfas, 2011).

The Adriatic Ionian macro-region shows a low level of capital integration with a share per partner amounting to 2.51. This level is significantly lower than the EU-average (2.91). Bosnia and Herzegovina, Albania and Montenegro account for the largest share of FDI stocks from the other partners in the macro-region (with 42, 31% and 26% of total FDI stock in the country) and are together with Serbia the countries beyond the EU-median. They are followed by Serbia and Slovenia with shares of about 20% and 11% respectively. Slovenia is with its 11% already among the lowest quartile. Italy (0.2%), Greece (3%) and Croatia (7%) have the lowest shares of FDI from the other partners in the macro-region. Since only some regions of Italy are in the macro-region, the actual Capital Integration may be higher. This observation points to the conclusion that intra-macro-regional capital integration is in fact significantly higher in the non-EU countries. The Western Balkans have overall attracted much FDI over the past years due to the EU accession prospect, a strong tourism potential, and its

[30] Folfas, P. (2011), *FDI between EU Member States: Gravity models and Taxes*, http://www.etsg.org/ETSG2011/Papers/Folfas.pdf

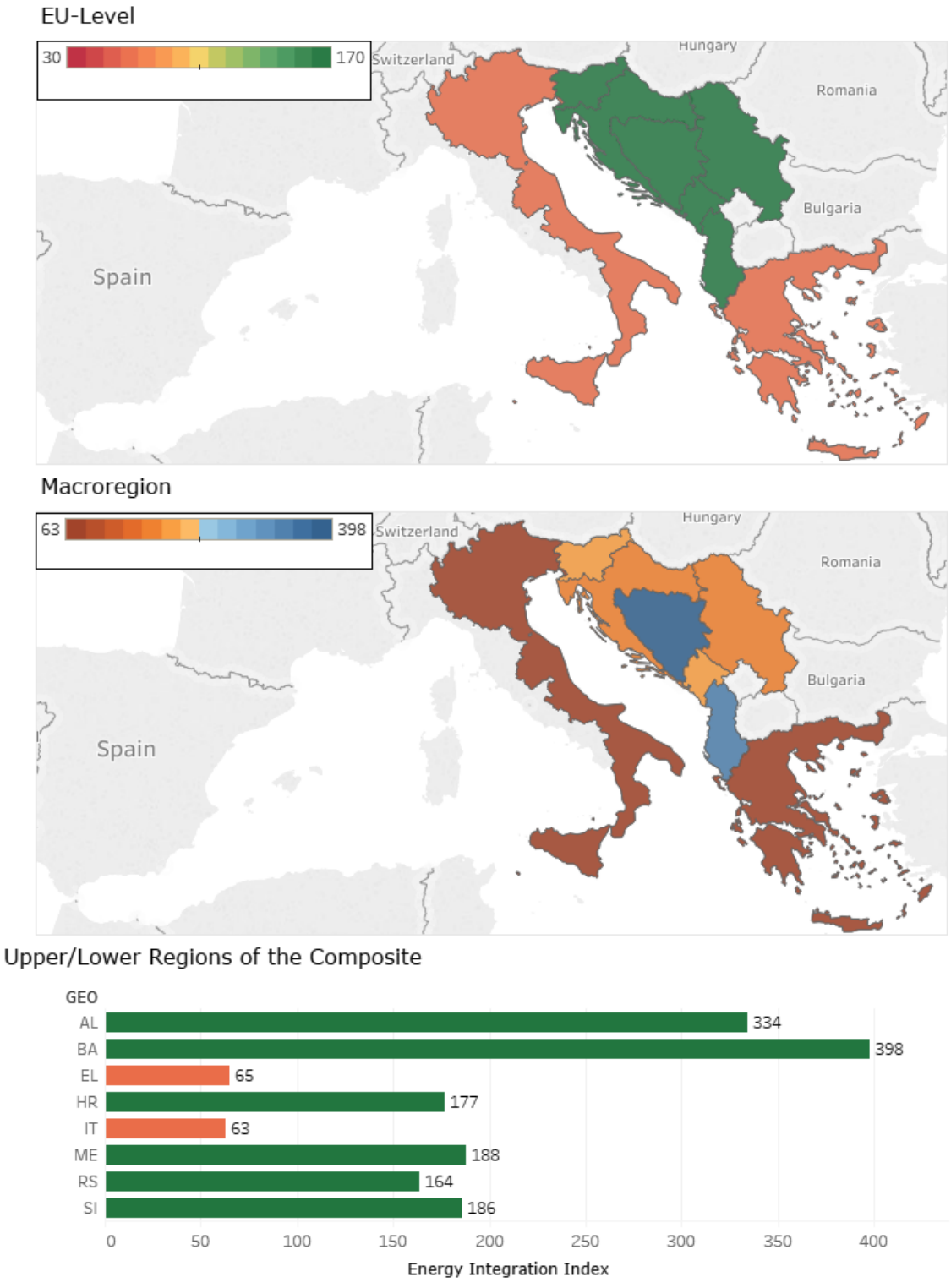
[31] Grozea-Helmenstein, D., G. Grohall, C. Helmenstein (2017): Convergence and Structural Change in Romanian Regions, in Larisa Schippel, Julia Richter, Daniel Barbu (2017): Rumäniens "Rückkehr" nach Europa. Versuch einer Bilanz. Wien: new academic press.

development as a regional energy hub (Sanfey *et al.*, 2016)[32]. While most of these stocks originated in 2014 from Austria, Italy and Greece accounted for the third and fourth most (ibid).

[32] Sanfey, P. *et al.* (2016) "How the Western Balkans can catch up". *EBRD Working Paper* No. 158, 1-44

2.4.4 Energy Integration

Figure 2-7: Energy Integration by country in 2015. The top figure shows an EU-wide comparison, while the middle map illustrates the indicator on the macro-regional scale. The bottom figure shows the benchmarked indicator values for each country.



Text Box 2-7: Explanation of the indicator: 'Energy Integration'

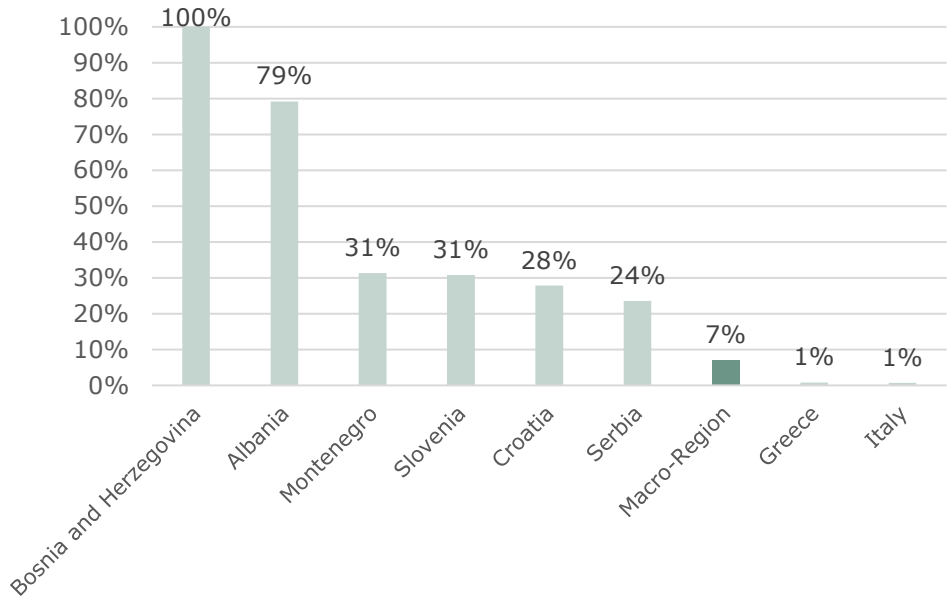
The energy integration indicator is defined as the energy export share that stays within the macro-region. Country-level data from Eurostat for the latest available year (2015) is used (Data table Exports - all products - annual data [nrg_131a]). Energy exports considered include all types of energy products: solid fuels, oil, gas, electricity and renewables.
The indicator for a specific country is constructed as follows:
1. Ratio between the macro-regional exports of the country and total energy exports is calculated.
Total exports = Energy export in tonnes of oil equivalent (toe) from the country to all trading partners
Macro-regional exports = energy products export in toe from the country to trading partners within the macro-region.
2. This ratio is divided by the number of partners in the macro-region, to obtain an average share of exports per partner in the macro-region.
3. Benchmark values are set-up in the same way as the integration indicators for macro-regional level, for EU-level energy trade integration, defined as the (per partner) share of exports to other EU countries as compared to all exports to the world.
This allows the degree of integration within each macro-region to be benchmarked against the degree of integration in the EU as a whole.

NOTE: Since the indicator is defined at the country level, it is not known what exact proportion of trade occurs within the macro-region, hence this indicator is a proxy.

Another area reflecting the degree of macro-regional integration is energy trade. The indicator selected to represent energy trade is the share of energy exports that goes to the other countries in the region (as proportion of total energy exports). This reflects the preferred partners for energy trade. The higher proportion exported to nearby countries or regions can indicate closer ties between the areas. This indicator does not directly reflect energy independence of the region, but is rather intended to show the directions chosen for outgoing trade.

The figure below shows the regional export share in total exports for the countries in the Adriatic-Ionian Sea macro-region.

Figure 2-8: Share of energy products exported to the macro-region by each country, 2015

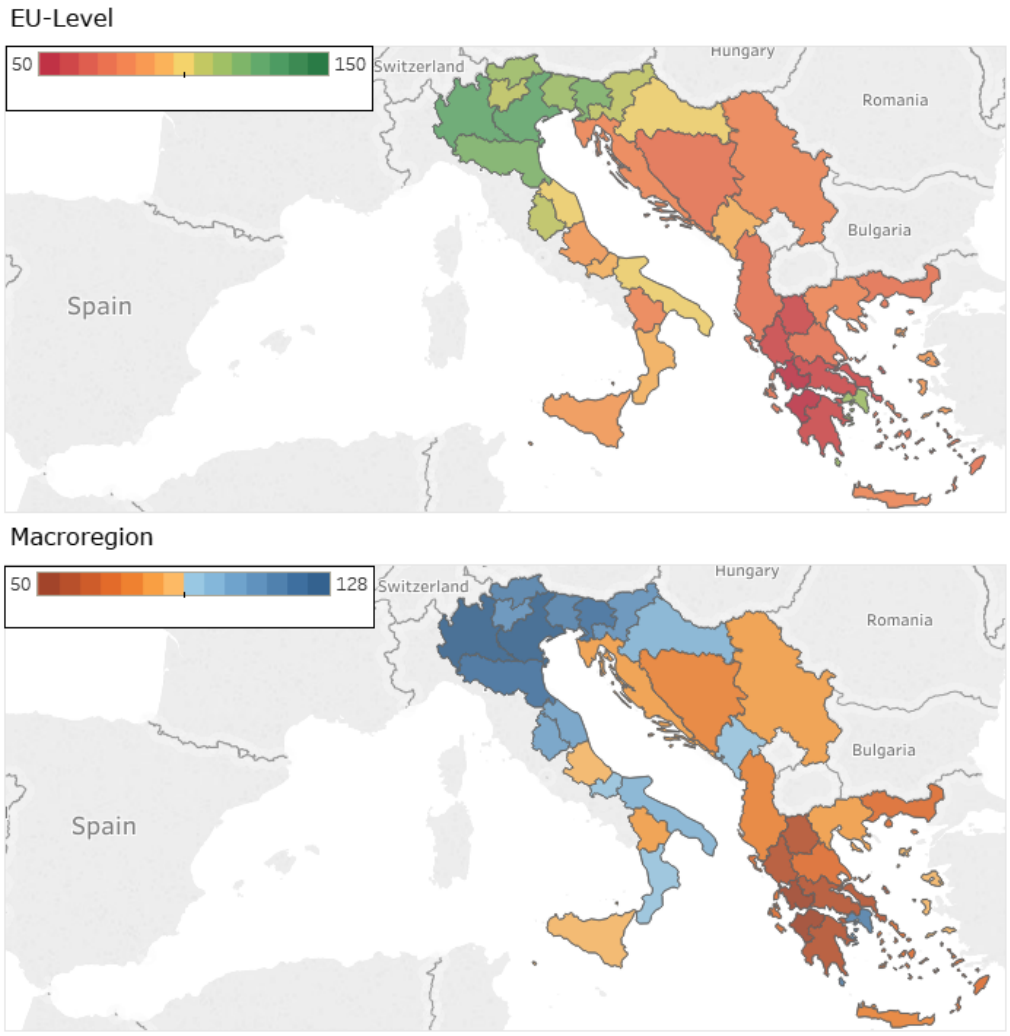


Overall, the region exports 54.6 Million Tonnes of oil equivalent (toe) of energy products. 3.8 Million toe of this trade goes to other countries in the macro-region. This corresponds to 7% of the region's energy exports. However, regional trade varies by country: some countries export a large share of their energy production to their neighbours, notably Albania and Bosnia and Herzegovina, while others, like Greece and Italy trade little within the macro-region. The latter two are also countries with the highest exports in the region, which is why only 7% of the entire region's exports remain in the region.

The benchmarked indicator shows that all countries in the region, except Italy and Greece show very high levels of energy integration, much higher than the EU-median, and even top-performer, as seen in Figure 2-7.

2.4.5 Accessibility Potential

Figure 2-9: Accessibility Potential by NUTS-2 in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Upper/Lower Regions of the Composite

CO..	NUTS LABEL	Multimodal Accessibility (travel time)	Road Accessibility (travel time)	Rail Accessibility (travel time)	Air Accessibility (travel time)
AL	Albania	74	65	61	81
BA	Bosnia and Herzegovina	73	67	64	81
EL	Attiki	115	75	65	123
	Dytiki Ellada	50	63	54	50
HR	Kontinentalna Hrvatska	99	106	95	101
	Jadranska Hrvatska	80	90	78	85
IT	Lombardia	128	129	126	125
	Basilicata	82	89	90	81
ME	Montenegro	95	62	58	104
RS	Serbia	81	87	72	86
SI	Zahodna Slovenija	117	115	110	119
	Vzhodna Slovenija	106	113	105	107

Text Box 2-8: Explanation of the indicator: 'Accessibility Potential'

The concept of accessibility refers to the ease of getting around from place to place (Saleem and Hull, 2012)[33]. Hull (2011) identifies two fields of accessibility: the first refers to the ability to travel and is based on the classical location theory. This shows the direct correlation between changes in the transport system (e.g. transport costs) and journey length (Banister, 2002; Ney, 2001; Geurs and van Wee, 2006). The second focuses mainly on the "ease of reaching" a number of daily activities at different destinations. The first conceptualisation of accessibility has been more intensively studied by the academic literature. This conceptualisation of accessibility forms also the basis of the indicators which are investigated below.

These assess the accessibility potential measured as an index[34] related to the ESPON average for various transport modes such as road, rail, air, and multimodal transport. Multimodal transport refers to the transportation of goods under a single contract, but carried out with at least two different means of transport (e.g. rail, sea and road), where the carrier is liable (in a legal sense) for the entire carriage. In order to achieve a feasible number of regions, the NUTS-3 regions were aggregated to a NUTS-2 level, by averaging the values of the aggregated regions.

The transport infrastructure in the macro-region represents a big challenge for many countries. While some countries need to upgrade and maintain their existing infrastructure, other countries need to develop or expand their transport network.[35] The new Member States and the (potential) candidate countries are confronted with low availability and quality of road transport infrastructure. However, during the last years, progress has been made to extend the primary high capacity road network, expressways and motorways, mostly with co-financing from the EU Cohesion Funds.[36] Although the railway infrastructure in these countries is quite wide it needs extensive renovation and upgrading, which are constraint by current budgetary limitations.

The relatively best accessibility values for all transport modes in the macro-region are found in many (particularly northern) regions of Italy, followed by those in Slovenia and Croatia. A medium accessibility by road and by rail transport has been found for Serbia. Albania, Montenegro, Greece, and Bosnia-Herzegovina exhibit the lowest accessibility of the macro-region for all transport modes, and are best accessible multimodal or by air.

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[33] Saleem Karou, Angela Hull (2012): Accessibility Measures and Instruments, in Angela Hull, Cecília Silva and Luca Bertolini (Eds.) Accessibility Instruments for Planning Practice. COST Office, pp. 1-19. URL: http://www.accessibilityplanning.eu/wp-content/uploads/2013/01/Accessibility-Measures-and-Instruments-R.pdf

[34] For each NUTS-3 region the population in all destination regions is weighted by the travel time to go there. The weighted population is summed up to the indicator value for the accessibility potential of the origin region.

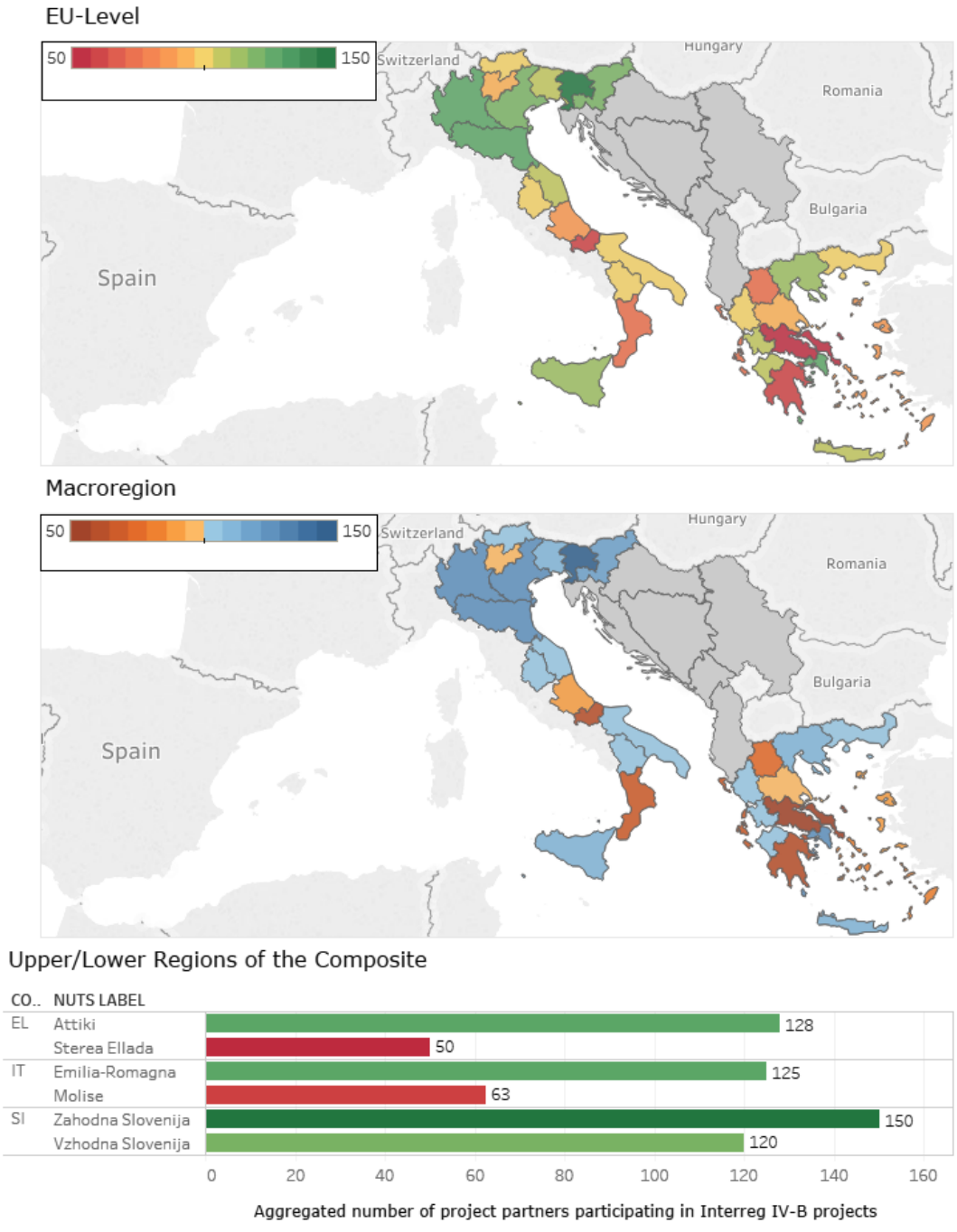
[35] http://www.europarl.europa.eu/cmsdata/116220/tent-issues-papers.pdf

[36] http://www.europarl.europa.eu/cmsdata/116220/tent-issues-papers.pdf

Inside the countries the diversity of accessibility is high for all transport modes. The lowest disparities are found among road and rail accessibility. Due to the implementation of successful investments co-financed through the EU Cohesion Funds, accessibility by road and rail improved significantly in 2014 compared to 2011, in most regions in Slovenia and Croatia. The long lasting economic and debt crisis in Greece and Italy coupled with lower investments determined a deterioration of their accessibility by road and rail between 2011 and 2014. At the same time the accessibility by air and multimodal transport improved in many NUTS-3 regions in almost all countries of the macro-region.

2.4.6 Transnational Cooperation

Figure 2-10: Territorial Cooperation by NUTS-2 in 2011, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-9: Explanation of the indicator: 'Transnational Cooperation'

Transnational cooperation[37] is a major aspect of territorial cohesion, which is in turn one of the three cornerstones of the EU's Cohesion Policy as well as the EU's enlargement policy. A major tool for the EU to facilitate and promote cooperation is the INTERREG programme as part of the European Structural and Investment Funds, which is currently in its fifth generation (INTERREG V).
Territorial cooperation represents a tool to support economic development and competitiveness, territorial, economic, and social integration, and to foster good neighbourhood relations.[38] It is also a tool which contributes to the reduction of negative border effects between weaker and stronger regions, which promotes city networking, and supports the adoption of solutions to address environmental challenges.[39] Territorial cooperation takes place in the framework of projects, programmes, and regions. It has been steadily expanding over the last years including also many unsupported/spontaneous movements. These take the form of city networks, and non-EU-supported, macro-regional and country-specific types of co-operation.[40] However, territorial co-operation has still many weaknesses that need to be addressed.

The indicator on cooperation builds on the number of organisations participating in INTERREG IVB projects as a proxy for macro-regional cooperation, which covers the time span of 2007-2013. INTERREG IVB projects occur under programmes which have a transnational geographic scope, such as the Alpine, Danube, or Central Europe. The data covers however only the time span between 2007 and January 2011.

The Adriatic Ionian macro-region comprises some of Europe's most engaged regions in territorial cooperation. Such as the EU's top-performer Zahodna Slovenija with 118 participating organisations (score of 150), and strongly performing Italian regions in the north (Lombardia and Veneto, each with 62 and 59 organisations).

The macro-region's NUTS-2 regions of Italy had 318 organisations engaged with projects under a transnational programme. In the case of Slovenia, 171 organisations participated, which is impressive given Slovenia's size. In the case of Slovenia and northern Italy it should however be emphasised, that these regions were in the geography of 4 out of 10 INTERREG IV-B programmes in all of continental Europe. Greece, which had 116 participating organisations and one of the EU's bottom performing region (Sterea Ellada), was in turn part of only 2 programmes (Mediterranean and South-East Europe). Nevertheless, Greece has also high-scoring regions, such as Attiki with 71 organisations.

[37] Collaboration between administrative bodies and/or political actors in Europe and beyond, representing their respective territories, which can also engage other stakeholders as long as their involvement is within the same institutionalized framework (2013, European Territorial Cooperation as a Factor of Growth, Jobs and Quality of Life, ESPON).

[38] https://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/TERCO/TERCO_Interim-Report-and-Annex_FINAL.pdf

[39] http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/TERCO/Final_Report/TERCO_FR_ExecutiveSummary_Dec2012.pdf

[40] *See footnote above*

2.5 Competitiveness

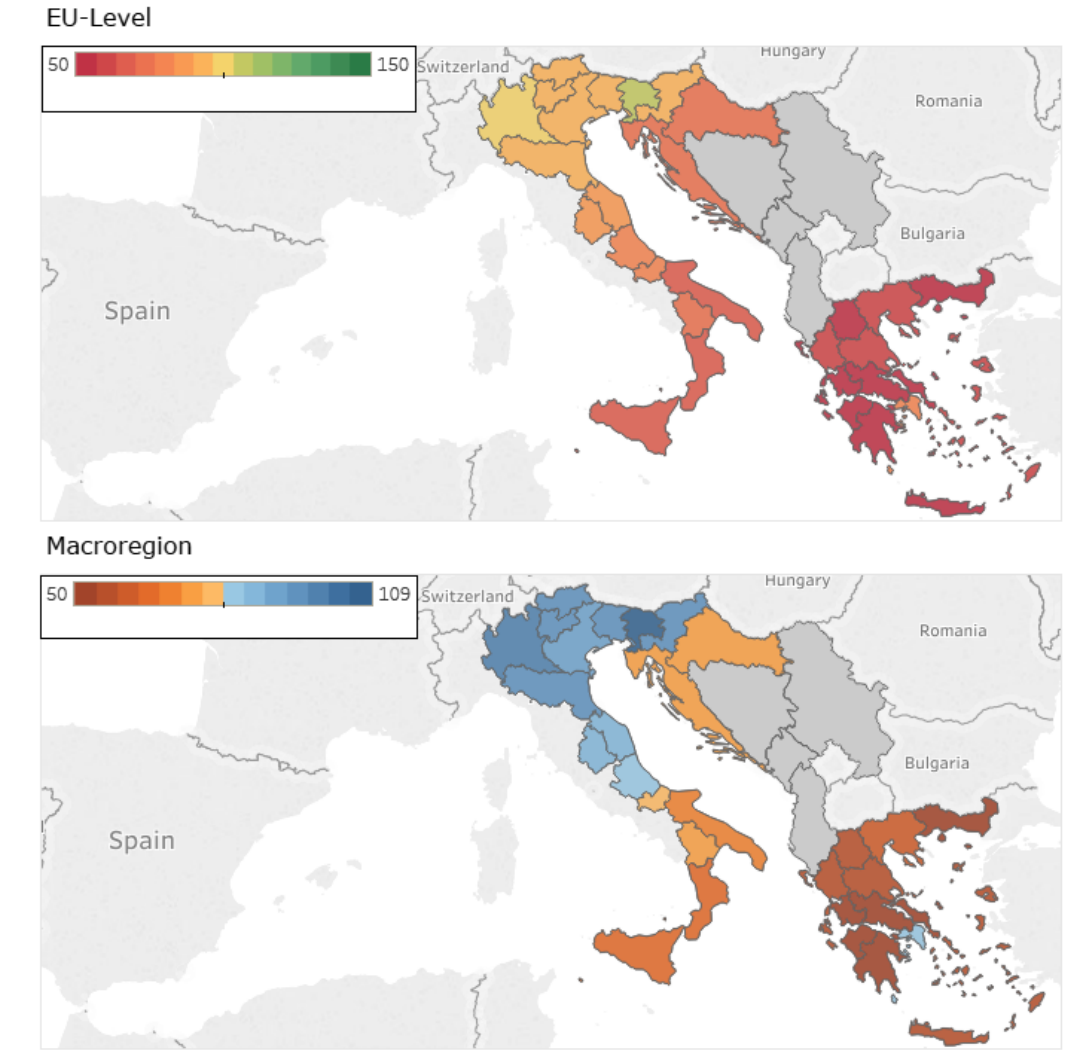
The availability of skilled workforce, capital and technological endowment as well as investment in research and infrastructure influence economic performance and competitiveness at the regional level. But also other factors, such as the proximity to universities and quality of health services, the time it takes to start-up a business, the perception of the rule of law, environmental and safety considerations are, among others, important competitiveness factors. In many countries, there are significant region-to-region differences in some or all of these factors (Grozea-Helmenstein and Berrer, 2013).

The competitiveness indicators which have been chosen provide a more detailed insight into the (broadly defined) competitiveness of countries and macro-regions on various aspects. They focus on common factors throughout all macro-regions and factors that are specific for each macro-region. The purpose in this category is to identify the possible needs for interventions that add to smart, inclusive, and/or sustainable growth, and therewith to the cohesion of a macro-region.

2.5.1 Overall Competitiveness

EU Regional Competitiveness Index

Figure 2-11: Regional Competitiveness by NUTS-2 in 2016, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-10: Explanation of the indicator: 'Regional Competitiveness'

Regional Competitiveness Index (RCI) measures various dimensions of competitiveness at the regional level.[41] It highlights the EU NUTS-2 regions' strengths and weaknesses, while giving useful insights into the fields that need improvement in order to rise regional competitiveness. In the framework of the Regional Competitiveness Index the overall competitiveness of a country is defined by all its regions and not only by its capital region. Countries such as Romania, Slovakia and France are characterised by strong disparities in the socio-economic development and competitiveness between the capital region and the rest of the regions in the country. Federal states, like Germany and Austria show a more homogeneous picture regarding competitiveness.
The Regional Competitiveness Index[42] is based on eleven pillars comprising inputs and outputs of territorial competitiveness. These basic pillars are grouped into three sets focusing on basic-, efficiency- and innovative- factors of competitiveness. They include:[43] (1) Quality of Institutions, (2) Macro-economic Stability, (3) Infrastructure, (4) Health and the (5) Quality of Primary and Secondary Education. These pillars are especially relevant for less developed regions.
The area efficiency includes the following pillars: (6) Higher Education and Lifelong Learning (7) Labour Market Efficiency and (8) Market Size. Innovation pillars are especially relevant for the most advanced regional economies. They comprise (9) Technological Readiness, (10) Business Sophistication and (11) Innovation. RCI aims at showing short and long-term capabilities of the regions.

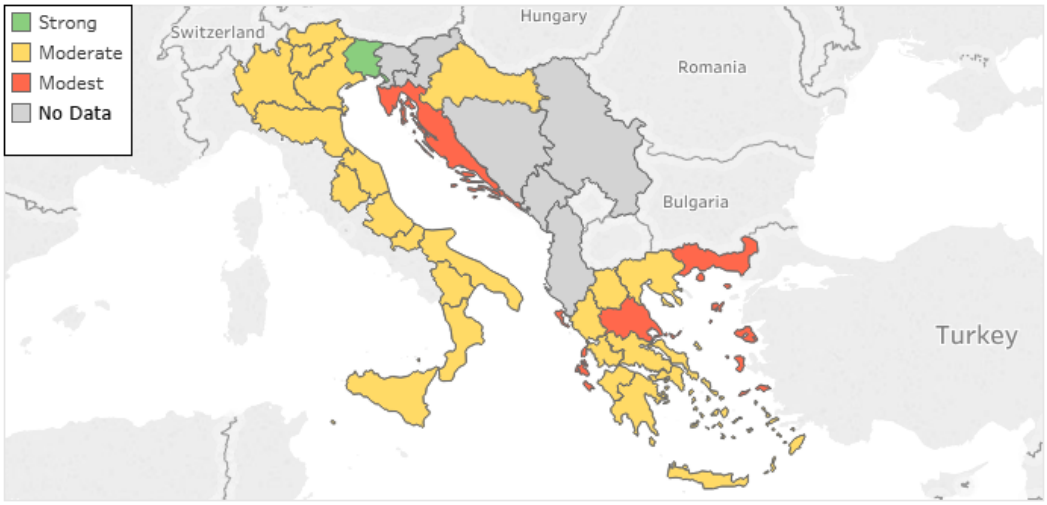
In 2013, the Slovenian region Zahodna Slovenija was the best performing region in the Adriatic and Ionian macro-region, followed by the Italian region Lombardia. The best performing Greek region was Attiki ranked on place ten. Croatian regions Kontinentalna Hrvatska and Jadranska Hrvatska were ranked 14th and 15th inside the macro-region. Among the 31 NUTS-2 regions that were ranked in this macro-region, the ten lowest performers were all located in Greece, the lowest was Sterea Ellada. The lowest performing NUTS-2 regions register low values for all three sub-indices considered: basic, efficiency and innovation.

In 2016, Zahodna Slovenija in Slovenia was ranked best again. Lombardia in Italy followed on the second place. Attiki lost one place, being ranked eleventh in 2016. Notably, these are the only two regions performing at least as strong the EU-median. The Croatian regions Kontinentalna Hrvatska and Jadranska Hrvatska maintained their positions. The ten lowest performers in 2016 were again located in Greece, however the last place was filled by Anatoliki Makedonia and Thraki whose ranking deteriorated in 2016 compared to 2013. There are no data available for Albania, Bosnia-Herzegovina, Montenegro and Serbia.

[41] URL: http://ec.europa.eu/regional_policy/en/information/publications/studies/2013/eu-regional-competitiveness-index-rci-2013
[42] URL: http://ec.europa.eu/regional_policy/en/information/publications/studies/2013/eu-regional-competitiveness-index-rci-2013
[43] URL: http://ec.europa.eu/regional_policy/en/information/publications/studies/2013/eu-regional-competitiveness-index-rci-2013

Regional Innovation Scoreboard

Figure 2-12: Regional Innovation Scoreboard by NUTS-2 in 2016. The bottom figure shows the scoring of all Regions.



Upper/Lower Regions of the Composite

COUNTRY..	NUTS LABEL	Modest	Moderate	Strong
EL	Anatoliki Makedonia, ..	●		
	Attiki		●	
	Dytiki Ellada		●	
	Dytiki Makedonia		●	
	Ionia Nisia	●		
	Ipeiros		●	
	Kentriki Makedonia		●	
	Kriti		●	
	Notio Aigaio		●	
	Peloponnisos		●	
	Sterea Ellada		●	
	Thessalia	●		
	Voreio Aigaio	●		
HR	Jadranska Hrvatska	●		
	Kontinentalna Hrvatska		●	
IT	Provincia Autonoma di..		●	
	Abruzzo		●	
	Basilicata		●	
	Calabria		●	
	Emilia-Romagna		●	
	Friuli-Venezia Giulia			●
	Lombardia		●	
	Marche		●	
	Molise		●	
	Provincia Autonoma di..		●	
	Puglia		●	
	Sicilia		●	
	Umbria		●	
	Veneto		●	

Text Box 2-11: Explanation of the indicator: 'Regional Innovation Scoreboard'

The Regional Innovation Scoreboard is a regional extension of the European Innovation Scoreboard, assessing the innovation performance of European regions on a limited number of indicators.[44]
The following analysis is based on the data of the Regional Innovation Scoreboard published by the European Commission. There have been used data on NUTS-2 regions of the European Union for the period from 2009 to 2016. Although data were not available for all NUTS-2 regions and countries in a macro-region, it gives a picture about the level of innovation in a macro-region.
The regions are ranked in the following four categories: Innovation leaders, strong innovators, moderate innovators and modest innovators.
Due to the underlying categorisation, this indicators has not been benchmarked, but has been left in its original format.

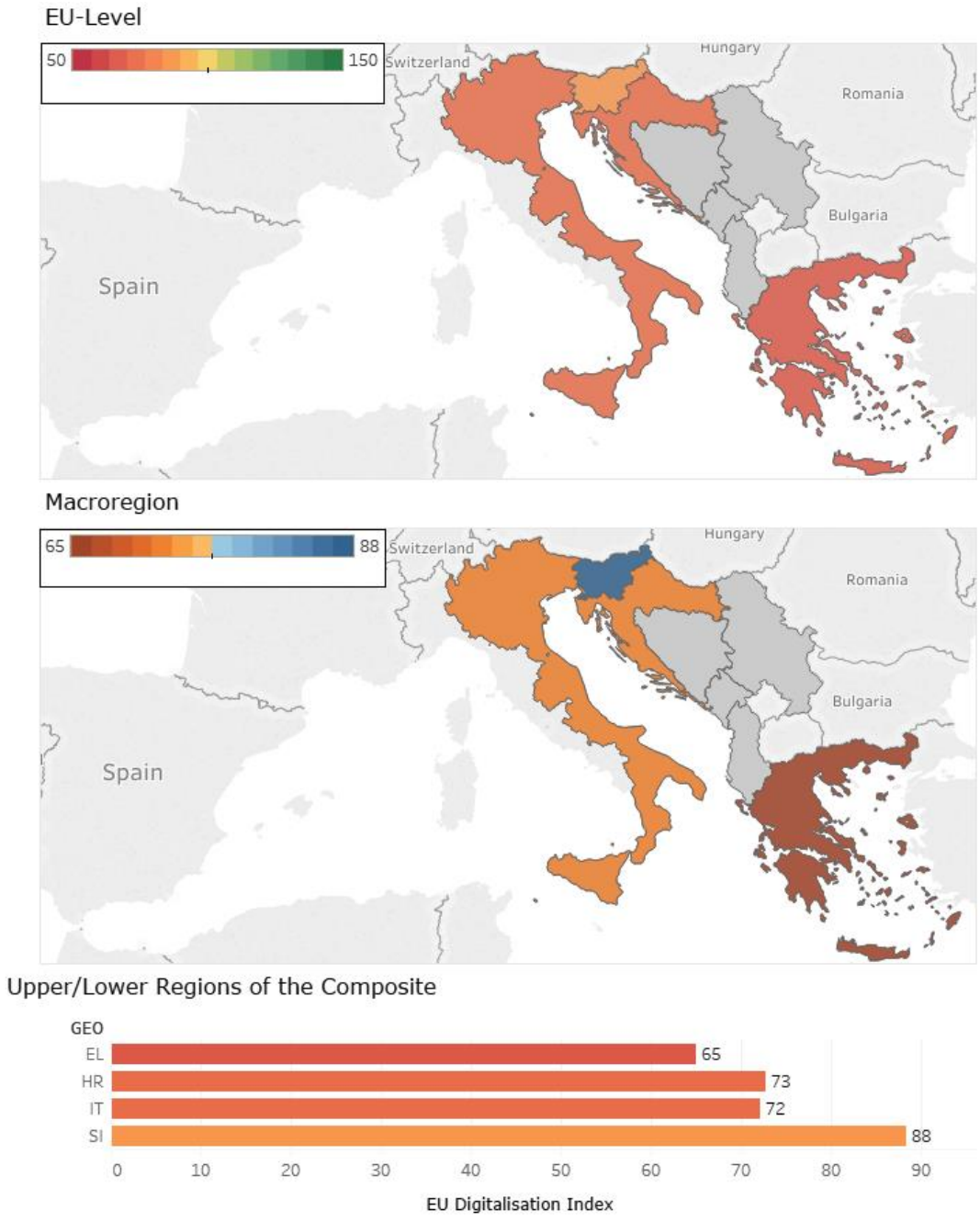
In 2012, the best performing region of the Adriatic and Ionian macro-region was Zahodna Slovenija in Slovenia, as this region was the only one that received a 'Strong' innovator rating. Croatia's, Greece's and Italy's NUTS-2 regions as well as Vzhodna Slovenija in Slovenia were all rated as 'Moderate' innovators in 2012.

The only region that was able to improve in 2016 was Friuli-Venezia Giulia in Italy (from 'Moderate' to 'Strong'), while four regions in Greece and one region in Croatia lost their moderate innovators rating becoming 'Modest' innovators. Many NUTS-2 regions in Italy show relative weaknesses in 'Innovative SMEs' collaborating with others', 'Public R&D expenditures', and 'Tertiary education attainment'. Vzhodna Slovenija in Slovenia performs low on 'Public R&D expenditures', 'Sales of new product innovations', and 'EPO patent applications'. The relative weaknesses of many Greek NUTS-2 regions lie in 'Business R&D expenditures', 'EPO patent applications', and 'Exports of medium and high tech products'. This ranking excludes Serbia, Bosnia-Herzegovina, Albania and Montenegro, as there are no data available for these countries.

[44] http://ec.europa.eu/growth/industry/innovation/facts-figures/regional_de

EU Digitalisation Index (DESI)

Figure 2-13: EU Digitalisation by country in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-12: Explanation of the indicator: 'EU Digitalisation Index'

The Commission's Digital Single Market Strategy for Europe[45] emphasises Europe's potential to take a leading role in the global digital economy; with a potential of EUR 415 billion GDP growth for the EU.[46] However, fragmentations in the single market and barriers restrain the development in this field. The digital economy could create opportunities, expand markets, assure better services at better prices, and generate employment. Therefore, progress on improving access for consumers and businesses to online goods and services[47]; creating the proper environment for developing digital networks and services; and raising the growth potential of the European digital economy are crucial in order to take advantage of the opportunities created by the digital economy.

The Digital Economy and Society Index (DESI) assesses the Member States' status and progress towards the global digital economy. DESI is a composite index that combines "relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness."[48]

The overall DESI score is the result of five separate dimensions:[49]

1. Connectivity: The Connectivity dimension measures the quality and development of broadband internet services.
2. Human Capital: This dimension measures the computer skills of European citizens.
3. Use of Internet: The Use of Internet dimension reports which actions European citizens execute online.
4. Integration of Digital Technology by businesses: This dimension shows the digitisation of businesses.
5. Digital Public Services: This dimension informs about eGovernment and the digitisation of public services.

An analysis of the DESI index for the macro-region's countries gives useful information regarding their achievements regarding digital competitiveness. The data used for the analysis has been published by the European Commission. However, data were not available for every country in the macro-region. For this analysis, the combined score of the five individual dimensions has been used.

In 2014, the best performing country of the Adriatic and Ionian macro-region was Slovenia with a score of 80, followed by Croatia followed with 73 points, losing on the 'Connectivity' and 'Digital Public Services' dimensions. The poorest performers in 2014, were Italy with a score of 72 and Greece with 65.

In 2017, all countries of the macro-region show significant progress compared to 2014. Slovenia is again leading with a score of 92, followed by Croatia (74). Italy (72) and Greece (65) are placed again of the end of this ranking. They are lagging far behind other European countries especially regarding the 'Use of Internet', 'Integration of Digital Technology' (digitisation of businesses), and 'Digital Public Services'.

[45] URL: http://www.ipex.eu/IPEXL-WEB/dossier/document/COM20150192.do.

[46] URL: http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuId=FTU_5.9.4.html

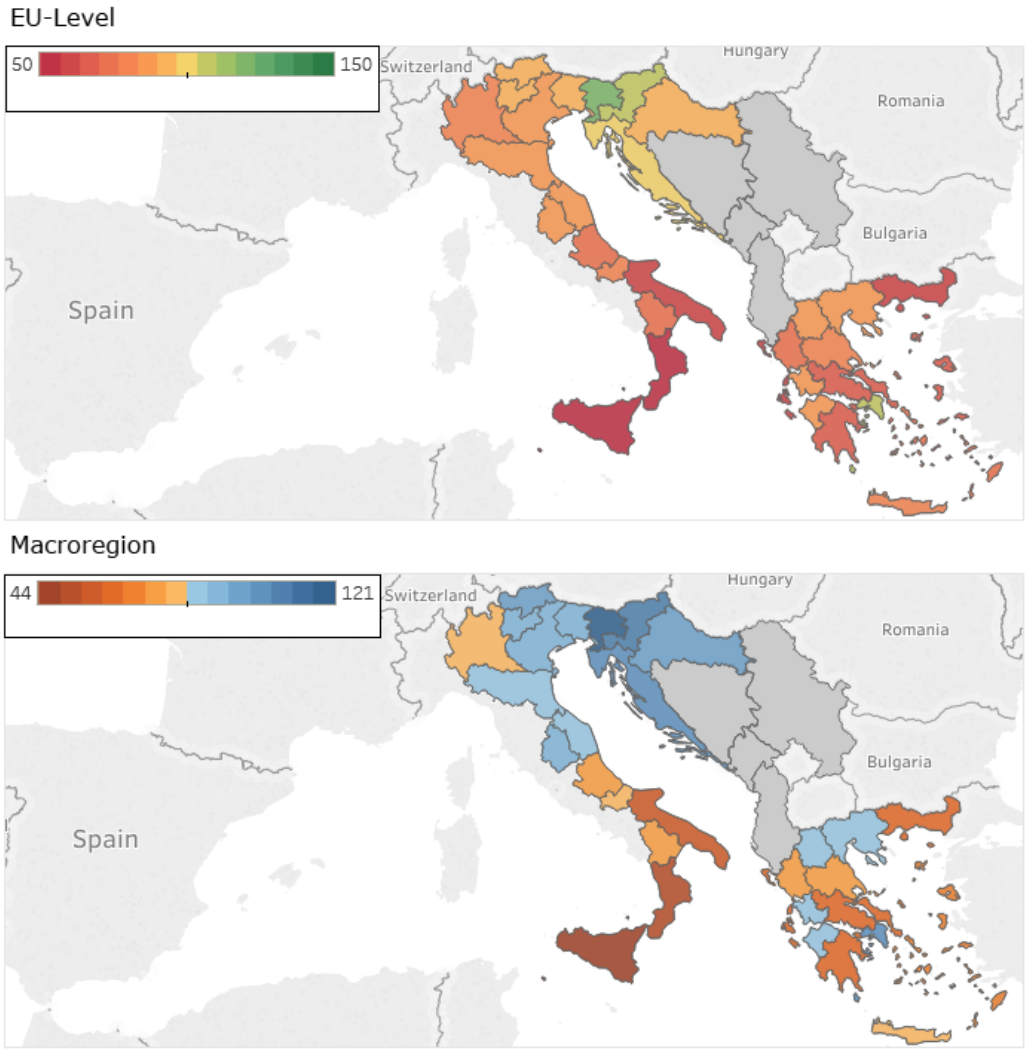
[47] URL: https://ec.europa.eu/digital-single-market/en/access-digital-single-market

[48] URL: https://ec.europa.eu/digital-single-market/en/desi

[49] URL: https://ec.europa.eu/digital-single-market/en/desi

Education

Figure 2-14: Education by NUTS-2 in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-13: Explanation of the indicator: 'Education'

A well-educated labour force on medium and high attainment levels represents a critical input for the economic performance of a region. While school enrolment co-determines regional workforce skills, productivity, and economic performance, the employment and career prospects in a region also influence the rate of enrolment in education (Huggins and Izushi, 2009). Economic growth raises employers' incentives to engage in worker training.
The Education Index seeks to reflect on this issue with five indicators:

The Participation Rate in Education and Training indicates "*the share of the population that participates in formal and non-formal education*". The former is defined "*as institutionalised, intentional and planned through public organizations and recognised private bodies and – in their totality – constitute the formal education system of a country. Non-formal are any organised and sustained learning activities outside the formal education system, and essentially those which complement formal education or are an alternative to those*."

The indicator Early leavers from education and training is defined by Eurostat as the "*percentage of the population aged 18 to 24 having attained at most lower secondary education and not being involved in further education or training*". A high share of early leavers impacts the economy: As the demand for low qualified workforce continues to decrease as a result of structural change, a high share of persons who leave the education and training system too early influence negatively the socio-economic development. As part of the EU 2020 targets, the European Commission seeks to achieve a value below 10%.

The indicator Young people neither in employment nor in education and training (NEET) reflects "*the percentage of the population of a given age group and sex who is not employed and not involved in further education or training (formal or non-formal)*". A high NEET rate points to a difficulty of transition between school and work (OECD, 2015). This may be caused by the mismatch between acquired skills in the education and the skills needed on the labour market and also by the scarcity of jobs in some economies which have been strongly impacted by the economic crisis. Flexible school-work arrangements can positively influence the transition to employment. Also higher education achievements may help the transition from school to work.

The last two indicators are respectively the Secondary-, and Tertiary Education Attainment of the total population aged 25-64. Eurostat defines these as "*the highest ISCED (International Standard Classification of Education) educational attainment successfully completed by an individual*". The shares of the adult population with secondary and tertiary education in total population are used to picture a region's skills level. Generally highly educated individuals tend to be attracted by urban centres as these offer better employment opportunities with income opportunities above average.

The performance in the NUTS-2 regions of the macro-region on the composite indicator Education is generally low, with the new Member States performing the highest, i.e. Zahodna Slovenija and Vzhodna Slovenija in Slovenia and values around the EU-median (100) in the Croatian regions. All NUTS-2 regions in

Greece and Italy show values below the EU-median, which is mostly explained by a high NEET rate and high share of early leavers form education and training.

Particularly in Sicily, a composite scoring of 44 is to be observed (which below half of the EU-median). This low score is explained through a very high NEET rate, low Tertiary Education attainment and a high rate of early leavers from education and training. Calabria and Puglia register values just above half of the EU average. These regions show also a deterioration of their performance in 2015 compared to 2011. The Greek regions Anatoliki Makedonia, Thraki, Ionia Nisia, Sterea Ellada, Peloponnisos, and Voreio Aigaio register also values far below the EU-median (100).

The NUTS-2 regions in Croatia show values that are on the EU-median (100) like Jadranska Hrvatska or just below it, Kontinentalna Hrvatska. Most NUTS-2 regions in Italy and Greece show an improvement of the composite indicator Education between 2011 and 2015, Slovenia on the opposite a deterioration. The banking crisis in Slovenia which has negatively affected the availability of budgetary funds may be one of the reasons behind this deterioration.

For the candidate and potential candidate countries data are available at Eurostat only for the indicator Early school-leavers - total (%). Although the indicator Educational attainment: percentage of 30-34 years old having completed tertiary or equivalent education is not identical with the indicator Tertiary Education Attainment of the total population aged 25-64 used for the benchmark, this may give useful information regarding educational attainment in these countries (see Table below).

Table 2-10: Education indicators in the (potential) candidate countries

	Early school-leavers - total (%)		Percentage of 30-34 years old having completed tertiary or equivalent education	
	2011	2015	2011	2014
Montenegro	6.7	5.7	23.5	28.3
Albania	35.2	21.3	na	na
Serbia	8.5	7.5	20.6	27.2
Bosnia and Herzegovina	29.9	26.3	13.4	18.9

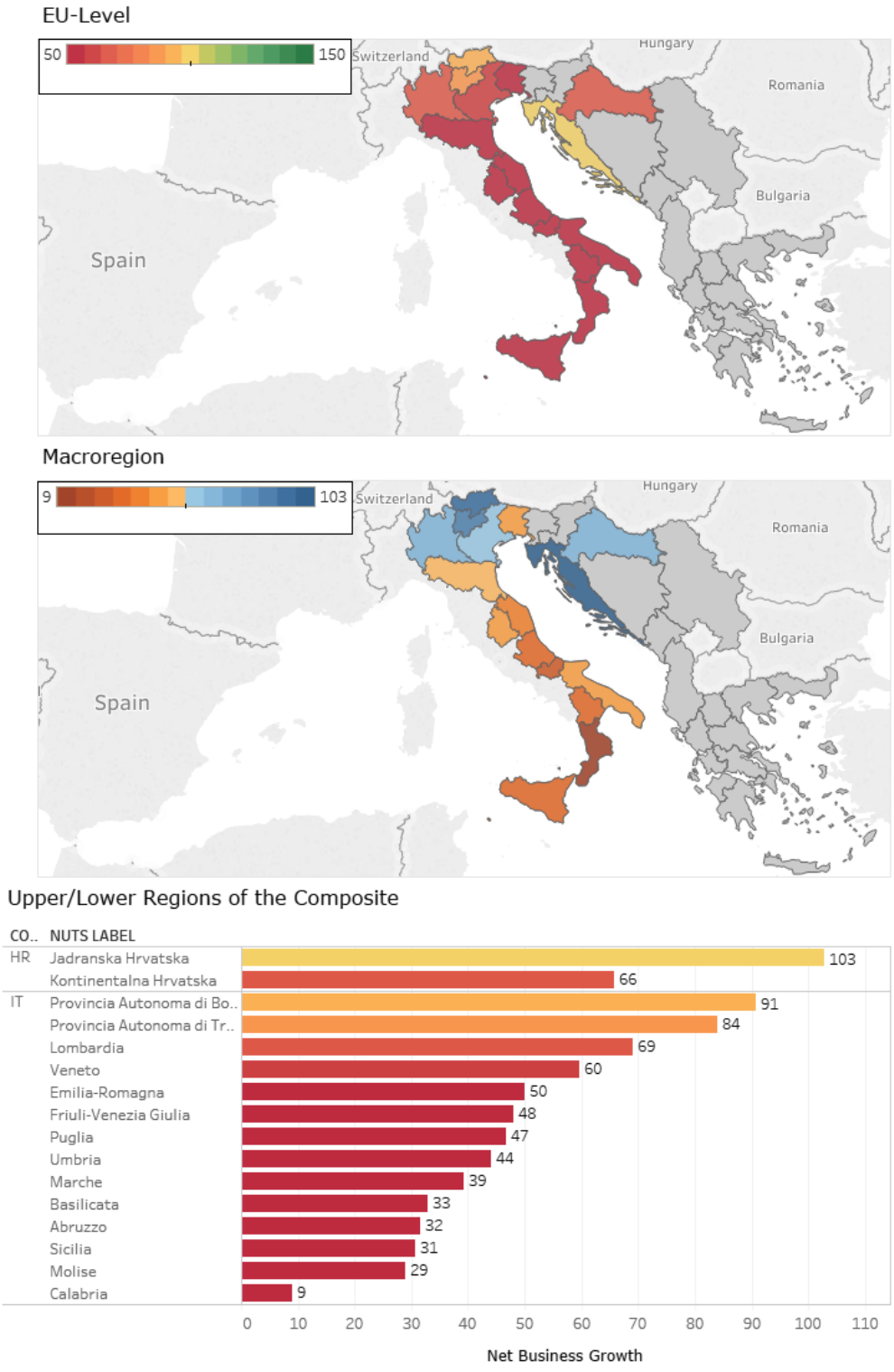
Source: Eurostat

While Montenegro and Serbia are performing relatively well on both indicators with a low share of early school leavers and a high share of population 30-34 years old having completed tertiary or equivalent education, Bosnia and Herzegovina and Albania show a relatively lower performance on these indicators. However, since 2011 all four countries registered an improvement.

2.5.2 Business

Net business population growth

Figure 2-15: Net business population growth by NUTS-2 in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components. Note: Data availability on this indicator is limited.



Text Box 2-14: Explanation of the indicator: 'Net business population growth'

Eurostat defines an enterprise as "the smallest combination of legal units" that "produces goods or services, benefits from a certain degree of autonomy in decision-making, [and] carries out one or more activities at one or more locations."[50] The foundation of new enterprises and closure of unproductive businesses are main contributors to business dynamism, with a strong impact on employment. The indicator Net business population growth considers the yearly change in the difference between enterprise births and deaths.

Enterprise births are defined as enterprises beginning their activity from scratch[51].
An enterprise death refers, according to Eurostat, to the "closure of a combination of production factors with the restriction that no other enterprises are involved in the event."[52] Deaths do not include exits from the population due a change of activity. An enterprise is included in this category only if it is not reactivated within two years. At the same time, a reactivation within two years is not considered a birth.

The indicator Net business population growth is based on data provided by the private sector economy. Eurostat has developed a methodology for the production of data on enterprise births (and deaths). The harmonised data collection follows the requirements for the indicators used for supporting the Europe 2020 Strategy.

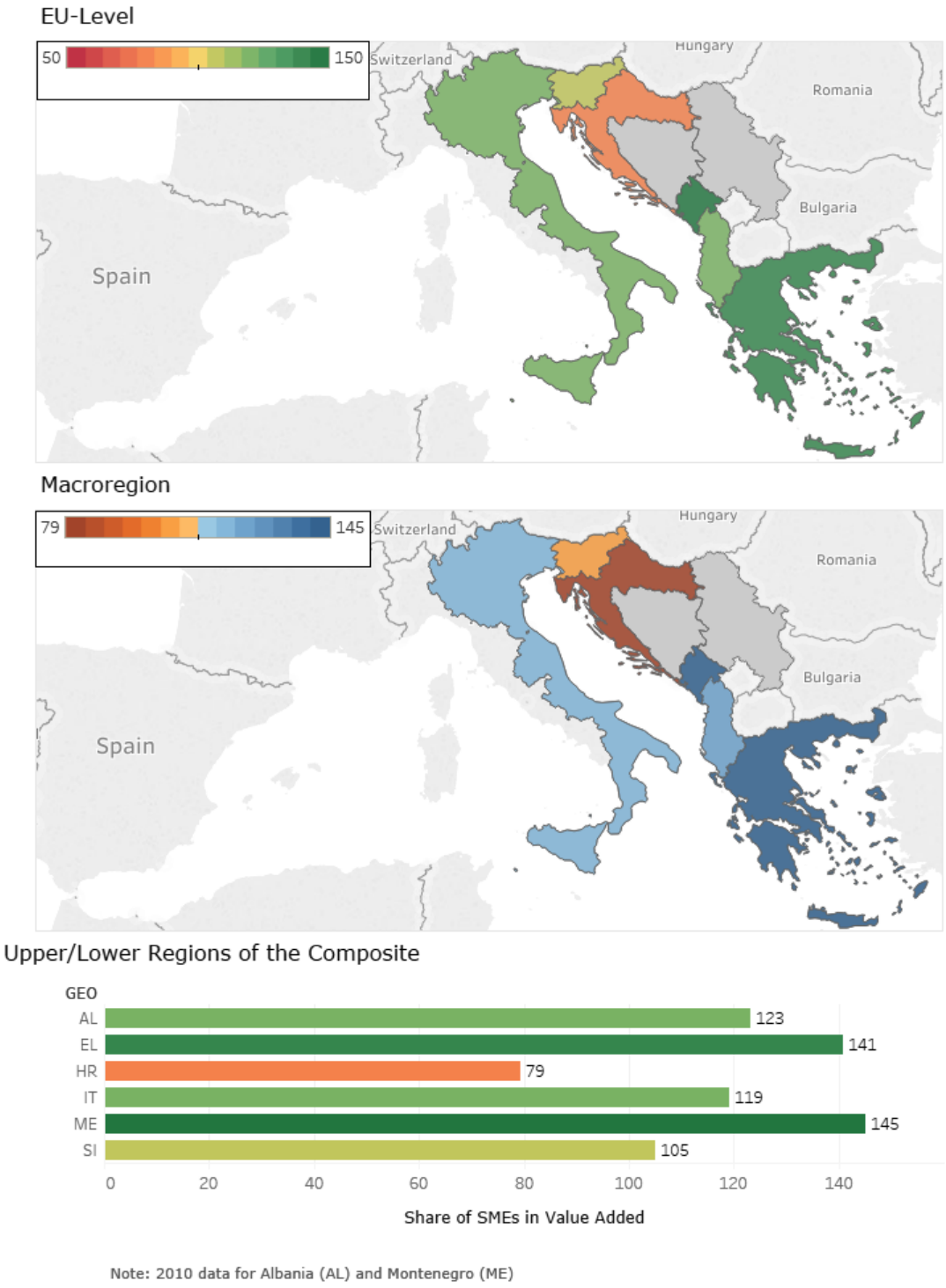
The indicator Net business population growth shows for the year 2014 a positive development in some NUTS-2 regions in Italy where the growth rates of the net business population takes values between 1.11% (score of 91) in Provincia Autonoma di Bolzano/Bozen, 0.79% in Provincia Autonoma di Trento (score of 84), and 0.10% in Lombardia (69). All other Italian NUTS-2 regions in the macro-region such as Veneto, Friuli-Venezia Giulia, Umbria, Marche, Abruzzo, Molise, Puglia, Basilicata, Calabria, Sicilia, and Emilia-Romagna registered, on the opposite, negative growth rates ranging from - 2.68% in Calabria (score of 9) to -0.33% in Veneto (60). Croatia shows moderate dynamics in Jadranska Hrvatska (2.17%, and score of 103) and a stagnation in Kontinentalna Hrvatska (66). No data are available for this indicator for Greece, Slovenia, Albania, Montenegro, Serbia, and Bosnia-Herzegovina.

Between 2012 and 2014, the business population growth has slowed throughout all of Italy, and the only region with a positive development since then is Jadranska Hrvatska. The available data draws in conclusion a dark picture, as a clear majority of regions perform significantly below the EU-median.

[50] URL: http://ec.europa.eu/eurostat/cache/metadata/de/bd_esms.htm
[51] The exact definition of a birth is "the creation of a combination of production factors, with the restriction that no other enterprises are involved in the event"; URL: http://ec.europa.eu/eurostat/cache/metadata/de/bd_esms.htm
[52] URL: http://ec.europa.eu/eurostat/cache/metadata/de/bd_esms.htm

Share of SMEs in value added

Figure 2-16: Share of SMEs in Value Added by Country in 2013, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Note: 2010 data for Albania (AL) and Montenegro (ME)

Text Box 2-15: Explanation of the indicator: 'Share of SMEs in value added'

Small and medium-sized enterprises (SMEs) are important players in the local and regional communities, as creators of new jobs and source of economic growth. As such, they play an important role in Europe's 2020 strategy, in achieving smart, sustainable and inclusive growth. In June 2008, a Communication named the Small Business Act (SBA)[53] for Europe recognising the central role of SMEs in the EU economy was adopted. This Act aimed to strengthen the role played by SMEs and to foster their growth and job creating potential through addressing some problems which impeded their development, such as administrative burdens; access to finance etc.[54] A review of the SBA was released in February 2011 and formulated new actions to respond to challenges arising from the financial and economic crisis.

For the Share of SMEs in value added, data was used from DG GROWTH's SME Performance Review from 2016.[55] The data covers the NACE rev.2 sectors B-J, and L-N. For policy purposes, SMEs in the EU are defined, according to Eurostat, as enterprises with fewer than 250 employees, provided that they are independent (of other enterprises) and do not have sales that exceed EUR 50 million or an annual balance sheet that exceeds EUR 43 million. Micro (with less than 10 employees), small (with 10 to 49 employees) and medium-sized enterprises (with 50 to 249 employees) are collectively referred to as SMEs.[56]

The share of SMEs in value added is the highest in Greece, providing 75% of Greece's added value in 2013, which corresponds to a benchmark of 141[57]. Italy (68%) and Slovenia (63%) both score above the EU-median of 61% as well. Croatia is the only country in this macro-region scoring below the median with a share of 55% (and score of 79). The scores in this macro-region are notably higher than in the other macro-regions.

Overall, the macro-region experienced however a declining share of SMEs in value added since 2008: Of the Member States, the share only increased in Greece by 2.2%, while Croatia and Italy registered declines of similar magnitudes. Throughout the measuring period, all countries but Croatia retained benchmarks above 100.

[53] URL: https://ec.europa.eu/growth/smes/business-friendly-environment/small-business-act_de

[54] URL: https://ec.europa.eu/growth/smes/business-friendly-environment/small-business-act_de

[55] URL: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review-2016_en

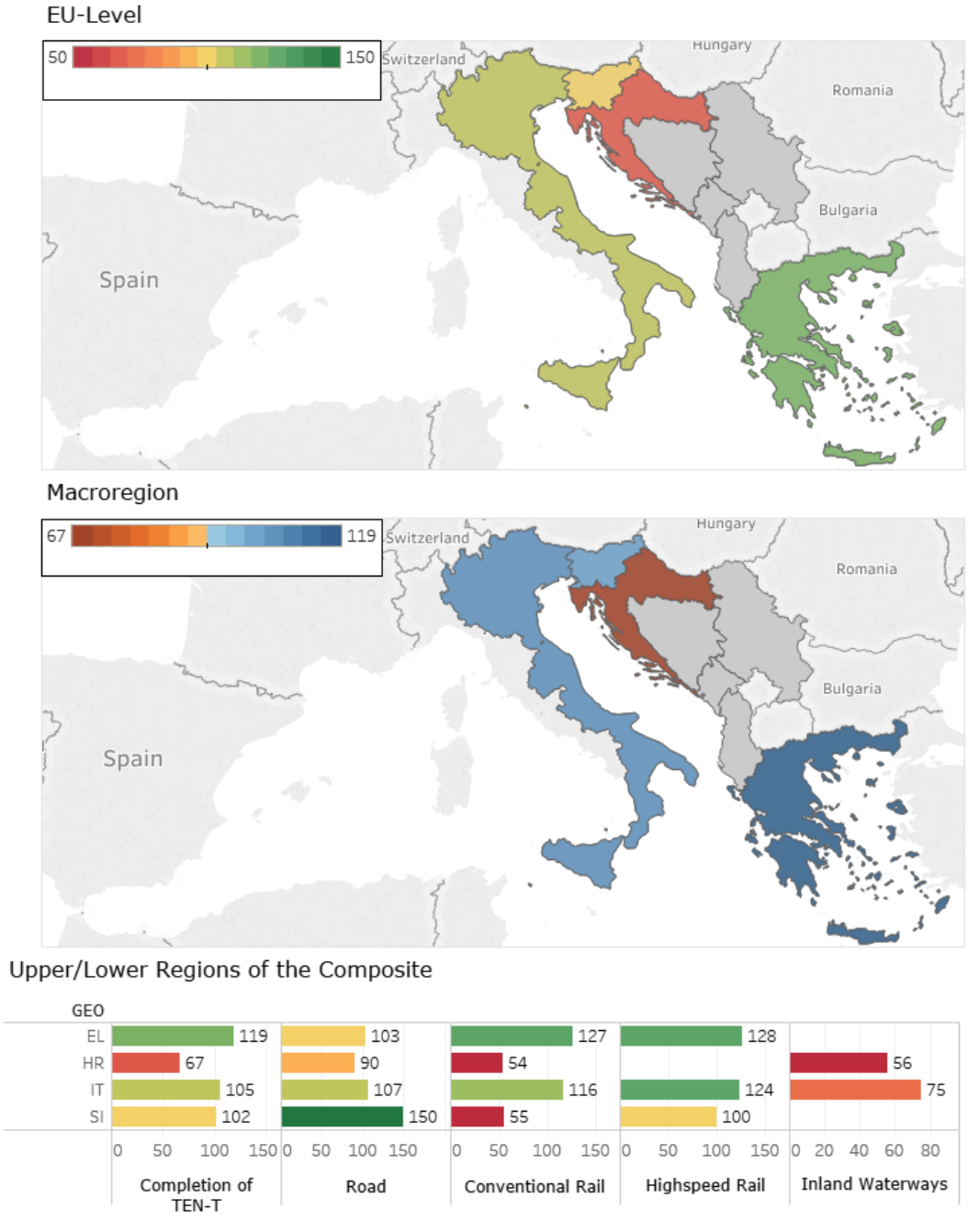
[56] URL: http://ec.europa.eu/eurostat/web/structural-business-statistics/structural-business-statistics/sme

[57] Albania and Montenegro are based on 2010 data, which results in a different benchmarking scale than for 2013.

2.5.3 Transport

Completion Composite TEN-T (road, rail, water)

Figure 2-17: TEN-T Completion by country in 2014, on an EU-wide (top) and Macro-regional (bottom) comparison. The bottom figure shows the Upper/Lower Regions, including their components.



Text Box 2-16: Explanation of the indicator: 'Completion of TEN-T'

According to the European Commission, the TEN-T – the trans-European transport network - is the master plan for a comprehensive transport infrastructure development throughout the Union.[58] Availability of a well-developed infrastructure is essential for the functioning of the internal market and determines the pattern of citizens' mobility and goods' transport. On the other hand, the implementation of infrastructure projects (in the New Member States often with contributions from the Cohesion Funds) generate value-added, jobs and tax revenues in the domestic economies.[59] Thus, developing infrastructure is a key tool to foster economic growth in the EU Member States.

This chapter analysis three indicators: Completion of TEN-T Road Core Network, Completion of TEN-T Conventional Rail Core Network, Completion of TEN-T Inland Waterways Core Network. The indicators refer to the "share of the network for the three transport modes completed at the end of the respective year, compared to the total, including planned sections and sections to be upgraded."[60]

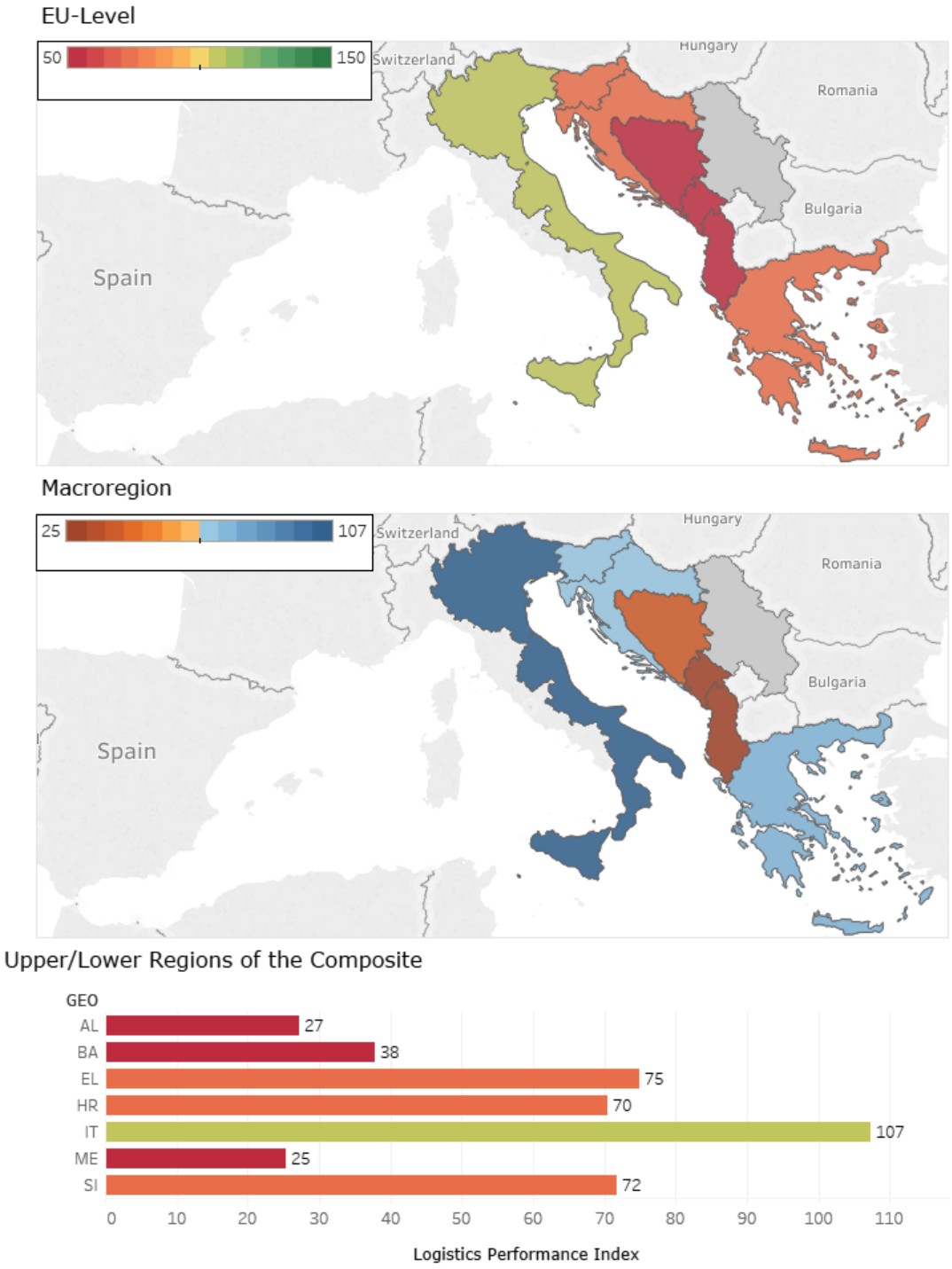
The statistics reflect the official maps contained in Annex I of Regulation (EU) No 1315/2013. According to DG MOVE TENtec "The term "completed" refers to "existing" infrastructure. This does not necessarily mean that infrastructure requirements, as stated in the regulation, are already implemented. The time horizon for the completion of the TEN-T Core Network is 2030. Therefore the categories "completed", "to be upgraded" and "planned" give a rather general overview as defined by Member States. There is no systematic definition of these categories at EU level. Due to the geographical position and size of the transport infrastructure network of the countries concerned, there may be data discrepancies across Member States."[61]

By the end of 2014 the most advanced country in completing the TEN-T road core network in the macro-region was Slovenia (100% of the total). Italy (78%), Greece (76%) and Croatia (61%) ranked in the middle. Greece (80%) and Italy (71%) were relatively advanced in completing the TEN-T rail core network. Croatia (5%) was among the least advanced countries in completing the rail network. The statistics on the completion of TEN-T inland waterways core network show a completion of 62% for Italy and 33% for Croatia.
The aggregation of these individual results shows that Greece leads the completion in this macro-region. Italy and Slovenia perform around the median. Italy is comparably advanced with its rail network, but lags behind on its inland waterways. Slovenia exhibits deficiencies on its rail network. Croatia is by far behind, which is also due to the fact that Croatia is the youngest EU member, its accession took place in 2013.

[58] http://www.europarl.europa.eu/cmsdata/116220/tent-issues-papers.pdf
[59] Grozea-Helmenstein, D. And Helmenstein, C. And Kleissner, A. And Moser, B. (2008): Makroökonomische und sektorale Effekte der UEFA EURO 2008 in Östereich. *Wirtschaftspolitische Blätter, 2008 (1). pp. 7-20.*
[60] URL: https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/ten-t-completion-rail-hs_en
[61] *See reference above*

Logistics Performance Index (LPI)

Figure 2-18: Logistics Performance Index by country in 2016, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components.



Text Box 2-17: Explanation of the indicator: 'Logistics Performance Index'

The Logistics Performance Index (LPI) is the weighted average of a country's scores on six key dimensions. These six dimensions are: Efficiency of customs and border management clearance (Customs), Quality of trade and transport infrastructure (Infrastructure), Ease of arranging competitively priced shipments (Ease of arranging shipments), Competence and quality of logistics services—trucking, forwarding, and Customs brokerage (Quality of logistics services), Ability to track and trace consignments (Tracking and tracing), Frequency with which shipments reach consignees within scheduled or expected delivery times (Timeliness).[62] The LPI consists of both qualitative and quantitative measures. B

The LPI is, according to the World Bank, an interactive benchmarking tool developed to support countries "to identify the challenges and opportunities they face in their performance on trade logistics."[63] It shows the strengths and weaknesses revealing possible fields for raising the performance. The LPI ranks 160 countries on the efficiency of international supply chain.

Italy scores for 2016 the best in the Adriatic and Ionian macro-region country on the LPI with a score of 107. This score is very high compared to the rest of this macro-region. The second best performing country (Greece) lies 32 points behind, and scores in the lower quarter of the benchmark. Croatia and Slovenia have similar scores. Greece's and Slovenia's score deteriorated since 2007 from 98 and 82 respectively, and Croatia improved from a score of 50. The (potential) candidate countries in this macro-region score clearly below the lowest performer of the EU. Thus, their standard does not live up to those of Europe, requiring more progress until the (potential) accession. The scores in these countries have fluctuated a lot over the past decade. Albania scored for example 3 points in 2007 and 50 points in 2012. The picture is similar in both candidate countries. Although their scores improved in the past, Bosnia-Herzegovina's score decreased due to less 'Ease of arranging shipments' and 'Tracking and tracing'. In Albania, additional categories were 'Infrastructure', whereas in Montenegro the scores deteriorated on the 'Infrastructure' and 'Tracking and tracing' dimensions. Serbia scores clearly below Slovenia and Croatia but much better than Bosnia and Herzegovina and Montenegro.

One of the components of the LPI is the quality of trade and transport related infrastructure (e.g. ports, railroads, roads, information technology). The quality of transport infrastructure is lower in European comparison in the Central and Eastern European countries. This leads to a performance gap between Italy and the Central and Eastern European countries in the Adriatic and Ionian macro-region. However, among the last group some countries were more successful in reducing the gap than others. Another divide can be observed between the more advanced countries like Slovenia and the other countries of the macro-region.

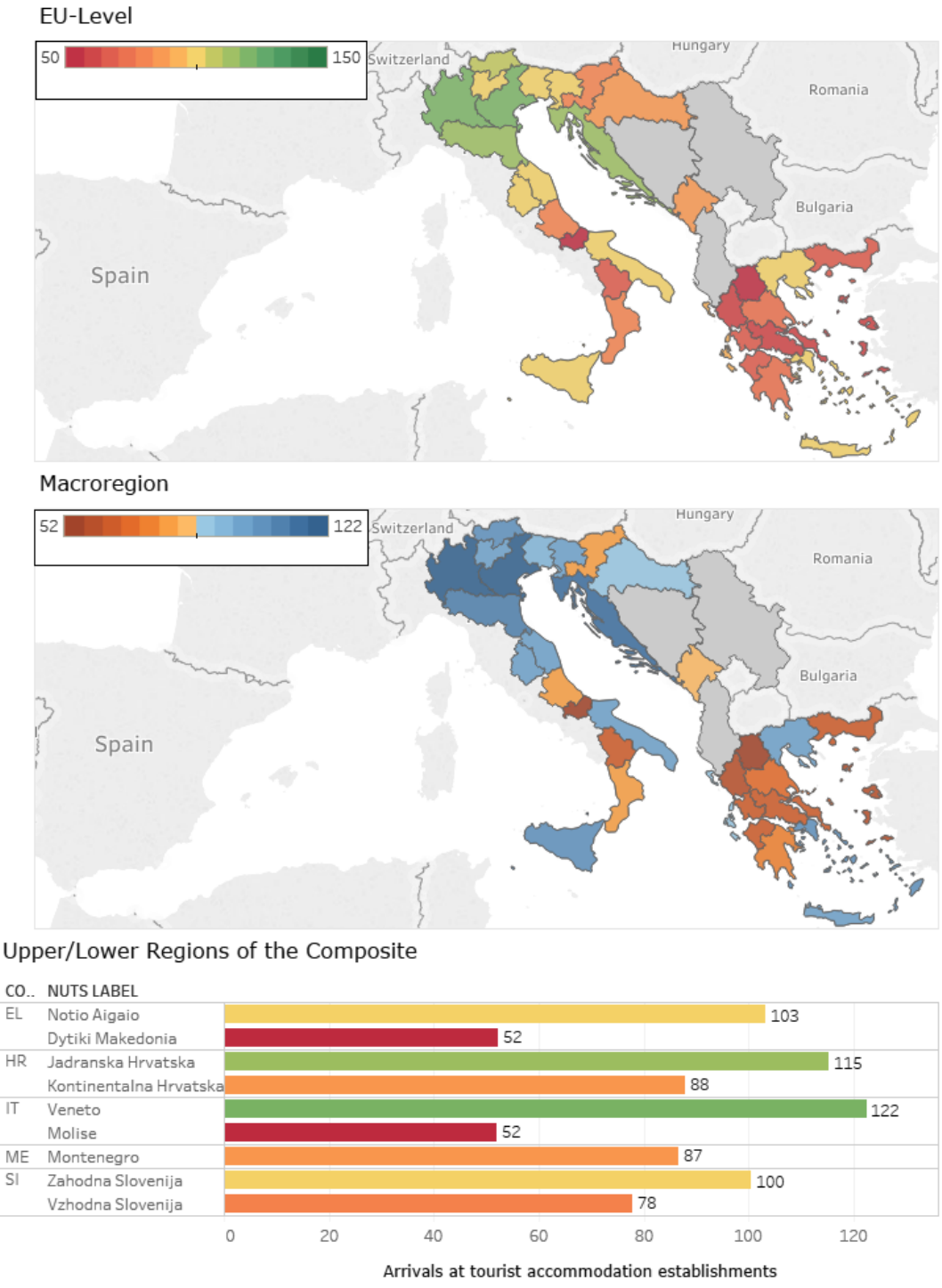
[62] URL: http://lpi.worldbank.org/international

[63] URL: http://lpi.worldbank.org/

2.5.4 Tourism

Arrivals at tourist accommodation establishments

Figure 2-19: Tourism arrivals by NUTS-2 in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-18: Explanation of the indicator: 'Tourism Arrivals'

The indicator Arrivals at tourist accommodation establishments is available at Eurostat for NUTS-2 regions. Tourist accommodation establishments are defined as hotels, holiday (and short-stay) accommodations, camping grounds, recreational vehicle- as well as trailer parks.

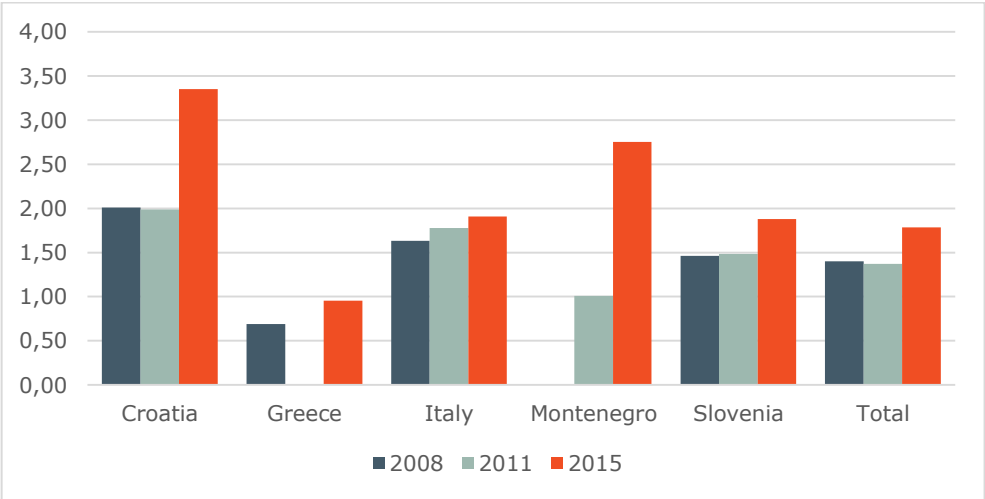
In the Adriatic region, Italy exhibits the most Arrivals at tourist accommodation establishments in 2015, with 2/3 of its NUTS-2 regions scoring above the EU-median and Veneto scoring the highest in the macro-region (122). At the same time, Italy also has some of the lowest scoring regions, of which particularly Molise (52). The Greek regions score to the greatest extent below the EU-median. Croatia and Slovenia have each a region scoring below and above the median.

Between 2008 and 2015, the Greek region of Ionia Nisia experience the largest growth of 14 points. Montenegro's score grew since 2011 by a notable 25 points, which however still lies with 87 below the EU-median. The country with the strongest decline in the macro-region is Italy, where Abruzzo's and Calabria's score declined most intensively (10 and 8 points respectively).

Taking the perspective of the percentage increase of arrivals, the macro-region as a whole saw an increase by 30%, with Croatia (63%) and Greece (36%) as the strongest growers.

The arrivals seen as share to the number of inhabitants, however, show another picture altogether. In this case, Croatia registered the highest number of arrivals per inhabitant in 2015, followed by Montenegro. This ratio has shown the highest increase in Montenegro between 2011 and 2015 (the data for 2008 is not available at Eurostat).

Figure 2-20: Arrivals in the macro-region per capita (million arrivals)



Much lower values for the Arrivals of non-residents staying in hotels and similar establishments per inhabitant register the candidate and potential candidate countries. The best performing among them is Montenegro. In all other countries, the number of arrivals per inhabitant are very low. The reason is the lower availability of accommodation infrastructure in these countries and insufficient promotion of the tourist destinations. The slow progress which can be observed since 2011, shows that international tourists are slowly discovering these destinations.

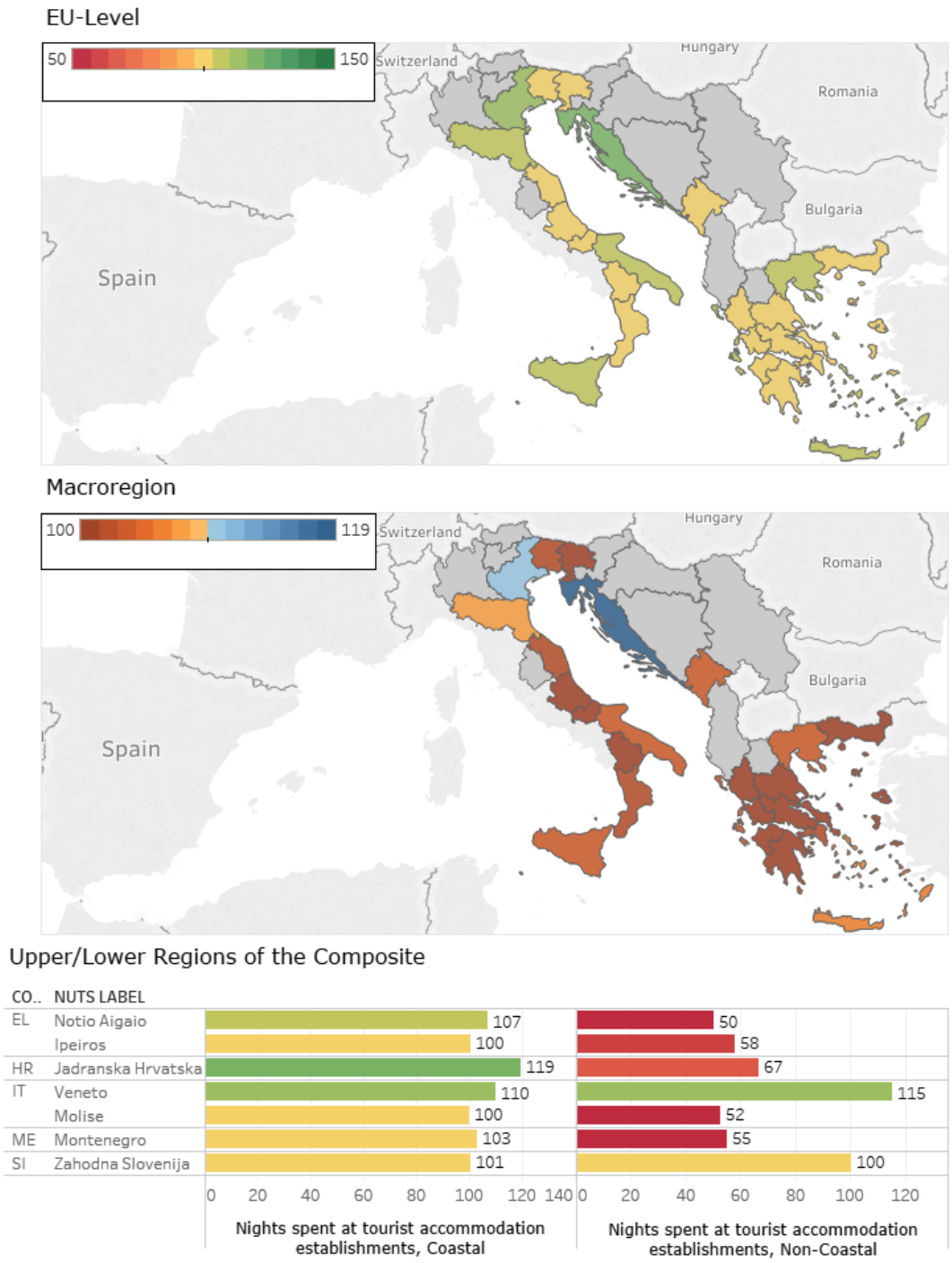
Table 2-11: Arrivals of non-residents staying in hotels and similar establishments per inhabitant in (potential) candidate countries

	2008	2011	2015
Montenegro	0.94	0.86	1.02
Serbia	0.09	0.10	0.16
Bosnia and Herzegovina	0.08	0.10	0.18
Albania	0.02	0.05	0.09

Source: Eurostat, own calculations.

Nights spent at tourist accommodations (coastal and non-coastal)

Figure 2-21: Nights spent at tourist accommodations (coastal/non-coastal) by NUTS-2 in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-19: Explanation of the indicator: 'Nights spent, coastal tourism'

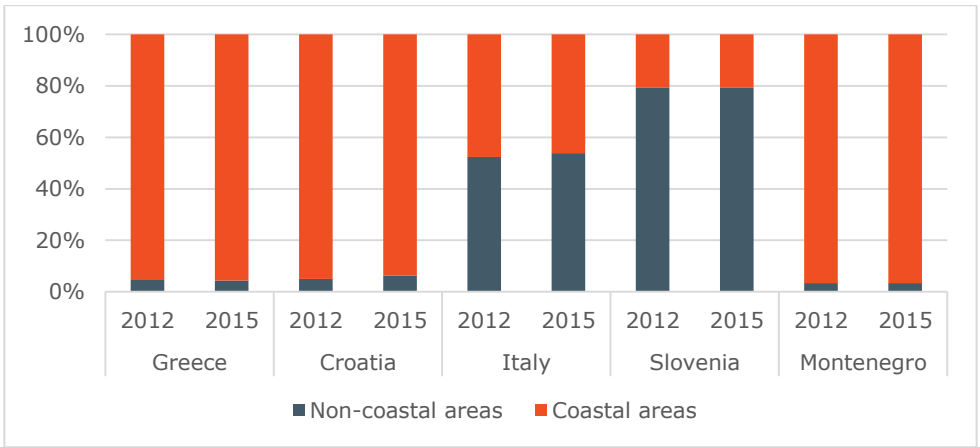
The Number of nights spent at tourist accommodations is available at Eurostat for NUTS-3 regions. Eurostat has an official definition of NUTS-3 regions that distinguishes between coastal and non-coastal regions. Due to the large number of NUTS-3 regions, the data is aggregated to the NUTS-2 level. In order to distinguish between coastal and non-coastal regions, a benchmark is defined for each type of region.
Tourist accommodation establishments are defined as hotels, holiday (and short-stay) accommodations, camping grounds, recreational vehicle- as well as trailer parks.

All coastal regions in the Adriatic-Ionian macro-region exhibit a number of nights spent at tourist accommodations above the EU-median. Yet, their scores are only slightly higher than the EU-median, despite their favourable geography. Croatia's coastal NUTS-2 region (Jadranska Hrvatska) sores the highest in this macro-region, which has been stable since 2012. Although at the bottom-end of Italy, Molise gained 12 points on the benchmark in the same time period. This observation is particularly interesting since all other NUTS-2 regions in this macro-region remained constant in their scores. Historically, the tourism sector in Molise does not count as very well developed[64]. The scoring could indicate that Molise has made significant progress in that respect.

The non-coastal parts of the NUTS-2 regions score in most countries in most cases close to the EU's bottom performing country, with the exception of Veneto and Emilia-Romagna in Italy as well as Zahodna Slovenija.

As can be seen in the figure below, the distribution between the number of nights in costal and non-coastal areas remained the same over 2012 till 2015. Greece, Croatia and Montenegro have mostly coastal occupancy rate whereas Slovenia has mostly non-coastal occupancy. In Italy the share is nearly equal.

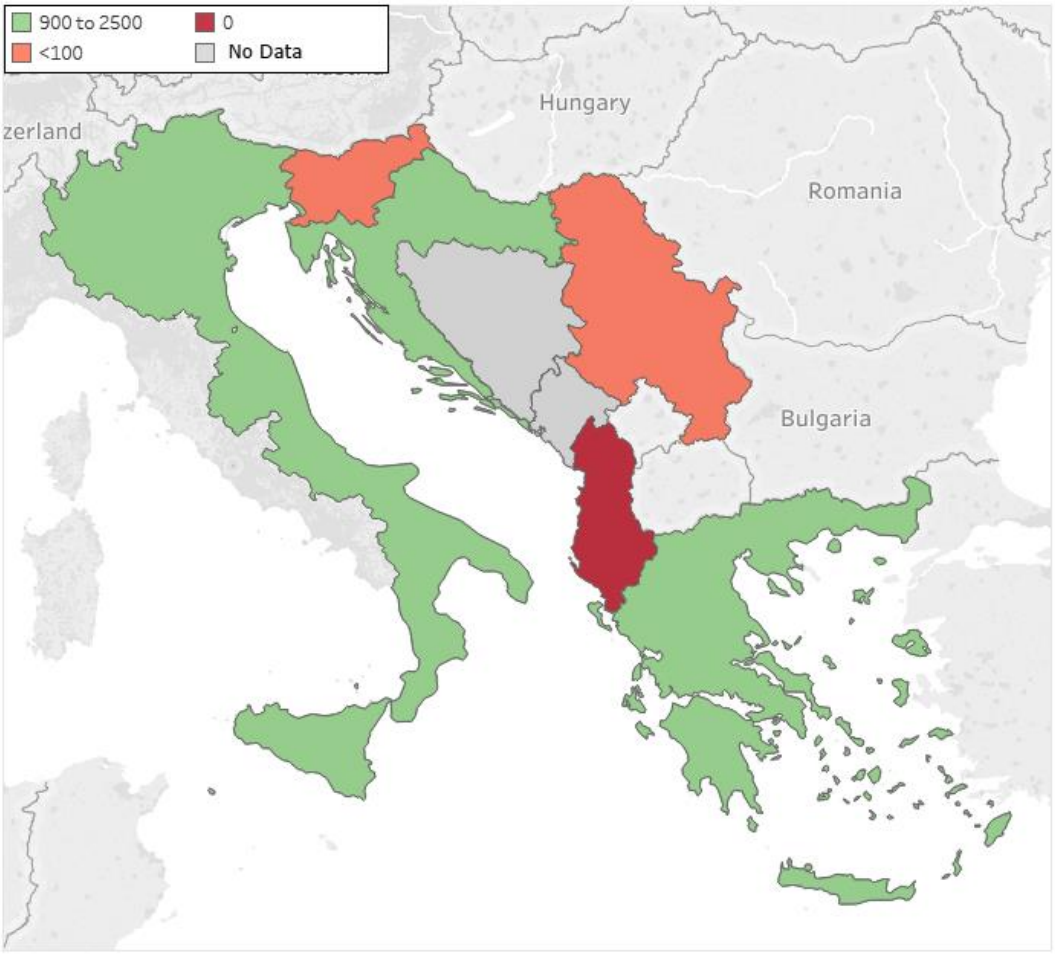
Figure 2-22: Split of coastal/non-coastal tourism in all NUTS-2 regions of the macro-region



[64] See DG Growth's Regional Innovation Monitor Plus, https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/molise

Accessible Tourism Services

Figure 2-23: Number of Accessible Tourism Services by country in 2014. Note: Due to the low number of categories, a benchmarking was not feasible



Text Box 2-20: Explanation of the indicator: 'Accessible Tourism Services'

Accessible Tourism Services refer to tourism services that can support an accessible tourism market, which includes seniors, people with disabilities, families with small children and people with various specific access requirements.

The source of data used in this study is the Report "Mapping and Performance Check of the Supply of Accessible Tourism Services". The data for the identification and calculation of accessible services was gained through a survey of Accessibility Information Schemes. The survey of AIS sites was based on web searches across all European Union countries, aiming for as full a list as possible."[65] In total there are 224,179 registered accessible services listed in Accessible Information Schemes in the whole of Europe.

Due to the low number of categories, a benchmarking of this indicator was not feasible.

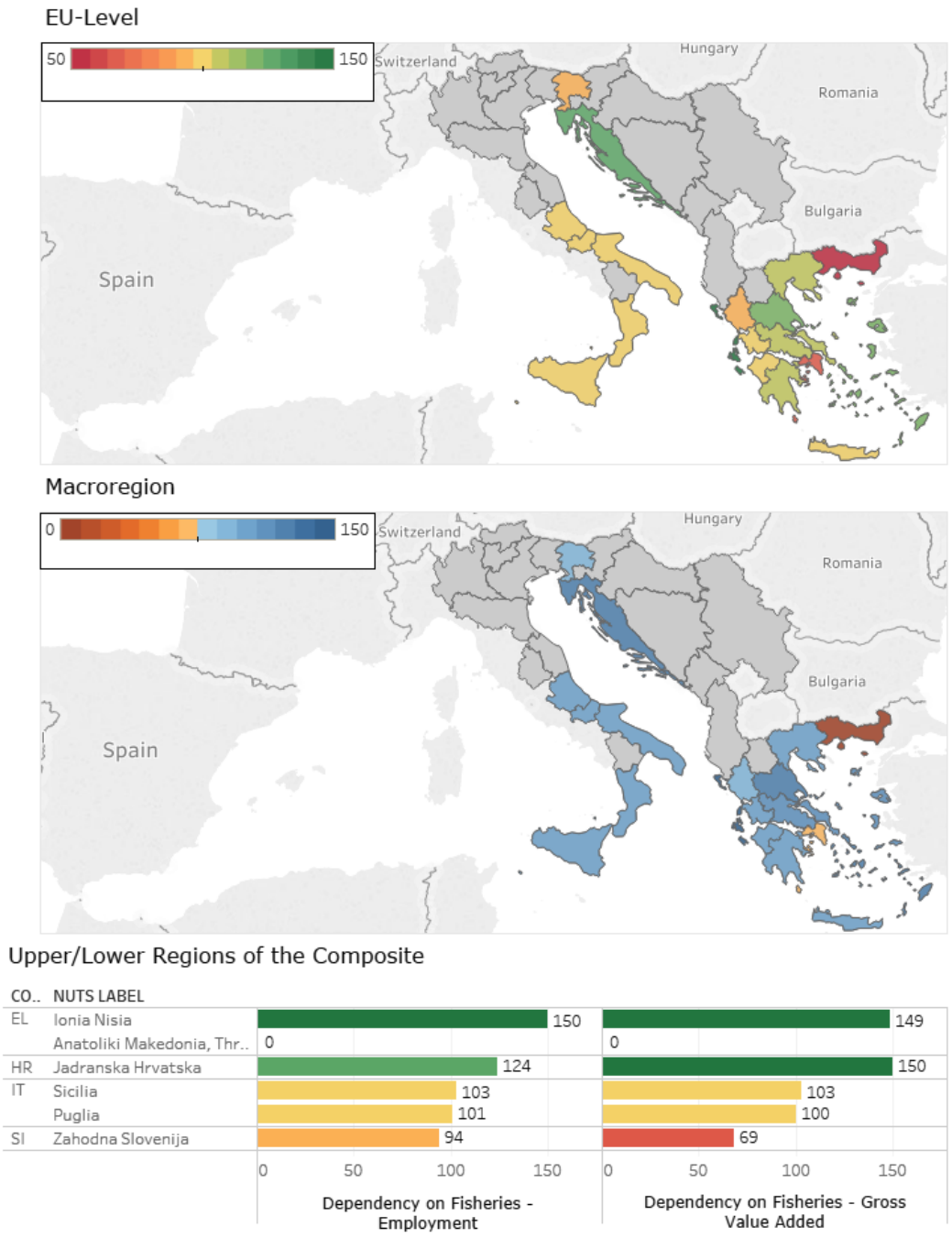
The most frequently listed services were: Accommodation (to be found in 16% of schemes), Physical Accessibility (16%), Attractions (15%), Food and Drink establishments (14%), and Leisure facilities (13%). The least recorded information relates to accessibility of Transport Services (8%), Booking and Reservations (5%), Equipment Hire (4%), and Personal Assistance (3%).

In 2014, the results of the survey showed that in the Adriatic and Ionian macro-region, Greece, Croatia and Italy had the most accessible services with figures between 900 and 2500 accessible services. Slovenia and Serbia were able to provide less than 100 of accessible services. Last in this ranking was Albania with 0 accessible services, however this is due to not having such a scheme.

[65] Mapping and Performance Check of the Supply of Accessible Tourism Services, Final Report, Annex 8. URL: http://www.accessibletourism.org/?i=enat.en.reports.1740

2.5.5 Fisheries

Figure 2-24: Dependency on fisheries by NUTS-2 regions on an EU-wide (top) and Macro-regional (middle) comparison for employment. The bottom figure shows the Upper/Lower Regions, including their components for both employment and GVA factors



2.5.6 Dependency on Fisheries (Gross value added)

A close examination of the gross value added (GVA) generated by the Fisheries sector as compared to the total gross value added caries widely between the

NUTS-3 areas of the macro-regions. According to the available data for 2011, the share of GVA attributed to fisheries sector is relatively higher in the NUTS-3 areas of the Adriatic macro-region than in the NUTS 3 areas of Baltic macro-region.

Within the Adriatic macro-region is the share of fisheries in GVA much higher in Croatian than in the other NUTS-3 areas. In Croatia, gross value added generated by Fisheries sector accounts for 1.5% of total GVA as compared to 0.14% in Italy and 0.39% in Greece and 0.04% in Slovenia. In Croatia, the share of GVA generated by Fisheries sector relative to total GVA varies between 3.3% in Zadarska Zupanija region to 0.47% in Licko-senjska Zupanija. In Greece, where the contribution of the fisheries sector was second largest in 2011, the proportion ranges between 1.36% in the Samos region to 0.02% in the Attiki region. In Italy, the highest dependency on Fisheries was recorded in Trapani region where the Fisheries accounted for 0.54% of the total GVA of the area, followed by Agrigento area where the share stood at 0.45%. The importance of the fisheries sector in terms of contribution to GVA showed the highest degree of variation in Greece.

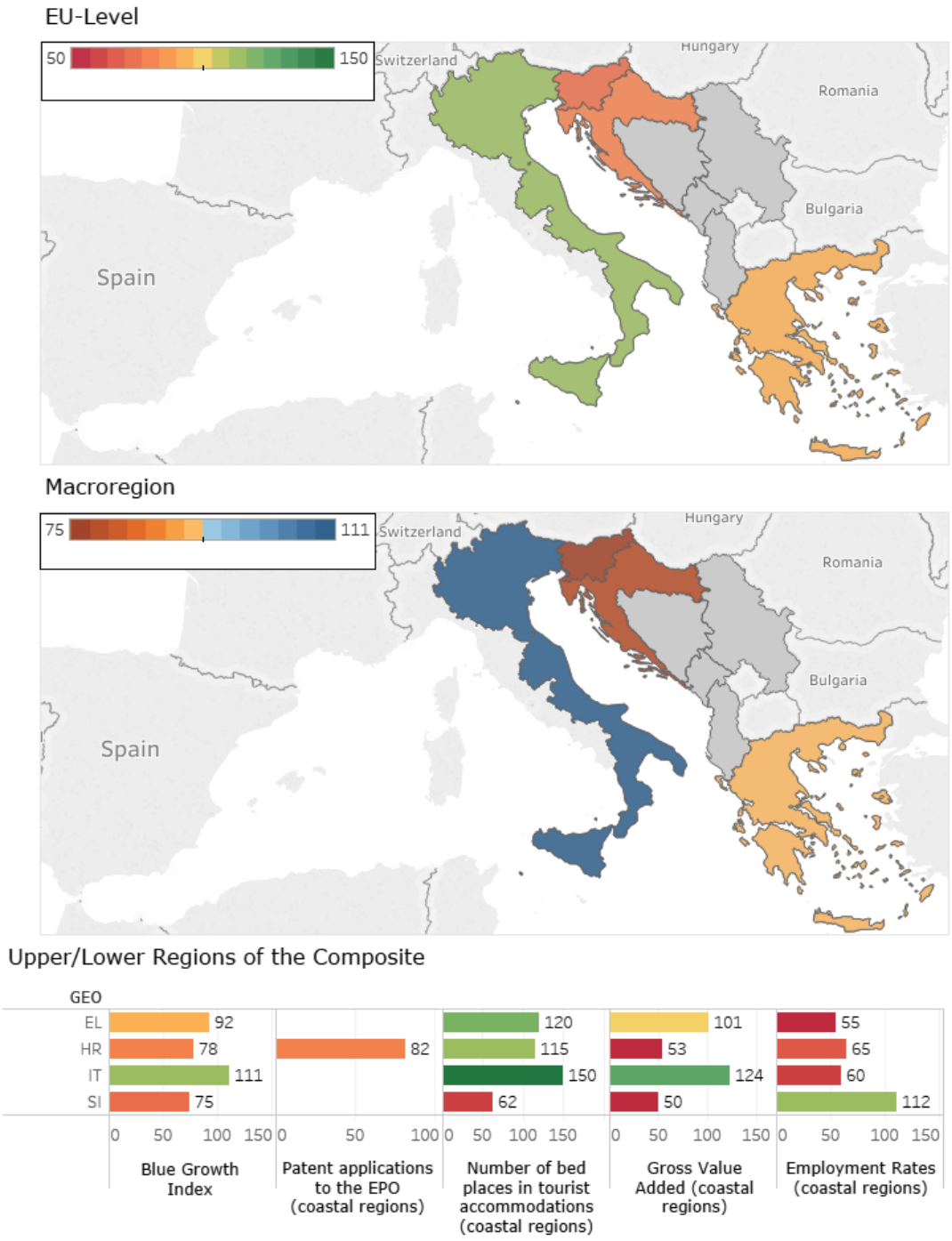
2.5.7 Dependency on Fisheries (Employment)

Another measure of dependency on a particular sector in an economy is the share of employment generated by the sector relative to the total employment. The share of employment in the Fisheries sector is more or less consistent with the share of GVA. In the NUTS-3 areas of the Adriatic macro-region, the share of employment in the Fisheries sector is relatively higher than that of the Baltic macro-region. The data used for this analysis was generated by EEA.

The highest share was registered in the NUTS-3 regions in Croatia with 0.94% of the total employment, followed by Greece with 0.48% and Italy 0.15%. In the NUTS-3 regions of Croatia the variations were between 1.52% in Zadarska zupanija and 0.32% in Licko-senjska Zupanija. Note that these regions showed highest and lowest contribution to the GVA as well. Similarly, the fisheries sector in the NUTS-3 regions of Samos in Greece registered the highest employment share at 1.58%. In Italy the share of employment ranged between 0.47% and 0.01%. Fisheries in Trapani region, which was the highest contributor to the GVA stood at second place with 0.44% of the total employment in the region.

2.5.8 Blue Growth

Figure 2-25: Blue Growth by country, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components. Due to incomplete data availability, the years of the individual indicators vary from 2012-2015.



Text Box 2-21: Explanation of the indicator: 'Blue Growth'

According to the European Commission, Blue Economy refers to the "set of economic activities that happen around Europe's oceans, seas and coasts.[66]" These activities include traditional sectors such as fishing, tourism and shipbuilding, as well as new sectors such as offshore wind energy or marine-based pharmaceuticals and cosmetics. They are responsible for a large share of employment and value added creation in the regions and countries located on or near Europe's coasts. As part of DG Mare's Integrated Maritime policy, a Blue Growth strategy was released, which seeks to contribute to the EU 2020 strategy; yet with a maritime focus.[67] Relevant themes are aquaculture, coastal tourism, marine biotechnology, maritime spatial planning and integrated maritime surveillance, to name a few. In order to provide inference on blue growth, a selection of Eurostat's Maritime Policy Indicators was made to reflect on the most prevalent themes.[68]

A composite indicator made up of three indicators: Number of establishments, bedrooms and bed-places, Gross-value added at basic prices and Employment rates, has been created to measure the potential of blue-growth in the coastal regions Adriatic-Ionian macro-region. Originally, the production from aquaculture was intended to be included, but due major data gaps, this indicator was excluded.

Italy is the strongest performing country on the composite indicator and outperforms the other countries by at least 19 points on the benchmark. Further, Greece, Croatia, and Slovenia all score below the EU-median. The coastal regions of these countries are best using the resources to generate value added and have a well-established tourism infrastructure, with the exception of Slovenia which scores close to the EU's bottom-performer. However, employment rates in these regions are very low on the EU-scale. Again, Slovenia proves the opposite with above median employment rates. Overall, each country exhibits different strengths and weaknesses, and the new Member States currently perform notably below the EU-median.

[66] URL: https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/publications/leaflet-blue-growth-2013_en.pdf

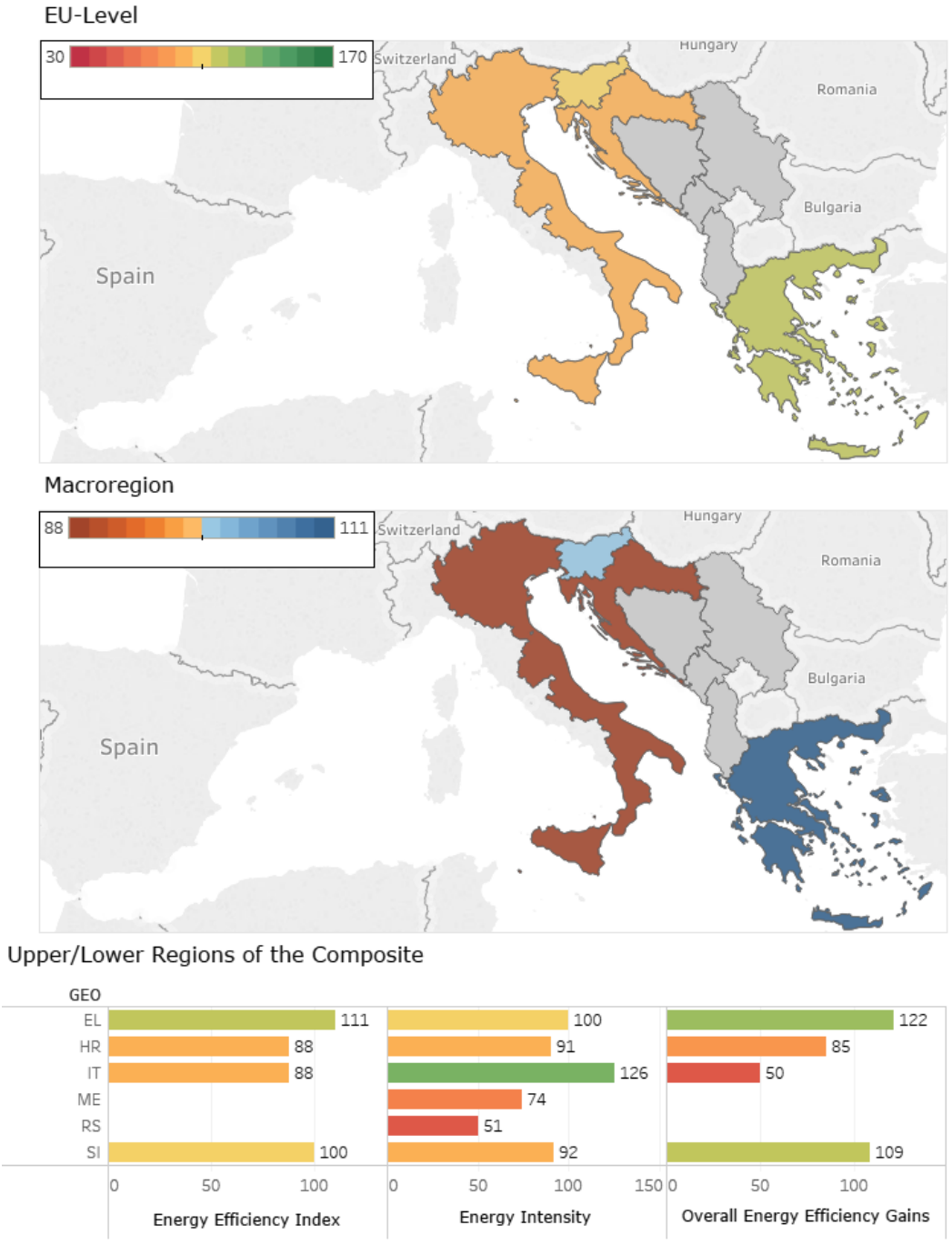
[67] https://ec.europa.eu/maritimeaffairs/policy/blue_growth_en

[68] http://ec.europa.eu/eurostat/web/maritime-policy-indicators/data/database

2.5.9 Energy

Energy Efficiency

Figure 2-26: Energy Efficiency Index by country. The top figure shows an EU-wide comparison while the middle map illustrates the index on the macro-regional scale. The bottom figure shows the benchmarked index values for each country, along with component indicators



Text Box 2-22: Explanation of the Indicator: Energy efficiency

To assess the status on energy efficiency in the macro-region, a composite index consisting of two indicators was used. The first indicator is energy intensity of the economy, indicating to what extent economic activity is linked to energy consumption. The second indicator is energy efficiency gains. This indicator was selected to include a time dimension into the description of status in energy efficiency, showing the development of energy efficiency over time.

Energy intensity of the economy on a national level was obtained from Eurostat data. This indicator is measured in kg of oil equivalent per 1000 euros of GDP, or tonnes of oil equivalent per million euros GDP. It is calculated as "*a ratio of total primary energy consumption and a country's GDP*" and shows how much energy is required to produce a unit of GDP. Lower values indicate higher economic outputs per unit of energy consumed. Data for Bosnia and Herzegovina is not available. Although 2015 data is available, data for 2014 was used in the composite, in order to tally with the second component indicator.

Energy Efficiency gains indicator is based on Odysee-Mure database (http://www.indicators.odyssee-mure.eu/energy-efficiency-database.html). In the Odysee-Mure project, energy efficiency gains are calculated for separate sectors, as well as for the economy as a whole. The indicator for the whole economy is calculated as "*a weighted average of sectoral energy consumption changes*", hereby taking into account the structure of the economy. Odysee-Mure database contains values only for EU countries. Calculations are based on changes in energy intensity between 2000 and 2014.
Eurostat data could also be used to obtain an efficiency gains indicator. This would allow including some of the non-EU countries in the macro-region. However, this indicator is missing the important information on the economy structure, and therefore would add little to the first indicator.

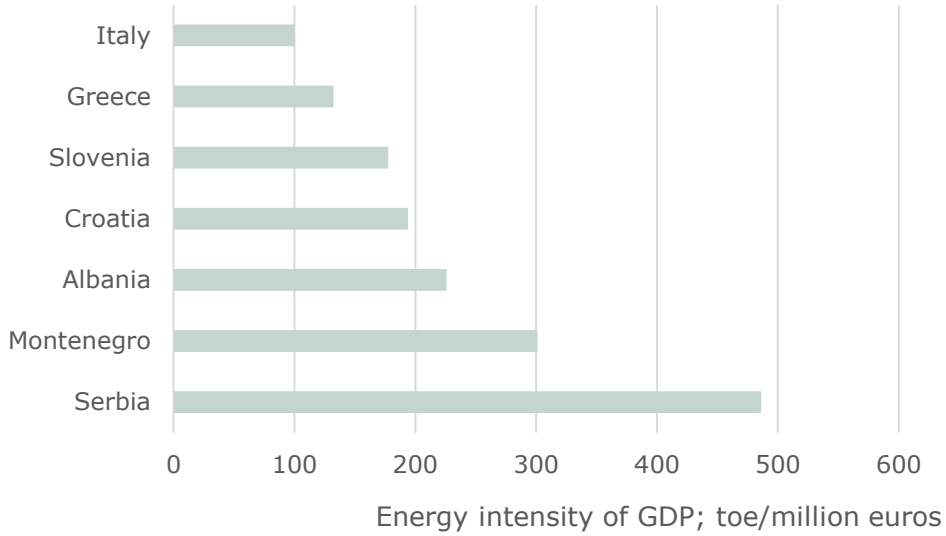
Both indicators are benchmarked using EU-median as central value (100).
For the energy intensity, lower values indicate better performance. In the benchmarking process, the scale is inverted, so that top benchmarked value (150) matches the lowest energy intensity.

The composite energy efficiency index consists of benchmarked energy intensity and efficiency gain indicators, considered at equal weights.

Energy intensity

In terms of energy intensity, the macro-region countries show very large variations. While Italy consumes 100 toe of energy to produce a million euros worth of economic output, Serbia needs 500 toe to achieve the same (Figure 2-27).

Figure 2-27: Energy intensity of the economy in Adriatic-Ionian Sea Region, 2015. Source: Eurostat



Efficiency gains

The second indicator complements the energy intensity by showing the countries' progress on energy efficiency over time. In addition to that, for the EU countries, this indicator addresses the sectoral differences in energy use (see Text Box 2-22). Table 2-12 shows the values of this indicator for the macro-region countries. Odysee-Mure project data is preferable, as it addresses the sectoral energy consumption, but it is available only for the EU countries in the macro-region, therefore it is complemented with Eurostat data for Albania and Serbia for comparison. In the composite index only the Odysee values are used.

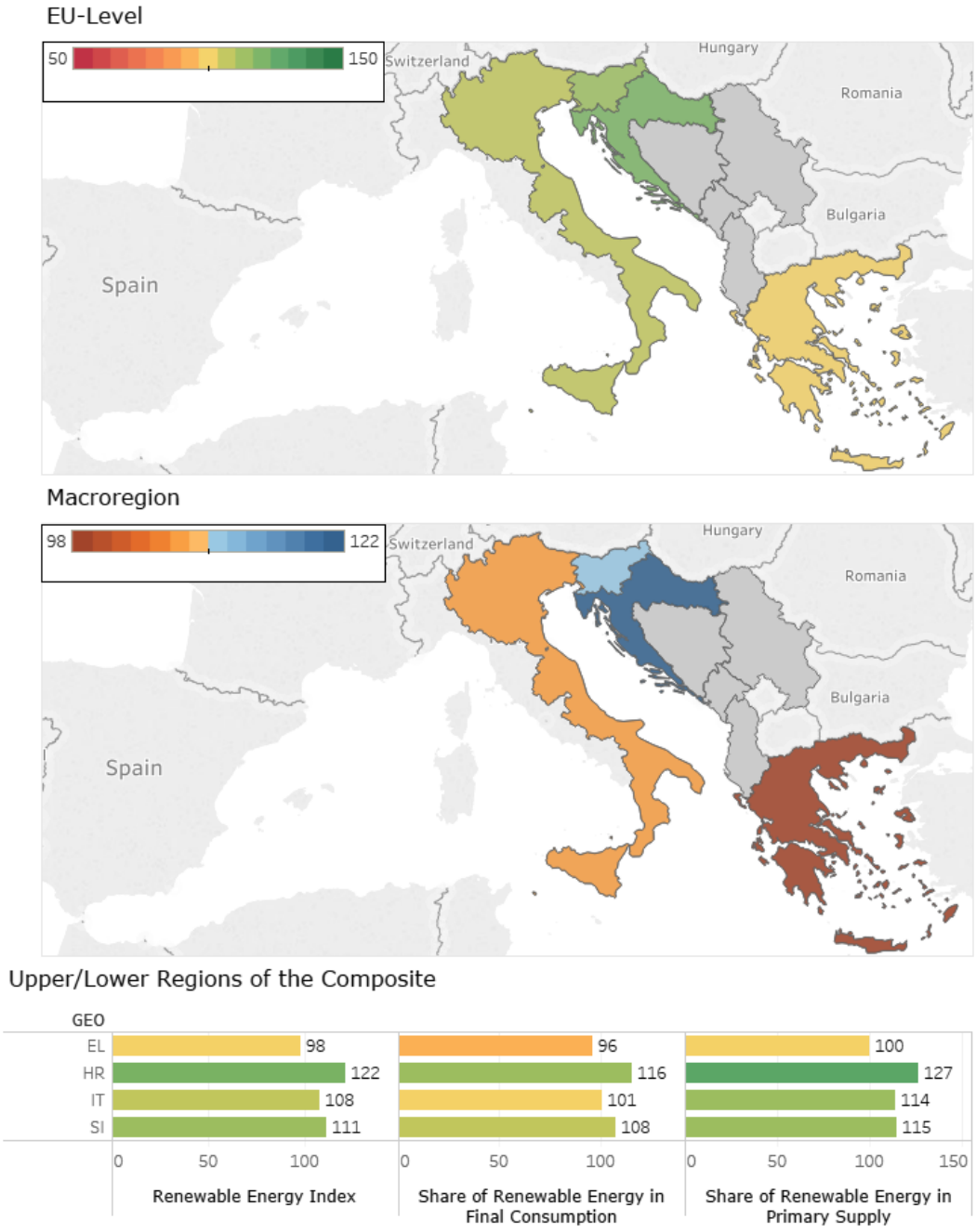
Table 2-12: Energy efficiency gains 2000-2014

Country	Value	Source
Albania	30%	Eurostat
Montenegro	NA	Not available for year 2000
Slovenia	22%	Odysee-Mure
Italy	12%	Odysee-Mure
Croatia	17%	Odysee-Mure
Greece	26%	Odysee-Mure
Serbia	38%	Eurostat

The composite index shows that Greece scores highest overall, but is not much above the EU-median value. While Italy scores lowest in the region, this is due to its already very high performance in terms of energy intensity, which means that it has less space for further improvements.

Renewable Energy Use

Figure 2-28: Renewable Energy Index by country in 2014. The top figure shows an EU-wide comparison while the middle map illustrates the index on the macro-regional scale. The bottom figure shows the benchmarked index values for each country, along with component indicators



Text Box 2-23: Description of the Renewable Energy Use indicator

The indicator for renewable energy use is a composite indicator consisting of two separate indicators: Share of renewables in primary energy supply (expressed in %), and share of renewables in gross final energy consumption (expressed in %). The first indicator is sourced from OECD, and the second from Eurostat.
Definition of renewables in both data sources are compatible: renewables include energy produced from hydropower, wind power, solar power, as well as tide, wave and ocean energy, energy from solid biomass, biofuels and renewable waste, and geothermal energy (Eurostat classification server RAMON and the OECD database).
Share of renewables in primary energy supply.
OECD country level data for 2014 was used to obtain the indicator for the share of renewables in primary energy supply. For the purposes of this indicator, OECD defines *Primary energy supply* as the sum of energy production and imports, from which exports and bunkers are subtracted, and subsequently adjusted for stock changes. OECD provides the renewable energy indicator as percentage of primary energy supplied by renewables in the total primary energy supply.
Share of renewables in gross final energy consumption.
Eurostat data for 2014 was used, specifically indicator table t2020_31. This indicator is used to measure EU's progress towards its 2020 target, namely to achieve 20% share of renewable sources in the final energy consumption.
Composite renewable energy indicator is calculated as the equally weighted sum of the benchmarked values of the above indicators.

Renewable energy is defined by International Energy Agency (IEA) as energy "that is derived from natural processes (e.g. sunlight and wind) that are replenished at a higher rate than they are consumed"[69] This includes wind, solar, hydro, geothermal, wave and bioenergy. Renewable energy is considered an important means to improve energy security, in particular important in countries with low indigenous availability of fossil fuels, as well as pollution and climate benefits[70].

For the purpose of this analysis, two indicators were selected to measure the level of renewable energy use: share of renewable energy in primary supply and share of renewable energy in consumption. Text Box 2-23 provides more detail on the construction of the index.

[69] https://www.iea.org/topics/renewables/

[70] IEA (2015). *Medium-Term Renewable Energy Market Report 2015*. International Energy Agency.

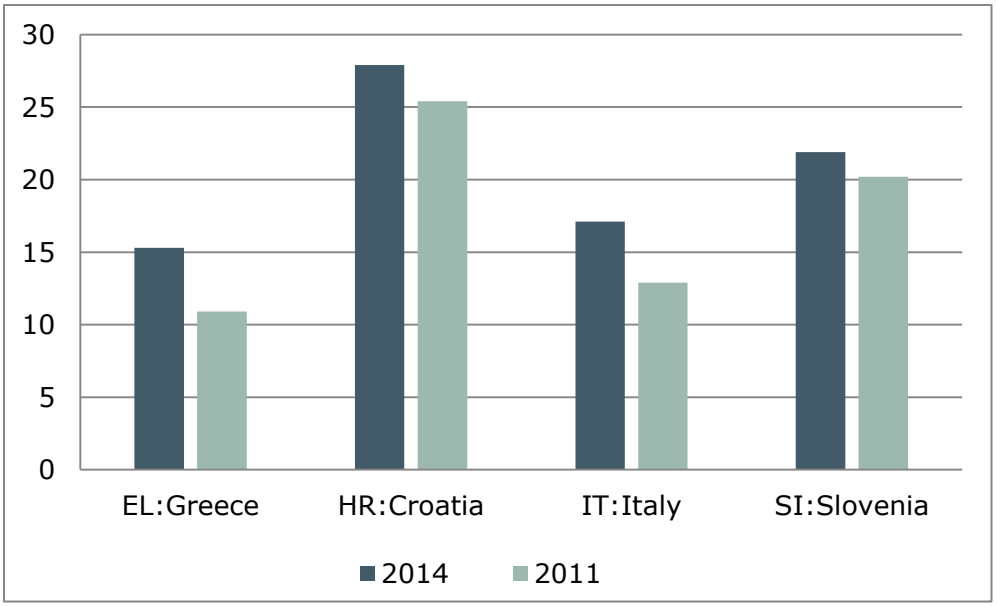
Table 2-13 shows the values of both indicators for the countries in the Adriatic-Ionian Sea Region.

Table 2-13: Shares of renewables in primary energy supply and in consumption, 2014. Source: Eurostat, OECD

Country	Share of renewables in primary supply, %	Share of renewables in final consumption, %
Albania	27.3	n/a
Bosnia and Herzegovina	25.6	n/a
Greece	10.6	15.3
Italy	18.1	17.1
Croatia	24.9	27.9
Montenegro	33.1	n/a
Serbia	15.1	n/a
Slovenia	18.4	21.9

Among the macro-region countries, Croatia and Slovenia show the highest shares both of renewable energy in final energy consumption and in primary supply. Greece on the other hand registers the lowest shares with 11% renewables in primary supply and 15% in consumption. All countries show improvement over time; Figure 2-29 shows how much lower these values were in 2011.

Figure 2-29: Renewable energy share in consumption, %. Source: Eurostat



All countries in the macro-region register a smaller share of renewables in primary energy supply compared to the share in the final energy consumption, except for Italy where it is an opposite situation to be noticed. The differences are small, below 5 percentage points. The share of renewables in primary

energy supply is in Italy higher by 1 percentage point compared to the share of renewables in final energy consumption.

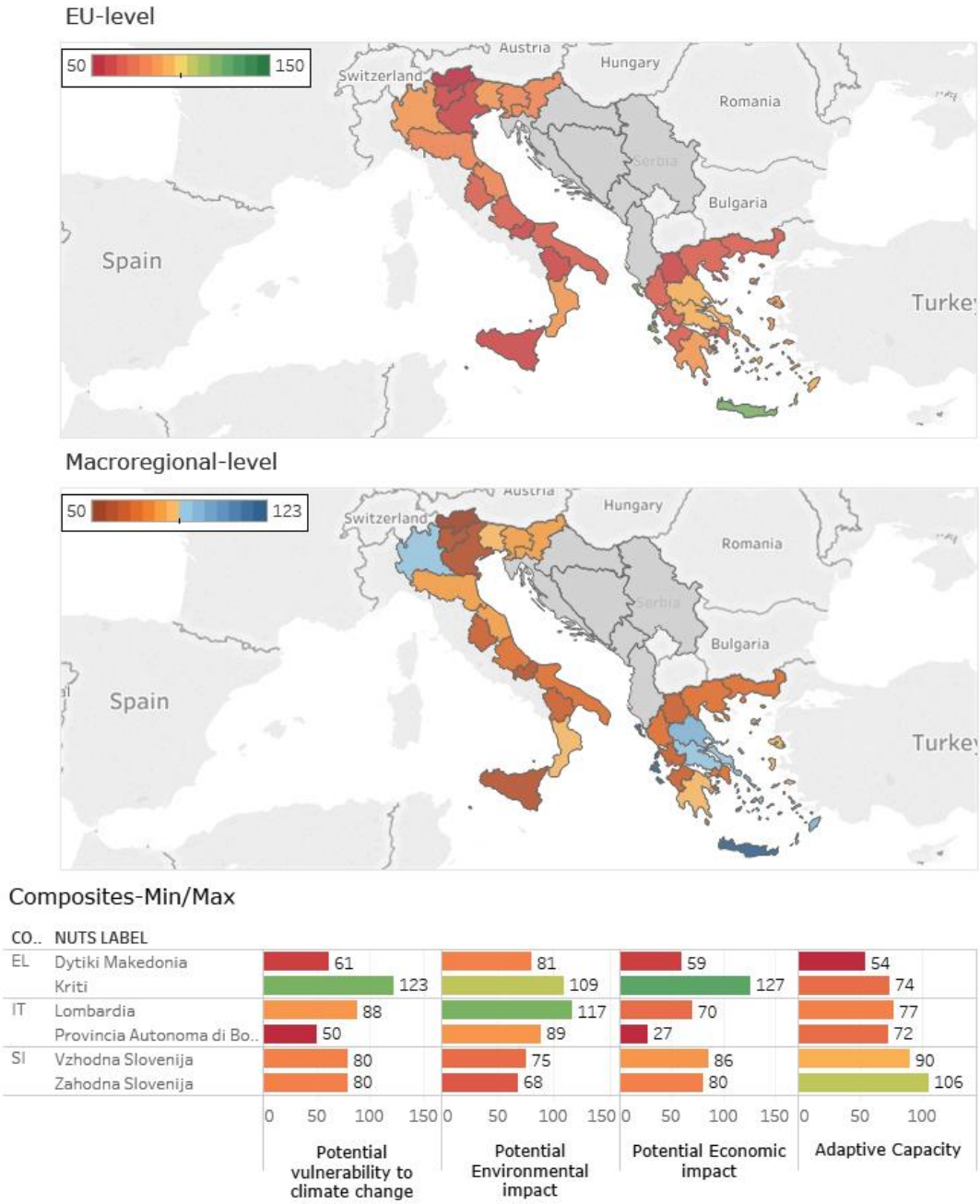
The benchmarked composite index for 2014 reveals the best performance in the macro-region on renewable energy use in Croatia, followed by Slovenia and Italy with above median index values (see Table 2-14). The lowest value is registered for Greece, just below the EU-median. This means that the region as a whole performs rather well in comparison with the EU-level benchmark.

Table 2-14: Benchmarked values of the Renewable Energy Use Index for the Adriatic-Ionian Sea Region.

Country	Benchmarked Renewable Energy Index
Greece	98
Croatia	122
Italy	108
Slovenia	111

2.5.10 Climate Change: Adaptation

Figure 2-30: Potential Climate Change Vulnerability by NUTS-2, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components. The analysis is from 2011, but the climate simulation for 2071-2100.



Text Box 2-24: Explanation of the indicator: 'Climate Change Adaptation

Climate change can be influenced by territorial development. Thus climate change mirrors territorial development which on the other hand can lower regional vulnerability to climate change (Schmidt-Thome and Greiving, 2013)[71]. Territorial development can contribute to developing climate change mitigation and adaptation capacities to cope with the influence of climate change (IPCC, 2007)[72]. Therefore, the ESPON Climate project calculated the potential impacts on climate change as "a combination of regional exposure and sensitivities to climate change"[73]. The exposure analysis made use of existing projections on climate change and climate variability from the CCLM climate model, which has also been used by the Intergovernmental Panel on Climate Change (IPCC). The data have been aggregated for two time periods (1961-1990 and 2071-2100) for eight climate stimuli. A region's climate change sensitivity was calculated on the basis of several sensitivity dimensions - physical, environmental, social, cultural and economic. Together, exposure and sensitivity determine the possible impact that climatic changes may have on a region. For this analysis, the Environmental- and Economic Impact are analysed as a separate component.

The ESPON Climate project analyses how and to which degree climate change will impact on the competitiveness and cohesion of the European regions and Europe as a whole. Moreover, it investigates the ways in which policy can contribute to mitigate climate change, and to adapt to and manage those results of climate change that cannot be avoided. Based on these insights, the adaptive capacity was calculated as a weighted combination of most recent data an economic, infrastructure, technological, and institutional capacity as well as knowledge and awareness of climate change[74].

Due to the fact that the adaptive capacity enhances impacts of climate change, it feeds into a region's overall vulnerability to climate change. Combined with the five types of impacts (see above), the potential regional vulnerability has been calculated (Schmidt-Thome and Greiving, 2013).

ESPON Climate's approach of disaggregating the multitude of impacts as well as assessing these on a regional scale helps to shape concrete policy implications; as is also emphasised by the European Commission and its Green Paper "*Adapting to climate change in Europe*". Therefore, it is important to analyse climate change and territorial impacts on regions and local economies in Europe. In the following, a comparison of the vulnerability to climate change among the NUTS-2 regions of the macro-region is being performed. For this analysis, NUTS-3 data has been aggregated into NUTS-2 regions.

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[71] Schmidt-Thome P. and S. Greiving (2013) editors: European Climate Vulnerabilities and Adaptation: A Spatial Planning Perspective, published by John Wiley and Sons Ltd. UK. ISBN 978-0-470-97741-5

[72] IPCC (2007): Climate Change 2007, Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the IPCC (978 0521 88010-7 Hardback; 978 0521 70597-4 Paperback).

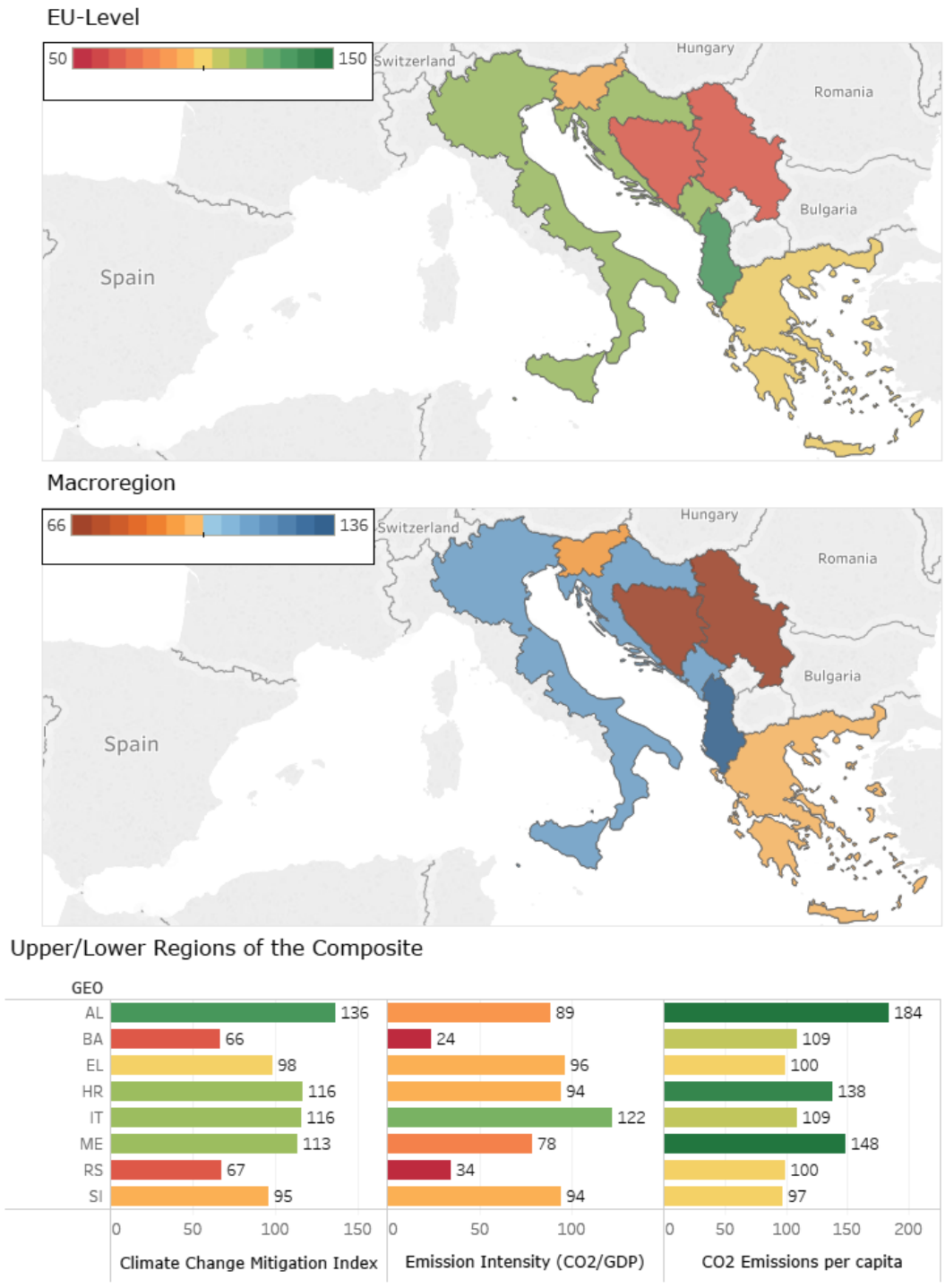
[73] URL: https://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/CLIMATE/ESPON_Climate_Final_Report-Part_A-ExecutiveSummary.pdf

[74] *See footnote above*

Potential Vulnerability	Italy scores the lowest on the benchmark in the macro-region, and has thus the highest potential vulnerability. The average score corresponds to 69 points on the benchmark. Notably, the region of Bozen/Bolzano scores as low as the most vulnerable Member State of the EU. Similarly, the Greek NUTS-2 regions score largely below the EU-median. However, the regions in the Ionian Sea belong to the least vulnerable ones in the EU. Ignoring these two high scores, Greece scores with an average of 77 the lowest in the macro-region. Slovenia, scores with both regions in the solid bottom half.
Environmental Impact	The ESPON Climate study evaluates that environmental changes are mainly consisting of potential changes in summer and winter precipitation, annual mean temperature and annual mean evaporation in the environment. The average potential environmental impact is most severe in Greece, where the average score on the benchmark is 81 points. The most affected region in Greece is Dytiki Ellada with a score of 56, separating it by 13 points from the next less affected region. Again, the regions in the Ionian Sea (Kriti with 109 points and Ionia Nisia with 98) are the least affected ones. Italy scores on average 90 points. The most affected regions are Molise (68) and Trento (73), and are separated by 8 points from the next most affected region. The impacts correspond to the EU-median for 5 regions (ranging from 94 to 105), and Lombardia even scores 117 points.
Economic Impact	Climate change can induce natural disasters with major economic and budgetary consequences. The economic impacts will be the most severe in this macro-region in Italy, scoring an average of 63 points on the benchmark. Five regions score below 60, with Bolzano/Bozen at the bottom end with a score of 27 (and a distance of 23 points to the second most impacted region). No region scores more than 75 points. From an economic perspective, interventions building strong resilience in all the regions is thus very important. The picture is in Greece much less dramatic, as the average score is 90. 6 out of 13 regions score 94 and above, of which Voreio Aigaio, Ionia Nisia, Kriti, and Notio Aigaio score between 118 and 134 points. However, the remaining regions score between 72 and 59, and are thus likely exposed to high economic costs, calling again for building strong resilience.
Adaptive Capacity	Adaptive capacity measures the ability of a system to adapt to disturbances and its capability to respond to changes. This concept, in recent years, has become synonymous to a yardstick of effective environmental governance. This unique measure offers a combination of various indicators to calculate the robustness of the society faced with change. While the Slovenian regions' adaptive capacity corresponds to the EU-median, Italy and Greece both have a very low capacity: Both score on average 65 and 63 and have each a region with the lowest capacity possible (Sterea Ellada and Calabria). Furthermore, Italy's score does not reach beyond 77 and Greece respectively 84. In conclusion, Greece and Italy are both potentially highly affected by climate change, and have at the same time a poor adaptive capacity.

2.5.11 Climate Change: Mitigation

Figure 2-31: Climate Change Mitigation by Country, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-25: Explanation of indicator: 'Climate Change Mitigation'

The composite indicator for climate change mitigation is an average of two benchmarked indicators:
CO_2 emissions per capita.
CO_2 emissions per unit of GDP.
The first indicator, CO_2 emissions per capita, shows the average emissions per person in each country. This allows comparison on countries on equal terms. There is no regional data available since emissions are reported on a national level. Therefore, country level data was sourced from the World Bank's World Development Indicators database. The indicator name and code in the database: *CO_2 emissions (metric tons per capita) (EN.ATM.CO2E.PC)*. Latest available year for this indicator is 2013.
The second indicator, CO_2 emissions per unit of GDP, shows the carbon intensity of the economy: that is how much CO_2 is emitted for a monetary unit of GDP produced. There is no regional data available, since emissions are reported on a national level. Therefore, country level data was sourced from the World Bank's World Development Indicators database. The indicator name and code in the database: *CO_2 emissions (kg per 2010 US$ of GDP) (EN.ATM.CO2E.KD.GD).*
Latest available year for this indicator is 2013.
Benchmarking: both indicators were benchmarked against the EU-level median, highest and lowest performing countries. Since the lower values of emissions are preferred, the scale was inverted during benchmarking. The resulting benchmarked figures therefore indicate better performance with higher values.

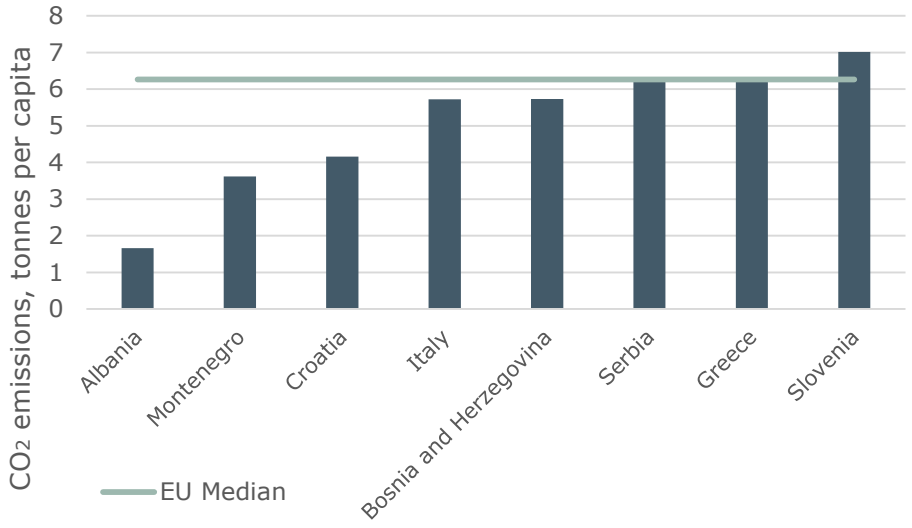
For the Climate Change Mitigation theme, two indicators were selected: CO_2 Emissions per capita and *CO_2* Emissions per unit of GDP. While several gases contribute to greenhouse gas emissions, CO_2 represents its main component in most sectors, and over 80% in the EU[75]. For a description of indicators used, see Text Box 2-25.

Among the EU countries, Luxembourg has the highest level of CO_2 emissions per capita, at over 18 tonnes per average inhabitant. Meanwhile Latvia emits the lowest amount, at 3.5 tonnes of CO_2 per capita. When CO_2 emissions are expressed per unit of GDP, Sweden is the leader in the EU at only 87 kilograms per thousand US$ of GDP, according to the World Bank data. For this indicator, Estonia scores worst, emitting 10 times more CO_2 than Sweden per unit of economic production.

In the Adriatic and Ionian macro-region countries, CO_2 emissions per capita are mostly around or below the EU-median (see Figure 2-32). Only in Slovenia the value is somewhat higher. On the other hand, Albania's value is in fact lower than the lowest emission per capita value in the EU. The region as a whole performs very well on this indicator.

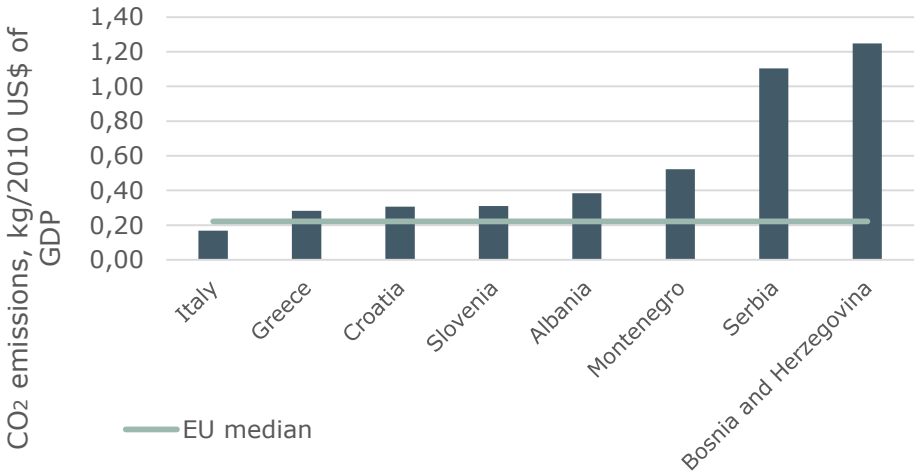
[75] http://ec.europa.eu/eurostat/web/environment/emissions-of-greenhouse-gases-and-air-pollutants/air-emission-accounts/database

Figure 2-32: CO_2 emissions per capita (tonnes), in the Adriatic and Ionian macro-region, 2013. Source: World Bank



A look at the emissions per unit of GDP (Figure 2-33) shows that Italy has the best, while Bosnia-Herzegovina and Serbia have the worst performance in the macro-region. In fact, CO_2 emissions per unit of GDP are higher in these countries than the worst-performing EU value. Meanwhile the rest of the countries lie somewhere between the EU-median and EU's highest emission value.

Figure 2-33: CO_2 emissions in kg per 2010 US$ of GDP, in the Adriatic and Ionian macro-region, 2013. Source: World Bank

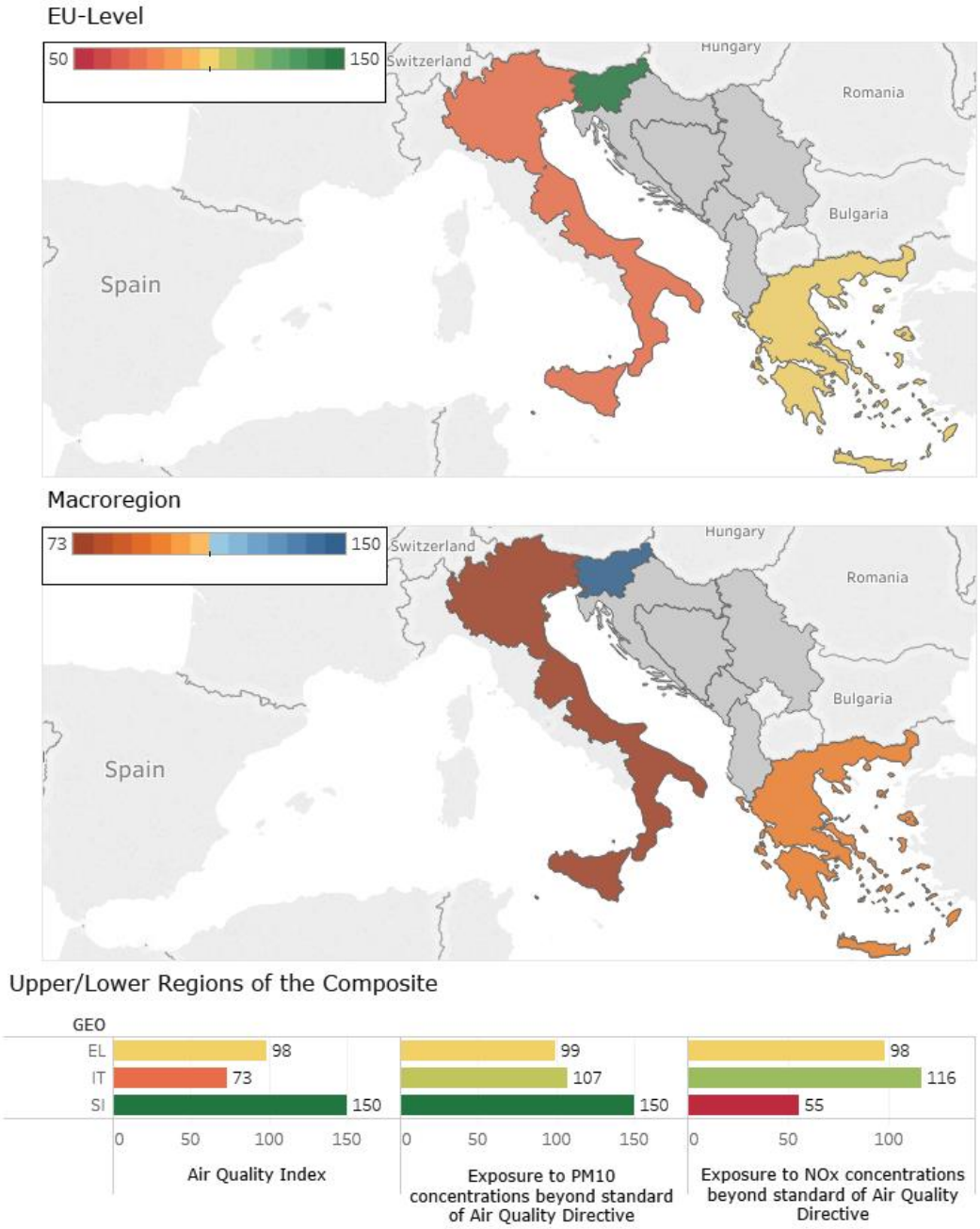


The benchmarked composite indicator which bundles the two indicators indicates the best overall situation regarding the CO_2 emissions in 2013 in Albania, followed by Croatia, Italy and Montenegro, all exhibiting values above the EU-median. A slightly below median performance of this indicator is to be found in

Slovenia and Greece. The lowest performers are Bosnia and Herzegovina and Serbia.

2.5.12 Environment: Air Quality

Figure 2-34: Air Quality Index by country in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-26: Explanation of the indicator: 'Air Quality'

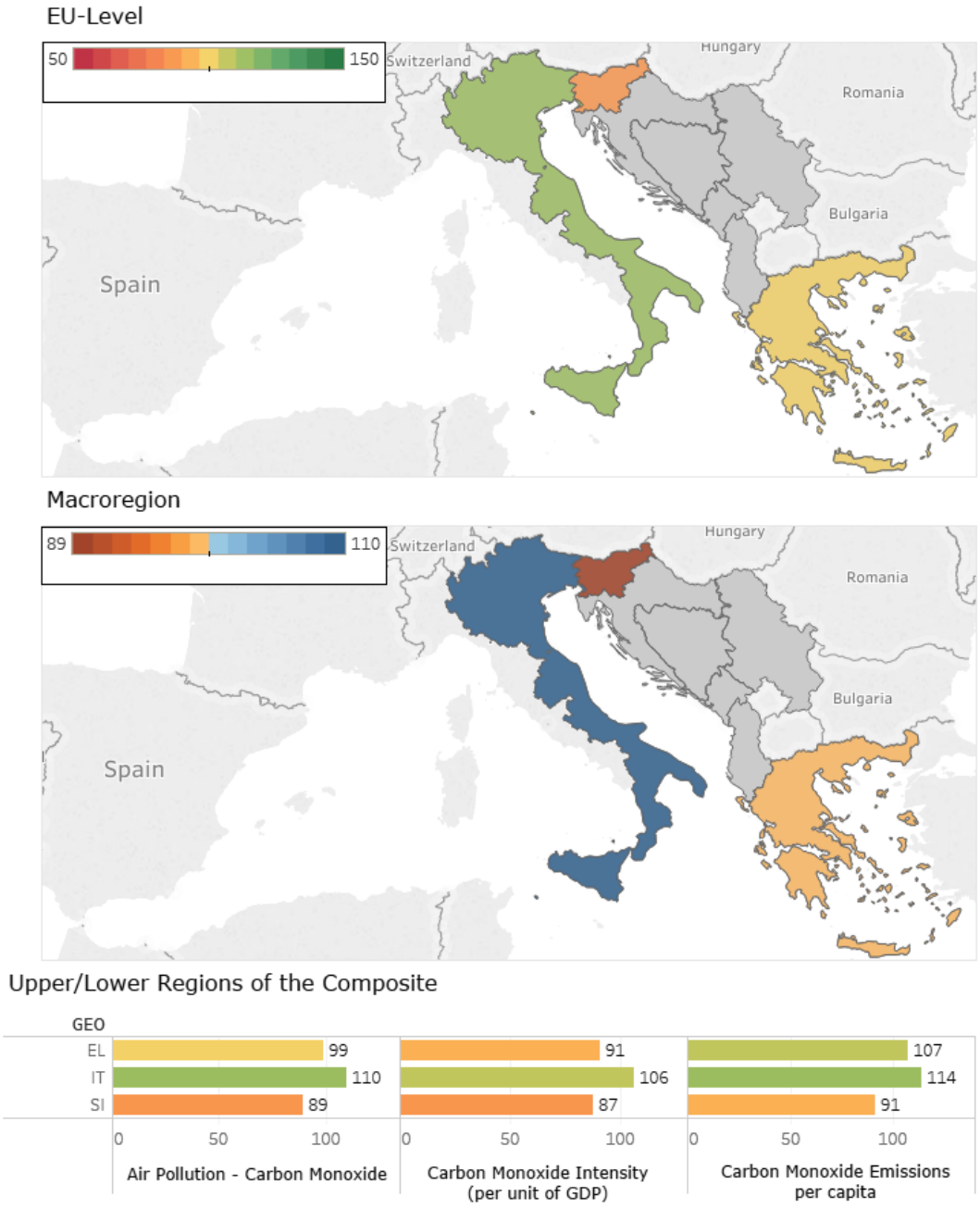
The theme Environment – Air Quality consists of 2 indicators: Share of urban population exposed to PM_{10} (particulate matter) above regulated threshold and Share of urban population exposed to NO_2 (nitrogen dioxide) above regulated threshold.
There are several air pollutants that have an adverse impact on human's health. The difference between PM_{10} and $PM_{2.5}$ is their size (in microns). These pollutants include dust, coming from construction, coal plants, bacteria and other organic dust. PM_{10} means all particles in size below 10 microns, while $PM_{2.5}$ means particles under 2.5 microns in size. Hence $PM_{2.5}$ is included in PM_{10}, and only the latter is used in this analysis. PM does not include gases like SOx and NOx; their concentration is calculated separately. While PM_{10} particles can penetrate only lungs, smaller $PM_{2.5}$ particles (visible only in electronic microscope) can pass from lungs into the blood supply.
The PM_{10} monitoring data at EEA – AirBase provide the basis for estimating the exposure of the urban European population to values of the PM_{10} higher than the daily limit value stipulated under the Air Quality Directive. This is set at 50 µg/m3 and should not be exceeded on more than 35 days during a calendar year. The exposure is estimated based upon PM_{10} measured at all urban and suburban background monitoring stations for most of the urban population, and at traffic stations for populations living within 100 meters from major roads.

Data for only three countries is available in the Adriatic-Ionian Sea macro-region. The most exposed country to PM_{10} in 2014 in this macro-region is Italy with 39% of population exposed to concentrations above the reference level for PM_{10}. Greece and Slovenia follow with very low levels (2% and 0% of population). Similarly, the exposure to NO_2 is high for Italy (15% of population) and low for Greece (2%) and Slovenia (0%).

The composite indicator combining the two indicators shows Slovenia followed by Greece as best performers. Both have values better than the EU-level median. The lowest performer is Italy, relatively far below the EU-median benchmark.

2.5.13 Environment: Air Pollution

Figure 2-35: Air Pollution Index by country in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-27: Explanation of the indicator: 'Air Pollution'

> The theme Environment – Air Quality consists of 2 indicators: carbon monoxide emissions per capita and carbon monoxide emissions per 1000 USD GDP.
> To compare the carbon monoxide emissions per capita and per unit of GDP (Kg per 1000 USD) of the individual European macro-region countries, data from the Organisation for Economic Co-operation and Development (OECD) has been used. Although data have not been available for the same year for every country in the analysis, the comparison gives a picture of the situation. However, only three countries in the macro-region are covered by the dataset.

CO emissions per capita

The countries of the Adriatic Ionian macro-region produced a combined amount of 150.44 kg carbon monoxide emissions per capita in 2011. Italy performs best with 41.60 kg emissions per capita. Greece follows with 44.52 kg per capita. Slovenia shows the highest value for this indicator with 64.32 kg per capita.

In 2014, the total outcome of carbon monoxide emissions dropped by 13% to a combined amount of 131.12 kg per capita. However within the macro-region Italy remains the best performing country with 38.06 kg per capita, followed by Greece (40.65 kg per capita) and Slovenia (52.41 kg per capita).

CO per unit GDP

The countries of the macro-region produced a combined amount of 5.23 kg carbon monoxide emissions per 1000 USD GDP in 2011. Best performing is Italy with 1.22 kg carbon monoxide emissions per 1000 GDP USD, followed by Greece with 1.69 kg per 1000 USD GDP. Slovenia registers with 2.32 kg per 1000 USD GDP the highest value for this indicator in the macro-region. From 2011 to 2014, Italy and Slovenia were able to reduce their carbon monoxide emissions, while Greece increased its amount of produced emissions. However, the combined outcoming carbon monoxide emissions still decreased by 7% in the macro-region in comparison to 2011.

Italy was able to hold its leading position with a value of 1.19 kg per 1000 USD GDP in 2014. Even though the emissions of Greece increased in 2014, the country's performance was still better than that of Slovenia with values of 1.75 and 1.91 kg carbon monoxide emissions per 1000 USD GDP.

Composite

The composite indicator combining the two indicators shows for 2014 Italy and Greece as best performers. They both have values better or around the EU-average. The lowest performer was Slovenia. Compared to the year 2011 the ranking did not change. Note that the benchmarking inverts the scale, so that higher values indicate lower emissions.

2.5.14 Environment: Waterbodies

Text Box 2-28: Explanation of the indicator: 'Waterbodies'

Anthropogenic activities adversely impact the waterbodies of Europe; mostly through the use pesticides and fertilisers in agriculture. Of which the latte leads to eutrophication of waterbodies, which negatively impacts the aquatic biodiversity, due to an excessive bloom of algae's.

In order to improve European Waterbodies, the EU commissioned the Water Framework Directive, which requires the Member States to achieve at least "Good Ecological Status" and "Good Chemical Status" of surface waters[1]. Ecological Status refers to biological and hydrological quality of the water, and its "chemical characteristics"[1]. The ecological status can be classified into four categories: High, Good, Moderate, and Poor. The chemical status describes in turn the water's quality in terms of it content of chemical substances, and is classified as either Good or Fail.

The categories of surface waters under this directive are coastal waters, transitional waters, rivers, and lakes.

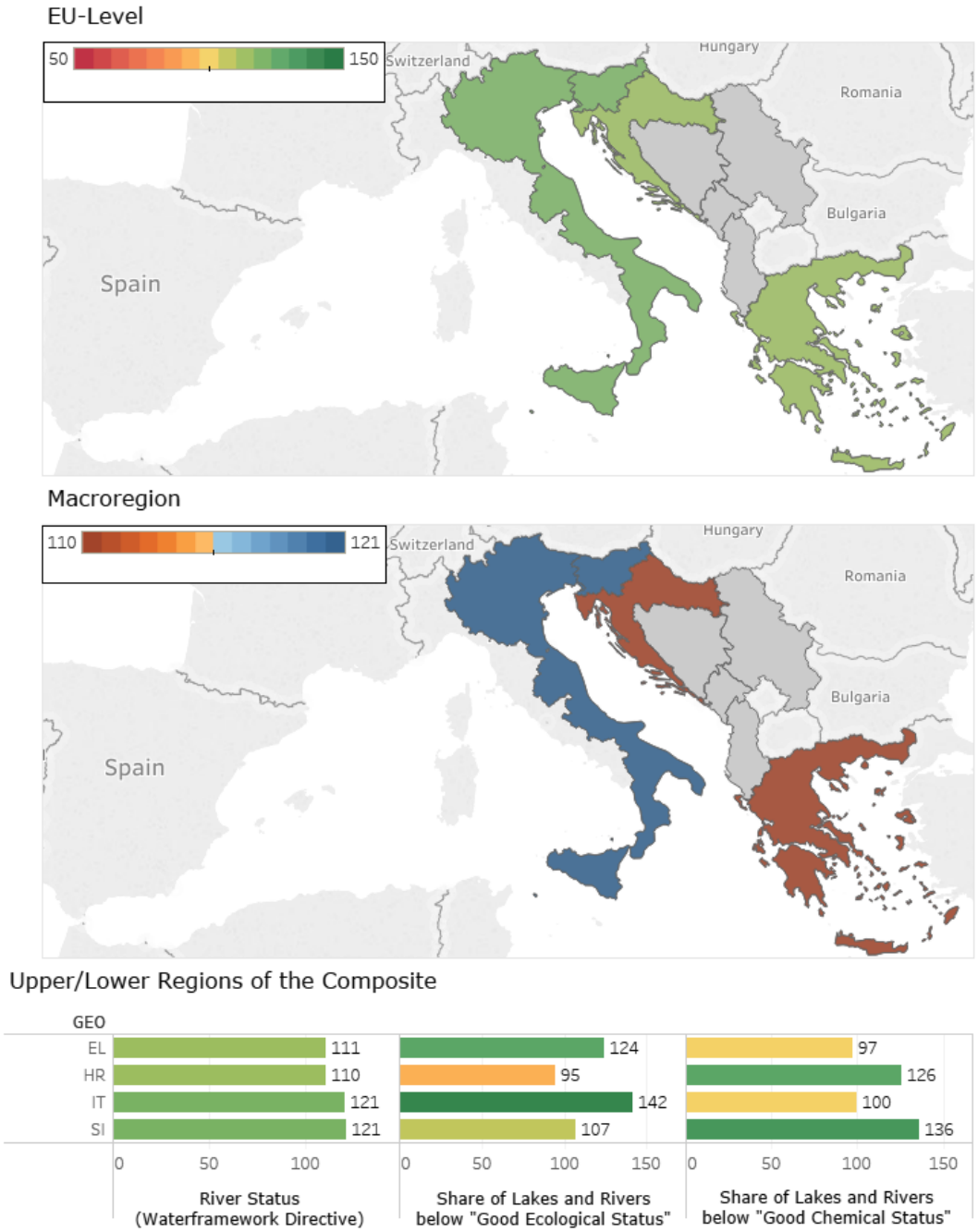
The Directive set 2015 as the year, until which all waterbodies had to achieve a good status. However, this was not achieved, and a re-drafting of the Water Framework Directive is scheduled before the end of this decade.

Fertiliser inputs from agriculture may also stream down into open seas. The resulting increased Nitrogen and Phosphorus concentrations promote the growth of phytoplankton. In order to estimate the biomass of phytoplankton, chlorophyll-a concentrations in water provide reliable inference [1]

The indicators in this section assess the share of waterbodies that are below good status. This is done for inland waterbodies (rivers and lakes) and sea waters (coastal and transitional waters) separately. For sea waters, also the chlorophyll-a concentrations are benchmarked.

Environment: River Status

Figure 2-36: River Status by country, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components.

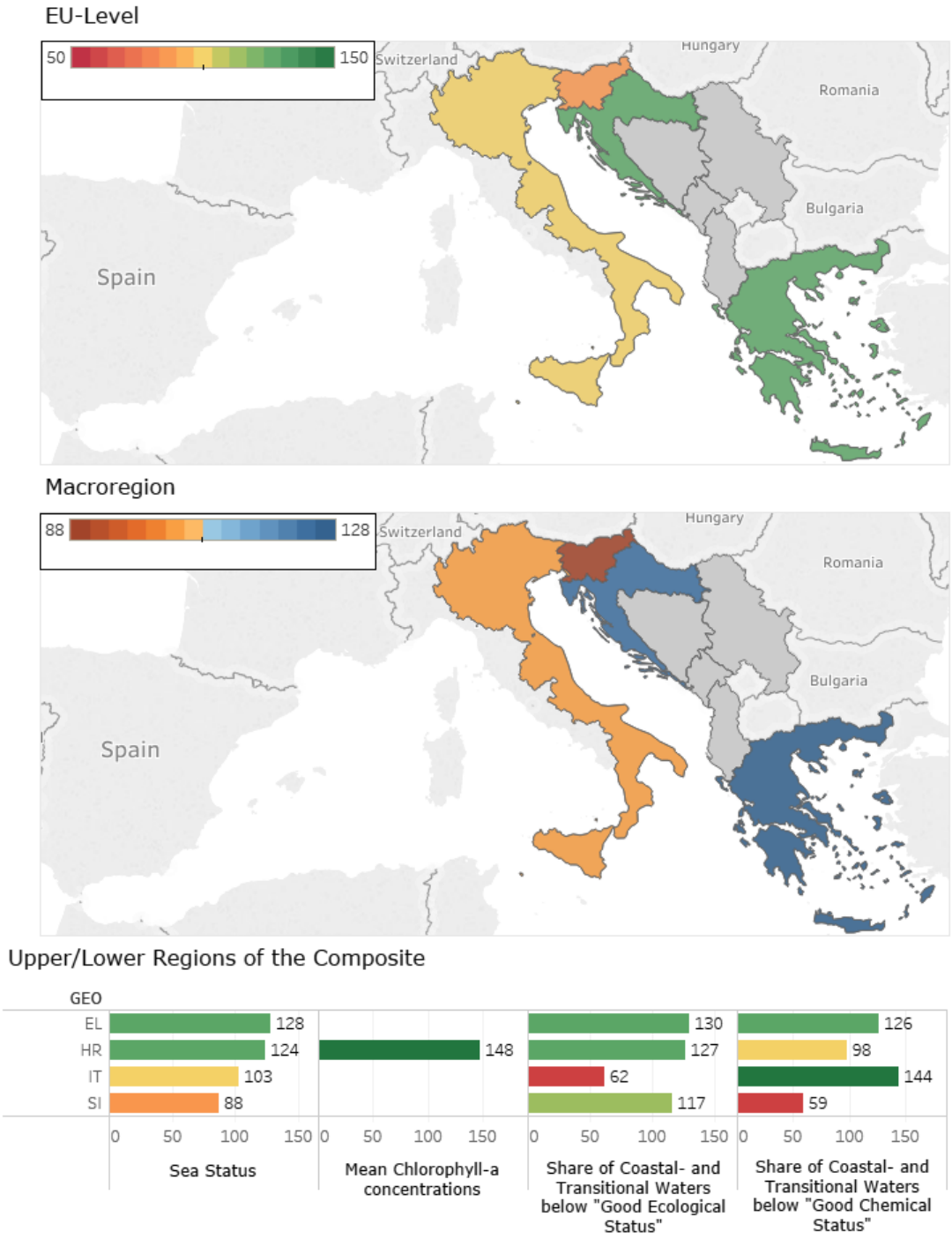


The countries of this macro-region show overall a strong performance on the Water Framework Directive, when benchmarked to the EU-wide status. All four Member States score above the EU-median, with at least 110 points. When looking at the 'share of Lakes and Rivers below "Good Ecological Status"', all countries, except Croatia, score above the median. Expressed in actual shares, Italy has 23.1% of its Rivers and Lakes below "Good Ecological Status". In Slovenia, even only 13.7% of its lakes are below "Good Ecological Status".

When considering the chemical status of rivers and lakes, Greece and Italy have the lowest share of Lakes and Rivers below "Good Chemical Status", scoring around the EU-median. In relative terms, Greece has a roughly twice the share of inland waters with failing chemical quality than Italy. Both new Member States perform in turn very strong on the benchmark, and exhibit share with failing chemical quality below 1%.

Environment: Sea Status

Figure 2-37: Sea Status by country, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components.

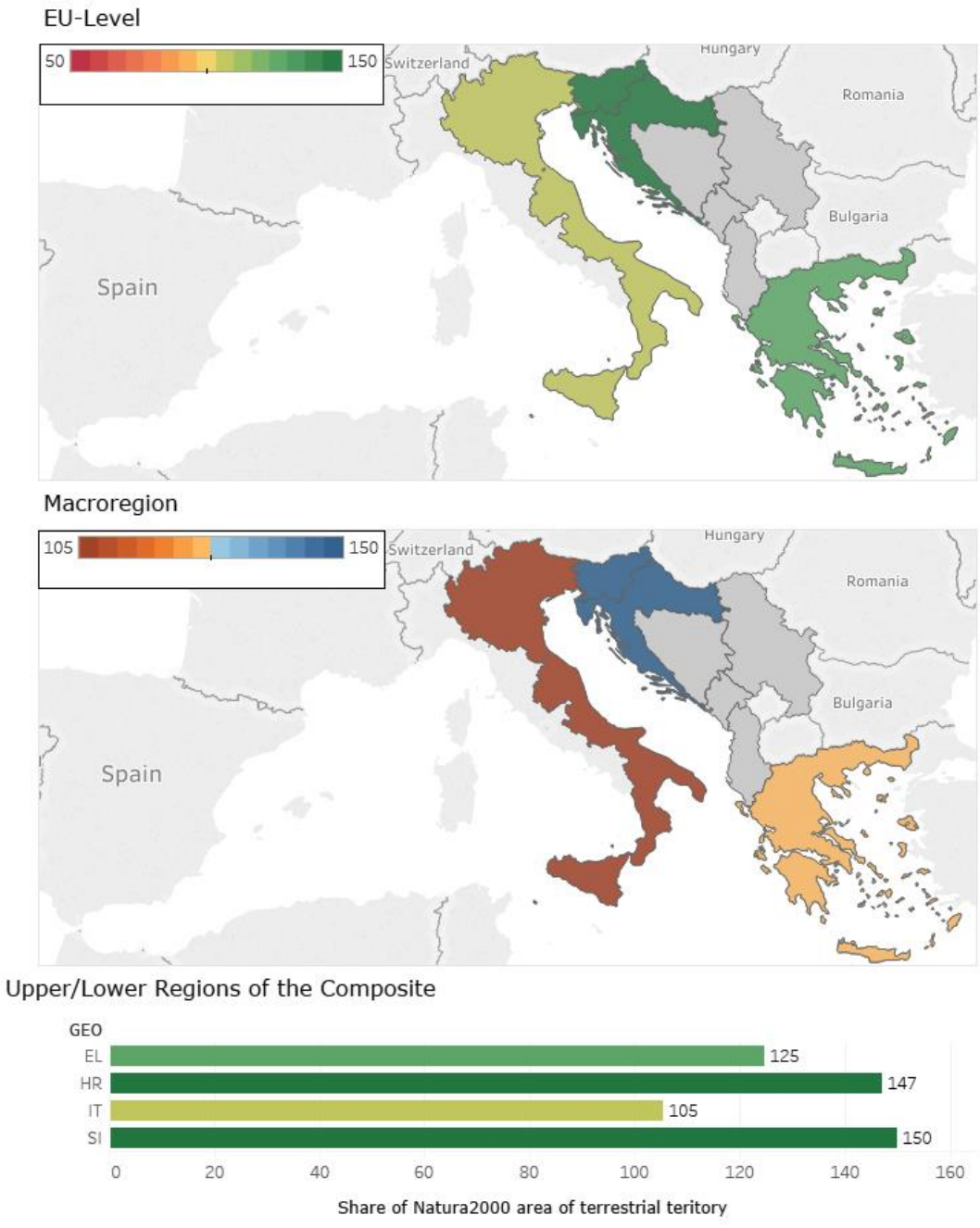


The status of waterbodies in the sea is comparably less sound. Slovenia scores 88 points (compared to 121 in inland waterbodies). Nevertheless, the majority performs (significantly) better than the EU-median. The data availability for chlorophyll-a concentrations in country's waters is very low: Only Croatia could be benchmarked. However, Croatia performs nearly as high as the EU's top performer. This high score compensates on Croatia's otherwise median performance on the chemical status.

The share of ecological status of transitional and coastal water is the best in Greece and Croatia and the lowest in Italy. The chemical quality is the lowest in Slovenia with 83% fails and the best in Italy with less than 1% fails. The other countries show also a good chemical quality of sea water.

2.5.15 Biodiversity: Natura 2000

Figure 2-38: Natura 2000 share by country in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the benchmarked values for each country.



Text Box 2-29: Explanation of the indicator: 'Natura 2000'

The indicator shows what proportion of territory is covered by terrestrial Natura 2000 sites at the country level. This gives an indication of a country's efforts towards biodiversity, conservation and sustainable use of its territorial areas. It includes both sites designated under the Birds and the Habitats Directives, and accounts for any overlaps. The marine areas are not included in the proportion of land area, although some countries have designated substantial marine zones as Natura 2000 sites.

The indicator is published in the Natura 2000 Barometer (for the current value at the end of 2015) and the Natura Newsletter for other years.

Albania, Montenegro, Serbia and Bosnia-Herzegovina are not included in the Natura 2000 Barometer data set.

Natura 2000 is "a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right."[76] It covers both terrestrial and marine zones in all 28 EU countries. The network includes sites designated under the Birds Directive and under the Habitats Directive. The indicator used is the proportion of land area covered by Natura 2000 sites under both Directives (see Text Box 2-29).

In the EU as a whole, 18% of land area is designated as Natura 2000 sites. The top performer in the EU is Slovenia with nearly 38% of its area designated as either Sites of Community Importance under the Habitats Directive, or Special Protection Areas under the Birds Directive (or both). Denmark, on the other hand, has only 8.3% if its area designated as Natura 2000 sites. The EU-median is 17%. These values are used for benchmarking the values of each country.

In the Adriatic Ionian Sea macro-region, all countries have designated large parts of their territory as Natura 2000 sites and all score above the EU-median value, as shown in Table 2-15. The region has the two top performers of the EU, Slovenia and Croatia. All the four countries have also designated marine sites that are not considered in the indicator.

Table 2-15: Indicator and benchmarked indicator values for Natura 2000 indicator

Country	% of territory designated as Natura 2000 site	Benchmarked value
Greece	27	125
Croatia	37	147
Italy	19	105
Slovenia	38	150

[76] http://ec.europa.eu/environment/nature/natura2000/index_en.htm

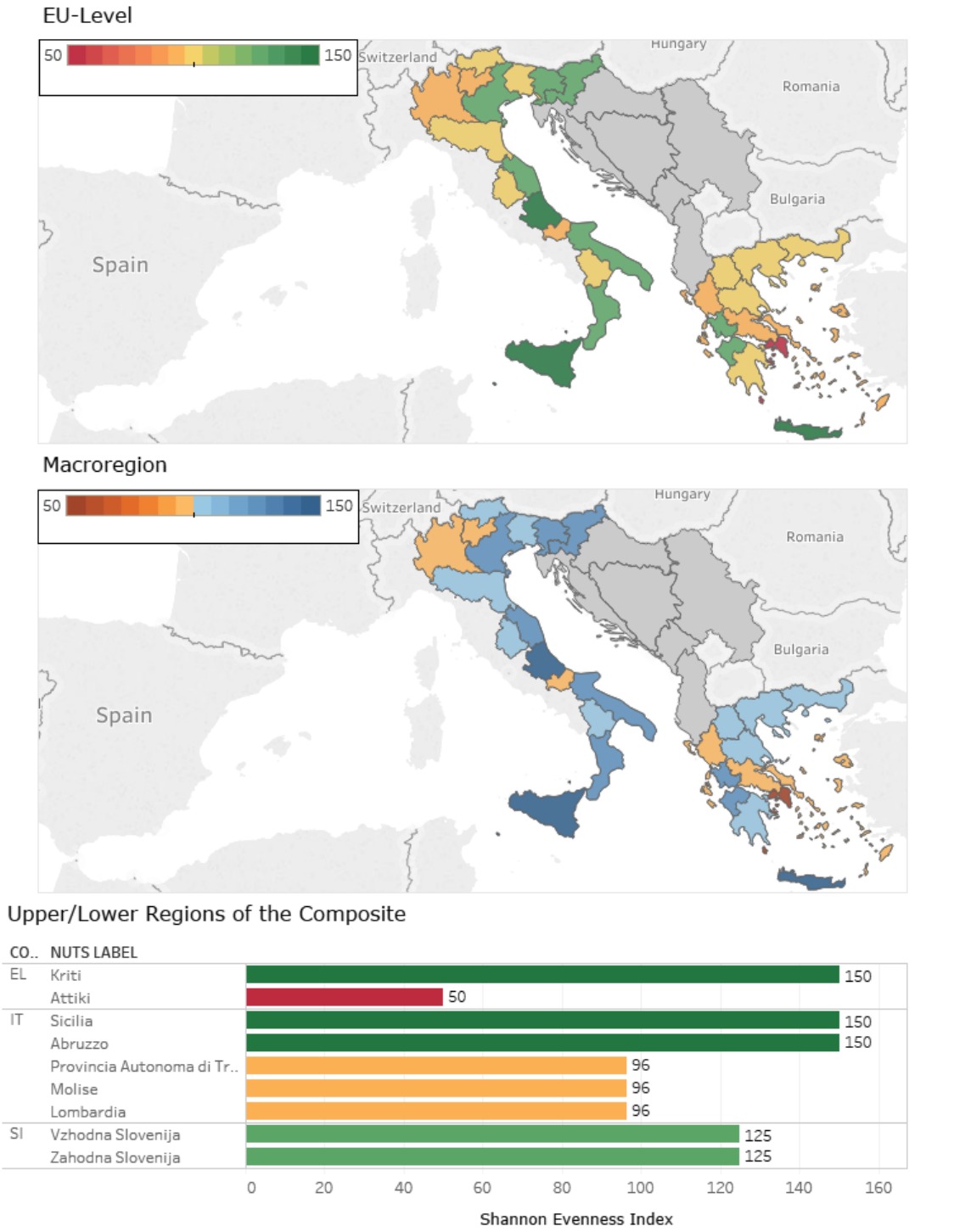
In comparison to the Member States of this macro-region, the enlargement countries have a substantially lower share for 2007, as the table below shows: Merely 4.5% on average, which is about five times smaller than the Member State average. Yet, it should be noted that this data is three years older, and thus not well-comparable.

Table 2-16: Share of territory as designated area in 2007 by country-level. Source: EEA.

	% of territory as designated area
Bosnia Herzegovina	0.8
Serbia	7.0

2.5.16 Diversity of Land Cover (Shannon Evenness Index)

Figure 2-39: Shannon Evenness Index by NUTS-2 level regions in 2012, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions



Text Box 2-30: Explanation of the indicator: 'Shannon Evenness Index'

Shannon Evenness Index (SEI) used here was obtained from the LUCAS survey data. LUCAS is carried out in the EU countries.

This index takes values between 0 and 1, where 0 represents a completely homogenous landscape, i.e. where all area has only one type of land cover. On the other hand, the value of 1 represents a perfectly heterogeneous landscape, where all considered land cover types are present at equal amounts. Therefore when interpreting the values of this index, the higher values indicate higher land cover diversity. The indicator does not by itself provide a value judgement of different landscape types.

Data is available for all EU Member States in the macro-region, except Croatia, as it was gathered before Croatia's accession to the EU. Data is not available for Albania, Serbia, Montenegro and Bosnia and Herzegovina.

Note that due to the categorisation of data from the source, several regions score the same value on the benchmark. As a result, too many regions qualify as top or bottom scorers to be displayed in the bottom part of the figure.

Diversity of land cover refers to the number of different types of landscape present within a certain area. Some countries or regions might have vast areas covered with the same type of cover, others might consist of many smaller areas with a variety of types of land cover and land use.[77] Eurostat's land use/cover area frame survey (LUCAS) gathers data on land use cover, by direct observation in the field.[78] The survey is carried out every three years in all EU Member States, with latest survey conducted in 2015. However the latest published survey is from 2012, carried out in 27 EU countries, before Croatia's accession. From the data gathered in these surveys, a measure on landscape diversity – Shannon Evenness Index – can be inferred. See more about the indicator in Text Box 2-30. At the EU level this index was 0.7 according to the 2012 survey, varying from around 0.4 to over 0.8 on a NUTS-2 region level.

In this macro-region the highest Shannon Evenness Index (SEI) values are observed in Italy, specifically in Abruzzo and Sicilia, with values above 0.8. These are also among the most diverse regions in Europe, boasting both mountains and coastal areas. Similarly in Greece, the most diverse landscape is that of Kriti region (Crete island). On the other end of the spectrum, both in Greece and in the macro-region, is the Attiki region, which is home to the metropolitan area of Athens. SEI here is 0.58, making Greece the most varied country in terms of regional values of this indicator. Both Slovenian regions are similar and close to the EU-level SEI.

[77] http://ec.europa.eu/eurostat/statistics-explained/index.php/Land_cover_and_land_use_(LUCAS)_statistics

[78] http://ec.europa.eu/eurostat/web/lucas/methodology

2.5.17 Biodiversity: Coverage of marine protected areas in Europe's seas

Text Box 2-31: Indicator: Coverage of marine protected areas

There are three different indicators available from the European Environment Agency. The first one shows the share of the area within a distance up to one nautical mile away from the coast which is covered by Marine Protected Areas (MPAs). The second and third indicators explain the same issue but refer to the zones one to twelve nautical miles from coast and over twelve nautical miles respectively (EEA). All these indicators concern seas which border on the European countries and the marine protected areas can therefore be assigned to the Baltic and Adriatic Ionian macro-regions, depending on the assessment area in question. Specifically, in accordance with the borders the Baltic Sea can be assigned to the Baltic macro-region, while the Mediterranean Sea sub-regions can be assigned to the Adriatic Ionian macro-region.

All data is provided for the year 2012.

Table 2-17 shows the proportion of sea area that is designated as marine protected area in the assessment area regions relevant to the Adriatic-Ionian Sea Region. It also includes other regions for comparison.

Table 2-17: Coverage of marine protected areas in 2012. Source: EEA; NM-nautical miles

Macro-region	MPA assessment area regions and sub-regions	% of 0-1 NM zone covered by MPAs	% of 1-12 NM zone covered by MPAs	% of 12 NM-END zone covered by MPAs
Baltic Sea macro-region	**Baltic sea**	36,1	16,4	3,9
	North-east Atlantic Ocean (excl. Icelandic, Norwegian & Barents seas)	52,1	16,4	2,3
	Celtic Sea	47,5	8,9	2,3
	Greater North Sea	63,4	32,4	11,2
	Bay of Biscay and Iberian coast	48,9	15,8	1,7
	Macaronesia	28	4	0,6
Adriatic Ionian macro-region	**Mediterranean Sea**	30,6	14,2	6,1
	Western Mediterranean Sea	60,4	29,6	10,1
	Ionian and Central Mediterranean Sea	30,5	2,7	0
	Adriatic Sea	17	1,4	0
	Aegean and Levantine Sea	14,2	2,4	0
	Black Sea	77,9	19,3	0

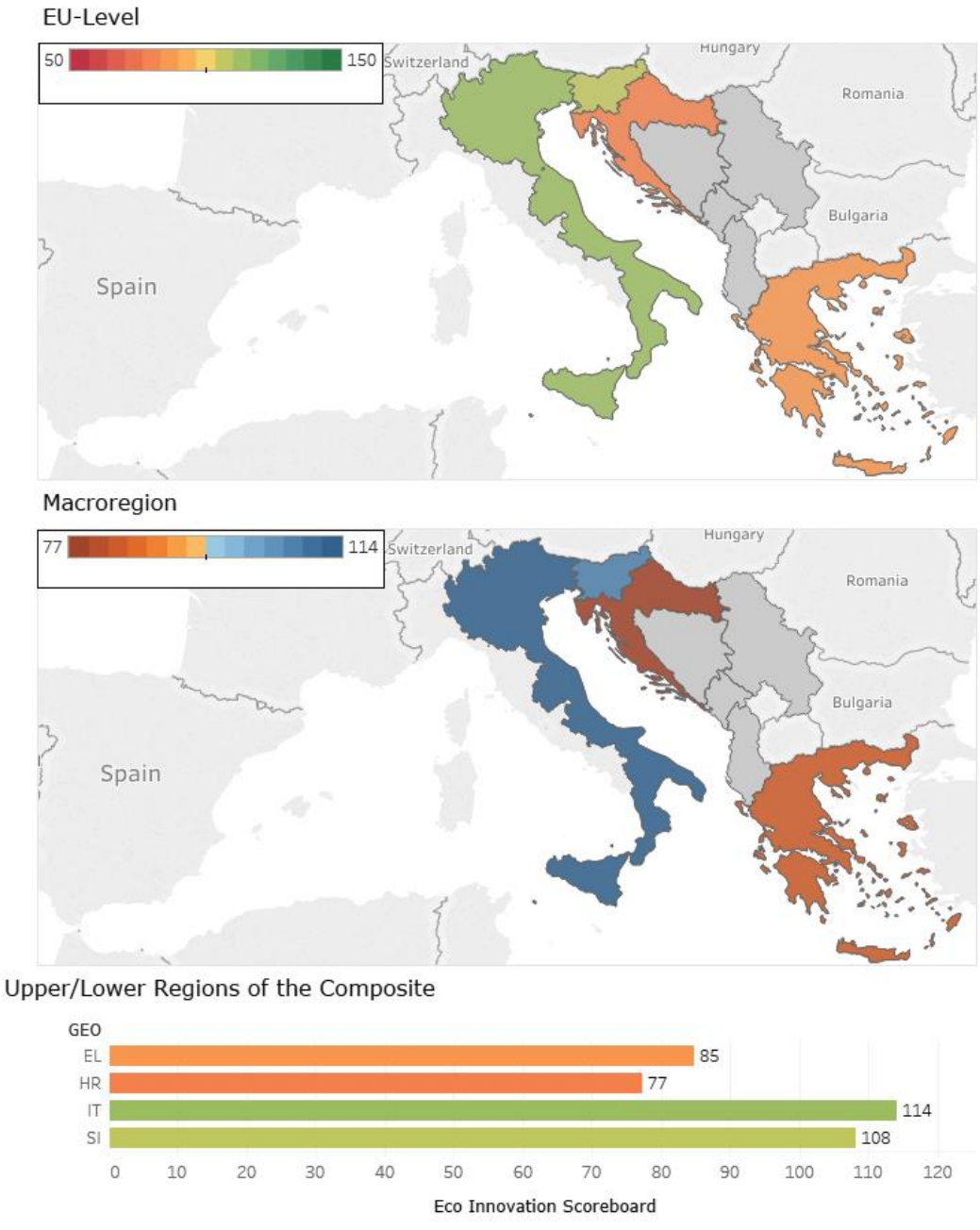
The first category, closest to the shore, is that with the highest proportion of Marine Protected areas. The seas bordering Adriatic-Ionian Sea region have 14-30% of that area designated as MPAs, which is lower compared with the Baltic Sea, as well as the Western Mediterranean Sea and Great North Sea which both have more than 60% of the area closest to the coastline designated as MPAs.

The next category refers to the zone between one and twelve nautical miles from the coast. The coverage of the marine protected areas in this category is around 1-3% for the seas bordering on the Adriatic Ionian region. This is low compared to other seas. Again the Western Mediterranean and the Great North Sea are the leaders in this respect. Meanwhile in the third category, more than twelve nautical miles from the coast, there are no designated MPAs in the seas bordering the Adriatic-Ionian macro-region.

Overall, further from the coast the values drop for all seas, but the tendency is more pronounced in the Adriatic-Ionian region seas.

2.5.18 Eco-Innovation Scoreboard

Figure 2-40: Eco Innovation Scoreboard by Country, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-32: Explanation of the indicator: 'Eco-Innovation Scoreboard'

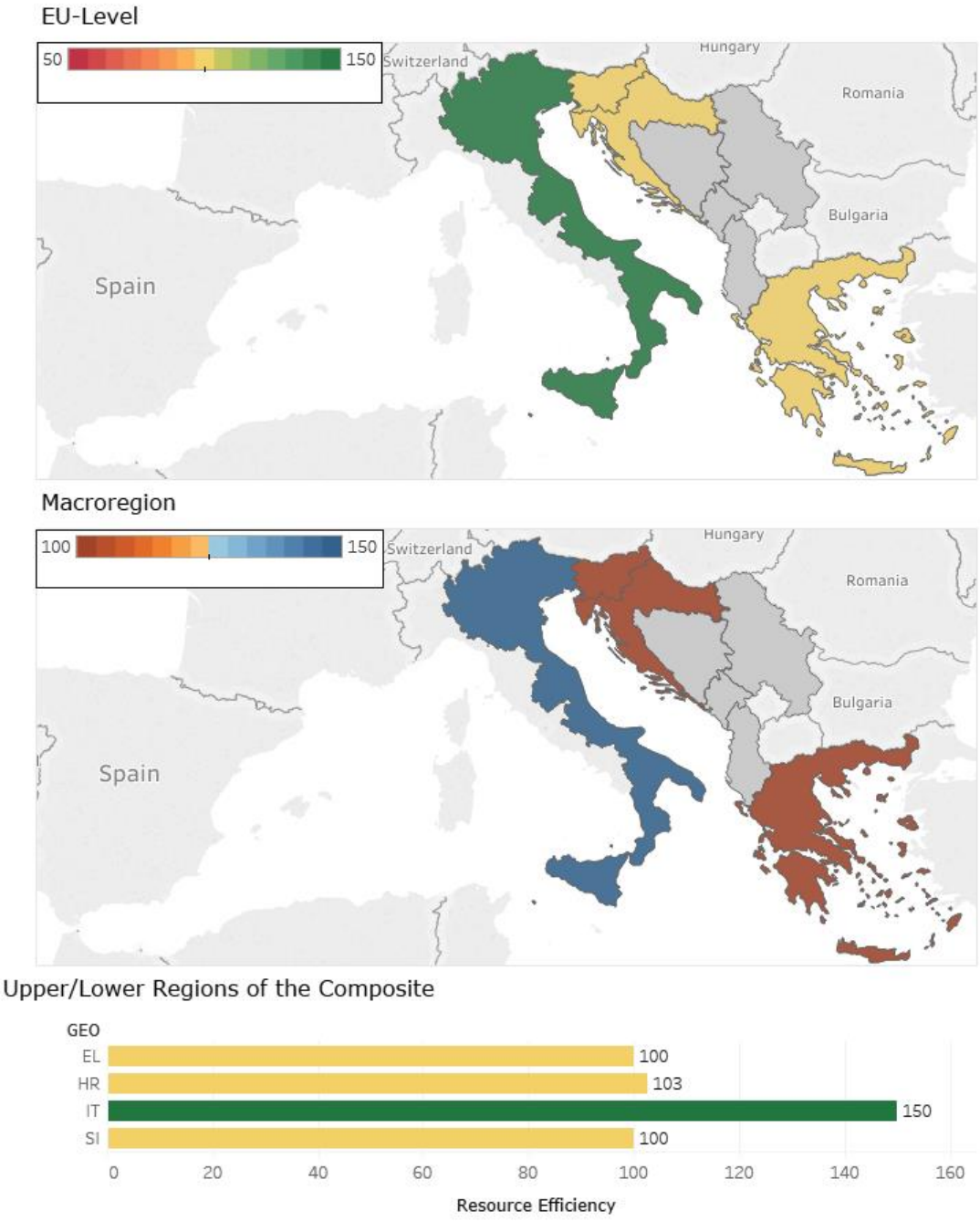
The Eco-Innovation Scoreboard (Eco-IS) and the Eco-Innovation Index measure the eco-innovation performance across the EU Member States. Different aspects of eco-innovation are measured by using 16 indicators grouped into five dimensions: eco-innovation inputs, eco-innovation activities, eco-innovation outputs, resource efficiency and socio-economic outcomes. The Eco-Innovation Index pictures the performance of individual Member States in different dimensions of eco-innovation compared to the EU average by stressing their strengths and weaknesses. The Eco-IS and the Eco-Innovation Index show a picture on economic, environmental and social performance. [1]
The Eco-Innovation Index is a composition of indices for eco-innovation inputs, eco-innovation activities, eco-innovation outputs, resource efficiency outcomes and socio-economic outcomes. Each of these indices consists of many sub-indices. It is only published for the Member States of the European Union. The latest data available refers to the year 2015. The basic value for this index is the average of all 28 Member States of the European Union.

Due to the fact that only data on countries which are members of the European Union are available, there are no results for four countries of the Adriatic Ionian macro-region. In this macro-region, Italy is the best performing country and at the same time the only country which performs above average. All other countries are performing below average, in case of Slovenia only slightly, namely by 4%. Croatia and Greece are performing lower with scores 33% and 28% respectively below the EU-average.

A comparison with the year 2011 shows that Slovenia worsened its position since then, while Italy and Greece were able to improve. In 2011 Slovenia scores a value 9% higher than the European average and Italy and Greece scored by 10% and 41% respectively below the EU-average.

2.5.19 Resource Efficiency (composite of Eco Innovation Scoreboard)

Figure 2-41: Resource Efficiency by Country, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-33: Explanation of the indicator: 'Resource Efficiency'

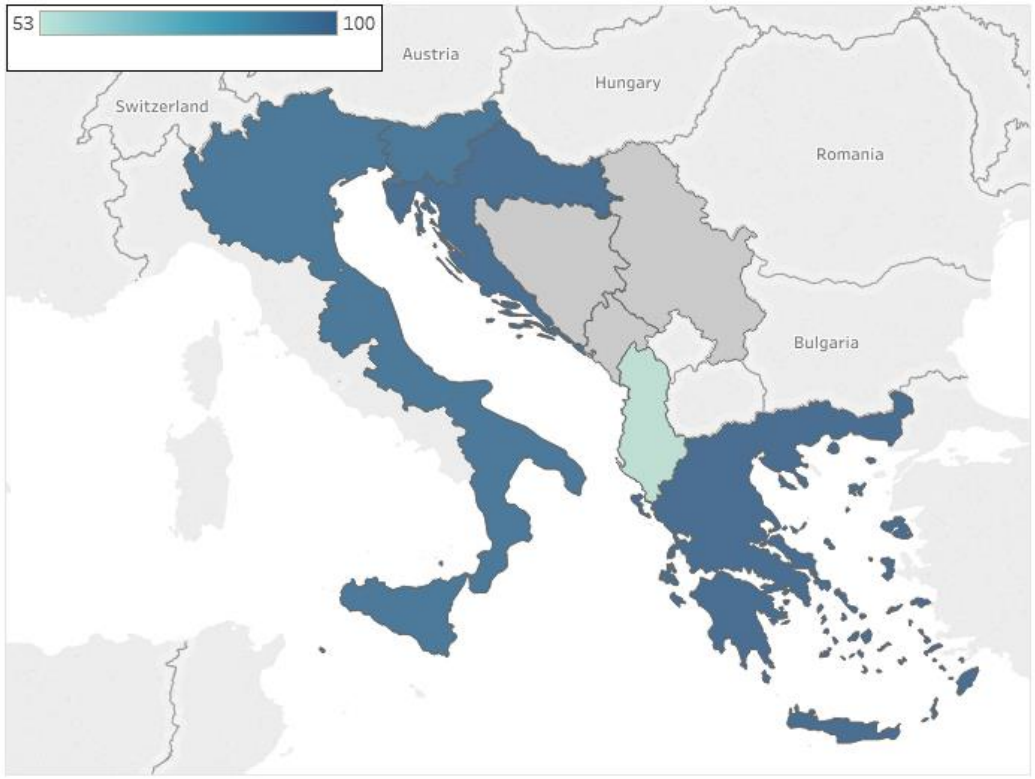
Eco-innovation can at the same time rise the creation of economic value, while reducing pressures on the natural environment.[1]
"The component of resource efficiency outcomes puts eco-innovation performance in the context of a country's resource efficiency. The four indicators in the component of resource efficiency outcomes are: Material productivity (GDP/Domestic Material Consumption), Water productivity (GDP/Water Footprint), Energy productivity (GDP/gross inland energy consumption), GHG emissions intensity (CO_2e/GDP)."[1]
The Resource Efficiency Index is only published for the Member States of the European Union. The latest data available refers to the year 2015. The basic value for this index is the average of all 28 Member States of the European Union.

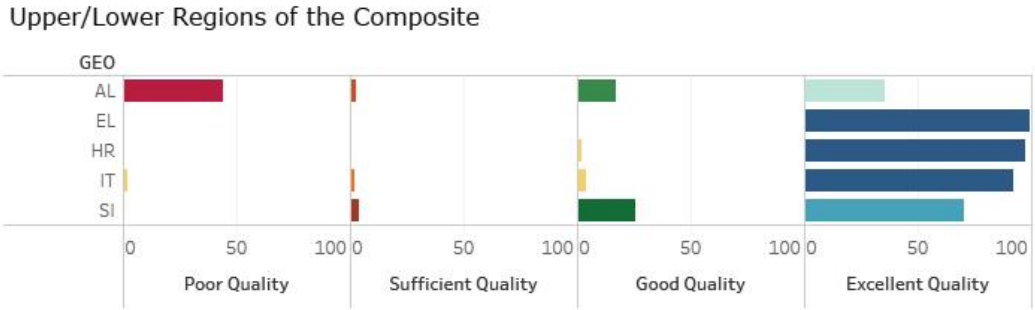
The best performing country in terms of resource efficiency in the Adriatic Ionian region is Italy. It scores 16% above the European average. All other countries, Greece, Croatia and Slovenia, display values which are below the EU average by 20% in case of Croatia or 22% in case of Greece and Slovenia. Data are missing for many countries out of this region, as many countries are not members of the European Union. The countries which are no included in the analysis are Albania, Montenegro, Serbia, and Bosnia-Herzegovina.

The performance in 2011 was not very different. Italy was also then the best-performing country while the others performed below the EU average. Also the scores in comparison with the European average are similar in both years.

2.5.20 Bathing Water Quality

Figure 2-42: Bathing Water Quality by country in 2015. The top figure shows the percentage share of a country's Bathing Waters with a 'Good' or 'Excellent' status. The bottom figure shows the percentage share of waters in the respective status category (sums up to 100%)





Text Box 2-34: Explanation of the indicator: 'Bathing Water Quality'

The index of the bathing water quality of the evaluated regions is classified into four categories: excellent, good, sufficient and poor, which enables people to choose better quality bathing water. The indicator is expressed as proportion of bathing sites within each category. The report of the European Environment Agency published in 2016 was used for the analysis. It contains information about more than 21 000 European coastal and inland bathing water sites, from which 85% show an excellent water quality.
The theme bathing water quality consists of indicators evaluating the water quality for various kinds of water categories such as river, lake, coastal water and transitional water. The analysis is based on the information provided by the European bathing water quality report which is published every year by the European Environment Agency (EEA) and the European Commission, in order to help citizens to make informed choices concerning their touristic destinations.
The EEA report assesses the bathing water quality of all 28 EU Member States as well as of Albania and Switzerland.

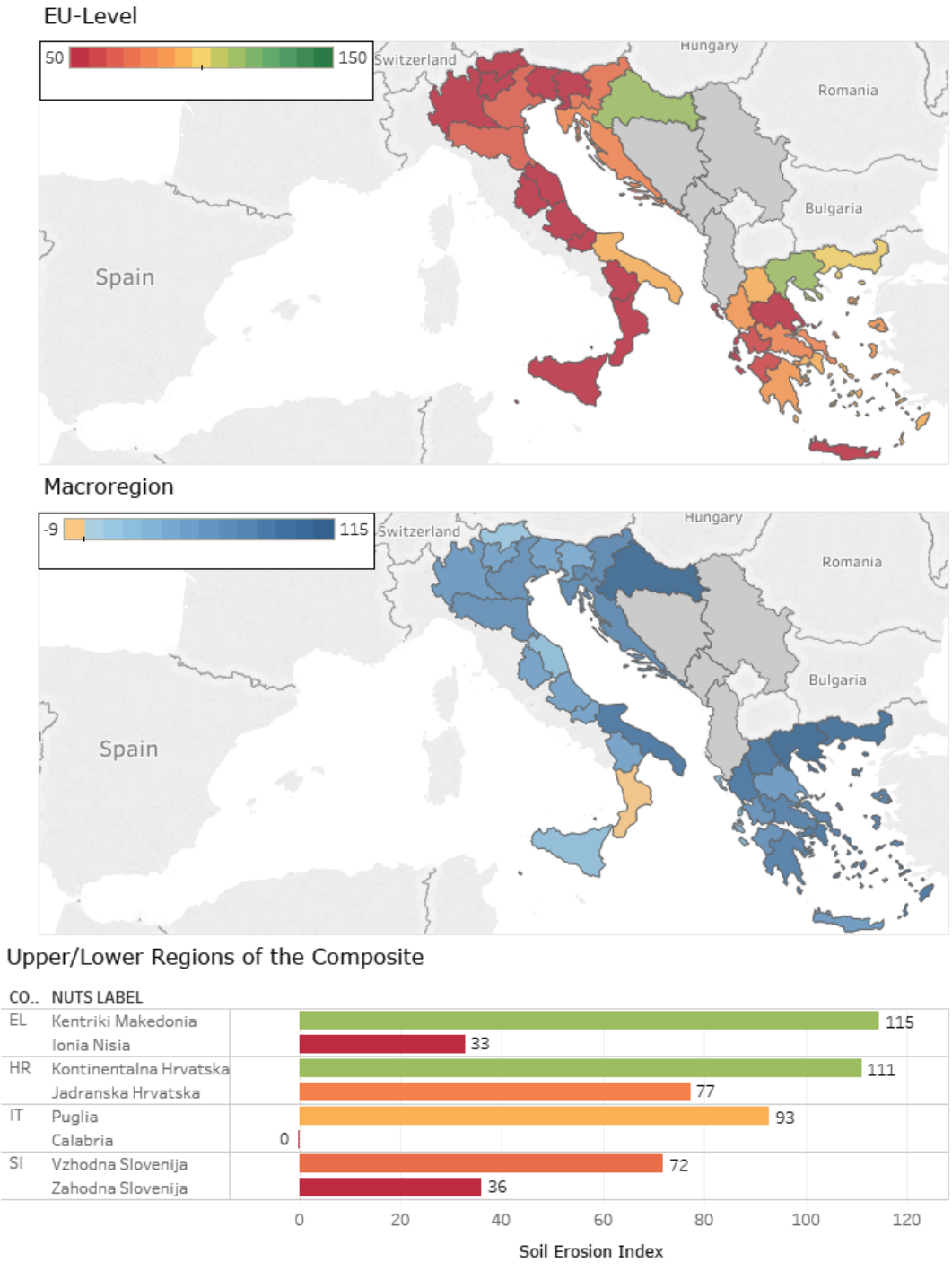
Note that since the analysis was conducted a new report was published (on the 23rd of May 2017).

In the Adriatic macro-region, for which data on the EU Member States Croatia, Italy, Greece and Slovenia, as well as Albania are available, the best bathing water quality values is to be found in Greece, where 97% of sites are of "excellent" quality. The majority of Croatia's water sites are also qualified as excellent and a few more show a "good" water quality. Italy, ranked on the third place, shows a high number of water sites satisfying the Directive's "excellent" bathing water quality standard. However, Italy also shows a somewhat high number of water sites with poor water quality. In Slovenia a large majority of all water sites have an excellent or a good water quality, and none are "poor". In Albania, ranked on the last place within the Adriatic macro-region, 31 bathing water sites (39.7%) were classified as having poor water quality. This is due to the fact that the majority of those sites, in total 24, are located on the coasts of Durres, Albania's second largest city and one of the country's main tourist attractions. In order to improve the bathing water quality the Durres Waste Water Treatment Plant has been reconstructed. In the newest Bathing Water Quality Report, published after the analysis was conducted, Albania shows a major improvement, with only 14% of bathing sites classified as having "poor" water quality.

2.5.21 Agricultural Impact

Soil Erosion by water

Figure 2-43: Soil Erosion by NUTS-2 in 2012, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-35: Explanation of the indicator: 'Soil Erosion by Water'

The indicator used here is one of the 28 Agri-environmental indicators used to monitor environmental aspects under the EU's agricultural policy. It is expressed as estimated erosion of soil in tonnes per hectare per year[79] (i.e. how many tonnes of soil from a hectare is removed by water and deposited elsewhere). The indicator is aggregated for NUTS-3 region level, thus allowing assessment in the macro-regions. This indicator is not measured, but modelled using the Revised Universal Soil Loss Equation (RUSLE) model, methodology developed and documented by JRC.[80] The indicator is re-published by Eurostat, dataset [*aei_pr_soiler*], with the latest year 2010 at the time of downloading. This indicator covers the territory of the EU28, hence candidate and potential candidate countries are not included in the dataset.

Higher values of this indicator show higher erosion, hence poorer performance. When benchmarking, the scale is inverted, so higher values indicate a better situation, i.e. lower erosion.

Benchmark is calculated on a country level (i.e. EU-median, top and lowest performer on a country level), therefore some NUTS-2 regions may score below the minimum benchmark (50), or above the maximum benchmark (150).

Soil erosion is defined as the displacement of material from the land surface by water (rainfall, irrigation, and snowmelt) or wind. It is considered one of the main threats to soil, as acknowledged by the European Commission's Thematic Strategy for Soil Protection[81]. The strategy stresses the importance of soil and the impact erosion and other types of soil degradation has on the climate, water quality, food safety and biodiversity. Soil formation is a very slow process, and heavily eroded or otherwise degraded soil would take hundreds of years to regenerate. The rates of regeneration differ, and are estimated to be around 1.4t/ha/year in Europe (Verheijen et al., 2009[82]). According to JRC, to protect most vulnerable soils, rates of soil erosion above 1 tonne per hectare per year should be considered unsustainable, and more than 10 t/ha/year indicate a high-risk[83] . Indicator showing specifically soil erosion by water was chosen for two reasons. First, this type of erosion is more widespread than wind erosion. Second, even though no actual measures of erosion rates exist on the European

[79] http://ec.europa.eu/eurostat/statistics-explained/index.php/Agri-environmental_indicator_-_soil_erosion

[80] Panagos, P., Borrelli, P., Poesen, J., Ballabio, C., Lugato, E., Meusburger, K., Montanarella, L., Alewell, .C. 2015. The new assessment of soil loss by water erosion in Europe. *Environmental Science & Policy*. 54: 438-447

[81] Communication COM(2006) 231; http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52006DC0231

[82] F.G.A. Verheijen, R.J.A. Jones, R.J. Rickson, C.J. Smith. 2009. *Tolerable versus actual soil erosion rates in Europe*. Earth-Science Reviews, 94 (1–4) (2009), pp. 23–38. This paper defines "upper limit of tolerable soil erosion" as that equal to the rate of soil formation.

[83] JRC. 2012. *The state of soil in Europe.* A contribution of the JRC to the EEA Environment State and Outlook Report.

level, there are good quality estimates for the entire territory of the EU, at a high level of resolution. For more information on the indicator used, see Text Box 2-35.

Data shows that the average erosion in the EU28 is 2.46 t/ha/year (Eurostat; Panagos *et al*, 2015). Generally the situation is better in the northern countries than elsewhere, the country with lowest erosion rate being Finland at 0.06t/ha/yr. Italy is on the opposite end of the scale with 8.5t/ha/yr. These values as well as the EU-median (2.1t/ha/year) are used in the benchmarking.

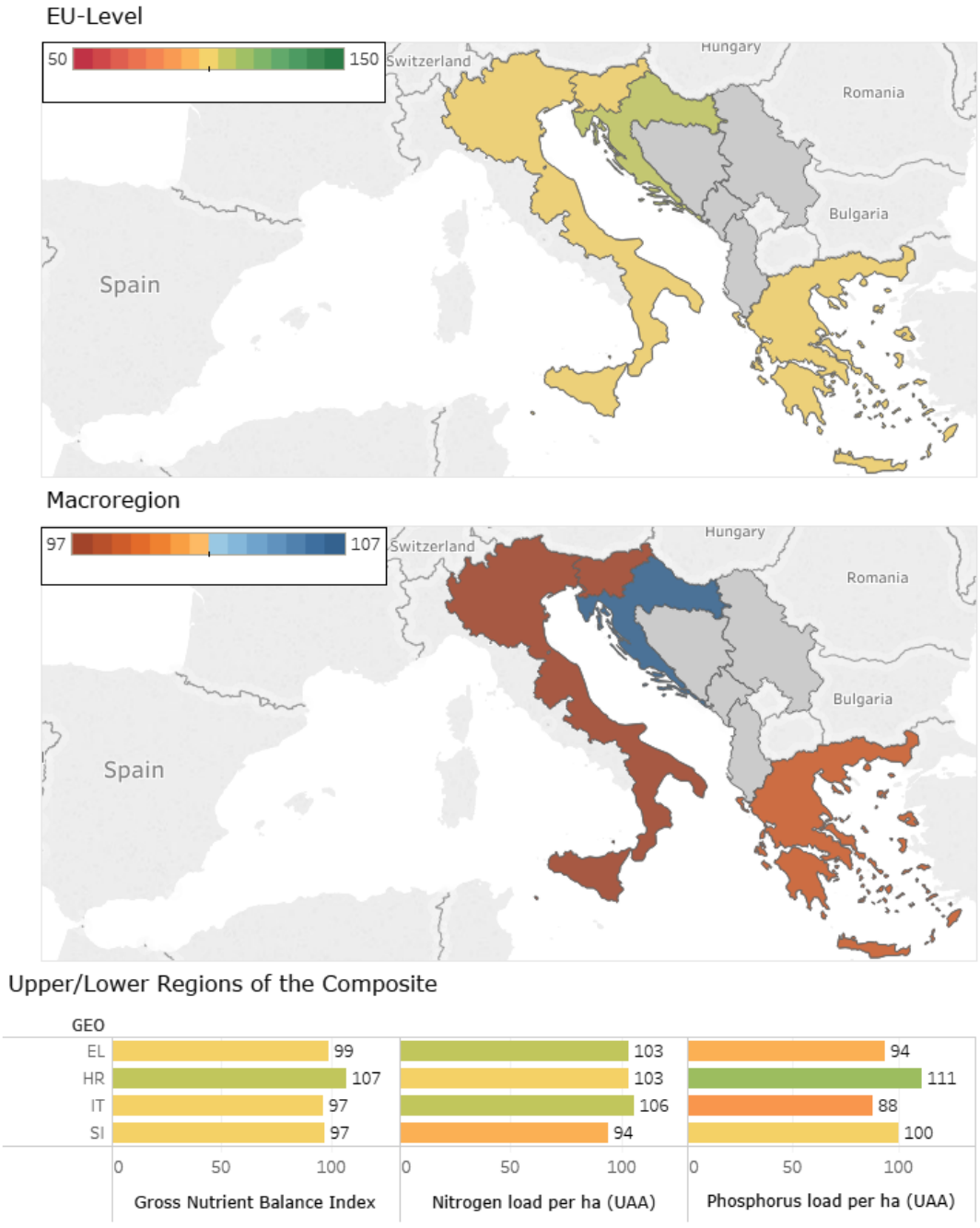
The Adriatic-Ionian Sea Region shows generally high soil erosion rates. This is due to prevalent climatic conditions and terrain. Among the NUTS-2 regions of this macro-region, the regions of Italy show the highest average soil erosion rates. The region which is most affected by soil erosion is Calabria, with a soil erosion rate of 14.87 t/ha/yr. This value is nearly twice as high as the highest erosion rate at country-level, and its benchmarked value is therefore just under zero.

On the other side of the spectrum, the Greek region Kentriki Makedonia has the lowest level or soil erosion of 1.49 t/ha/yr, which is better than EU-median, but nevertheless exceeds the regeneration rate discussed above. In Greece, the island region Ionia Nisia has the highest erosion rate with 10.66 t/ha/yr (benchmarked value of 33), followed by the island of Kriti. The two regions of Slovenia have a moderate to high level of soil erosion: Vzhodna Slovenija 5.65 t/ha/yr and Zahodna Slovenija 10.24 t/ha/yr, corresponding to 72 and 36 when benchmarked. Of the Croatian regions, the inland area, Kontinentalna Hrvatska, performs significantly better than the coastal region Jadranska Hrvatska (1.62 and 4.98 t/ha/year respectively, benchmarked values 111 and 77).

These results indicate, that the entire macro-region faces a common challenge of high soil erosion, and its most exposed areas (islands and shorelines) are at an even greater risk.

Gross Nutrient Balance

Figure 2-44: Gross Nutrient Balance by country in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-36: Explanation of the indicator: 'Gross Nutrient Balance'

According to EEA[84], the indicator Gross Nutrient Balance "estimates the potential surplus of nitrogen on agricultural land". The estimation accounts for nitrogen and phosphorus additions to agricultural lands as well as the amounts that are removed from the system, via crops harvested and eaten by feedstock.

The indicator measures the balance of nutrients, expressed as kg of nitrogen and phosphorus per ha of Utilised Agricultural Area (UAA).[85]

The data is available for EU countries only.

The composite indicator is the average of benchmarked gross nitrogen balance and gross phosphorus balance values.

The strong use of artificial fertilisation for crops in Europe, or more generally a surplus of nutrients, has several implications on the environment, of which most prominent are eutrophication and nitrification. While a too high and too long a surplus is not desirable, a deficit can also have negative implications for land-use.

In the macro-region the highest gross nutrient balance on country level in the macro-region was registered in Croatia (66 kg/ha) followed by Italy (65 kg/ha). The values in Greece (59 kg/ha) and Slovenia (44 kg/ha) are lower. These values are all quite close to the EU-level median, with Croatia somewhat higher, while the rest only slightly below.

2.6 Political, Institutional & Governance Indicators

The political, institutional and governance indicators draw a picture on the political state of the macro-region. The indicators in this section inform about the quality of governance and the institutional capacity. In the context of Cohesion Policy, these indicators essentially reflect the likely capacity of the macro-region's countries to effectively pursue interventions on the economic, social as well as territorial cohesion.

In addition, the selected indicators in this chapter inform about the quality of civil freedom as well as the enforcement of law on macro-regionally relevant problems: Human trafficking and Drugs. The selected indicators are shown in the table below.

[84] URL: http://www.eea.europa.eu/data-and-maps/indicators/gross-nutrient-balance-1

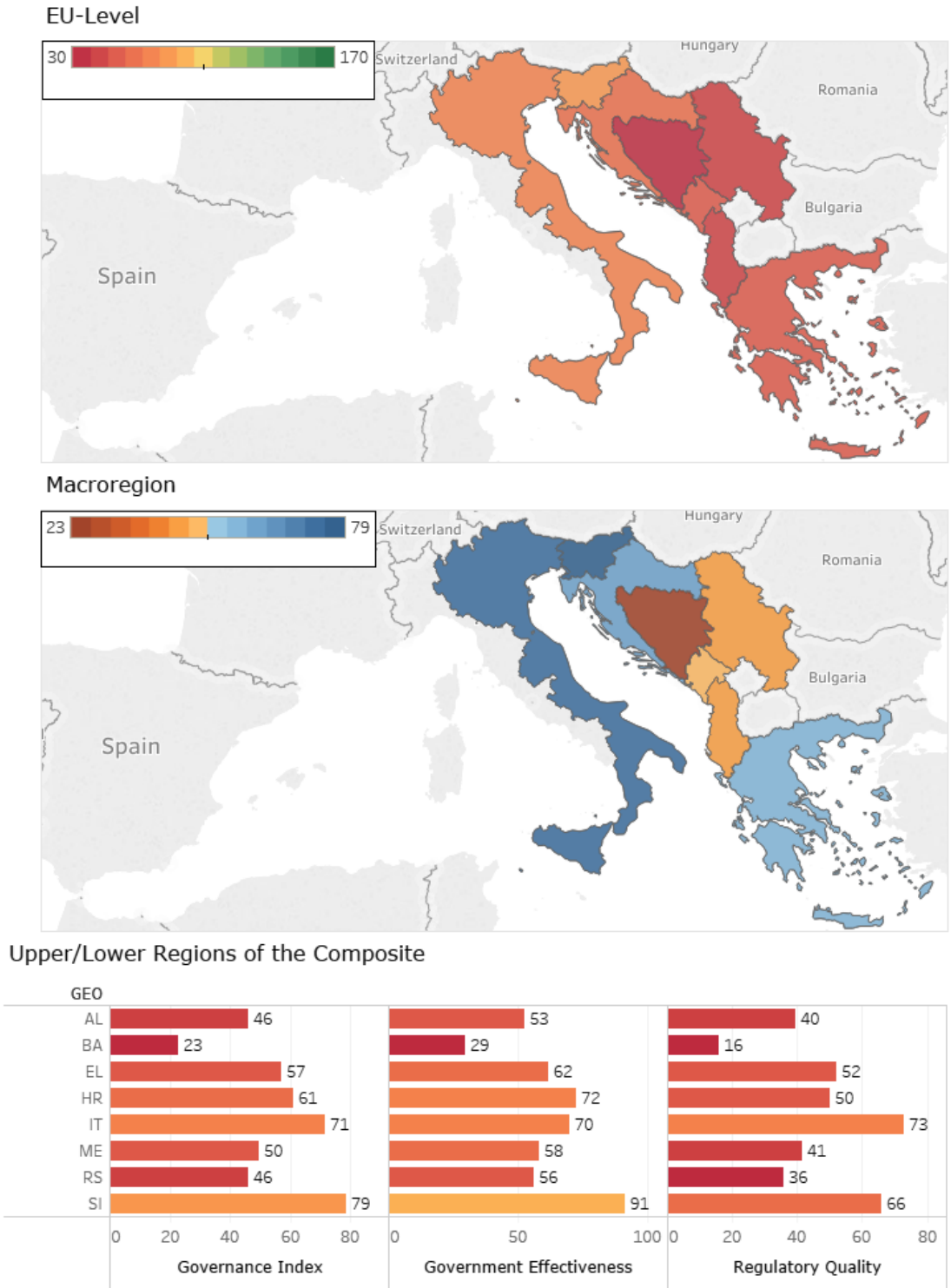
[85] http://ec.europa.eu/eurostat/cache/metadata/EN/aei_pr_gnb_esms.htm

Table 2-18: Overview of Political, Institutional & Governance indicators

Composite	Components
Governance	Government effectiveness
	Regulatory Quality
Public Institutions	*none*
Voice & Accountability	*none*
Human Trafficking	*none*
Number of Drug Seizures	*none*

2.6.1 Governance

Figure 2-45: Governance by country in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-37: Explanation of the indicator: 'Governance'

Governance is defined as the "processes of governing […] undertaken by a government […] over a […] territory […] through laws, norms, power or language."[86] It includes "the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions."[87] In this context, a government has the responsibility and authority to make binding decisions in a given geopolitical system (such as a state) by establishing laws.[88] Thus, Governance refers to the way the rules, norms and actions are structured, sustained, regulated and held accountable. A government may operate as a democracy, where citizens vote on the people who govern with the aim to achieve a public good.

The governance of the macro-region is analysed using two governance indicators: Regulatory Quality and Government Effectiveness. Regulatory Quality refers to "the perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development"[89]. Government Effectiveness reflects the "perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies."[90] Both indicators are part of the World Bank's broader Worldwide Governance Indicators (WGI) Project of the World Bank Group.[91]

An analysis of the composite indicator Governance shows a low quality of governance in all the countries of the macro-region. The best scores in this group can be found in Slovenia (79) and Italy (71), followed by Croatia (61) and Greece (57). The scores for all these countries show a decrease in the scores in 2015 compared to 2008, due to a deterioration of both regulatory quality and government effectiveness. The lowest scores for the composite indicator Governance can be found in Bosnia-Herzegovina (23), Serbia (46), Albania (46), and Montenegro (50). However, while the score for Bosnia-Herzegovina did not change, all other countries in this group have made considerable progress in the period 2008 to 2015, mainly due to improvements in regulatory quality. This observation shows that the candidate countries of this macro-region are steadily approaching the governance standard found in the EU, while the only potential candidate country (Bosnia-Herzegovina) is still far below that standard.

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[86] *Bevir, Mark (2013). Governance: A very short introduction. Oxford, UK: Oxford University Press.*

[87] *Hufty, Marc (2011). "Investigating Policy Processes: The Governance Analytical Framework (GAF). In: Wiesmann, U., Hurni, H., et al. eds. Research for Sustainable Development: Foundations, Experiences, and Perspectives.". Bern: Geographica Bernensia: 403–424.*

[88] Wikipedia 2017, https://en.wikipedia.org/wiki/Governance

[89] URL: http://info.worldbank.org/governance/wgi/pdf/wgi.pdf

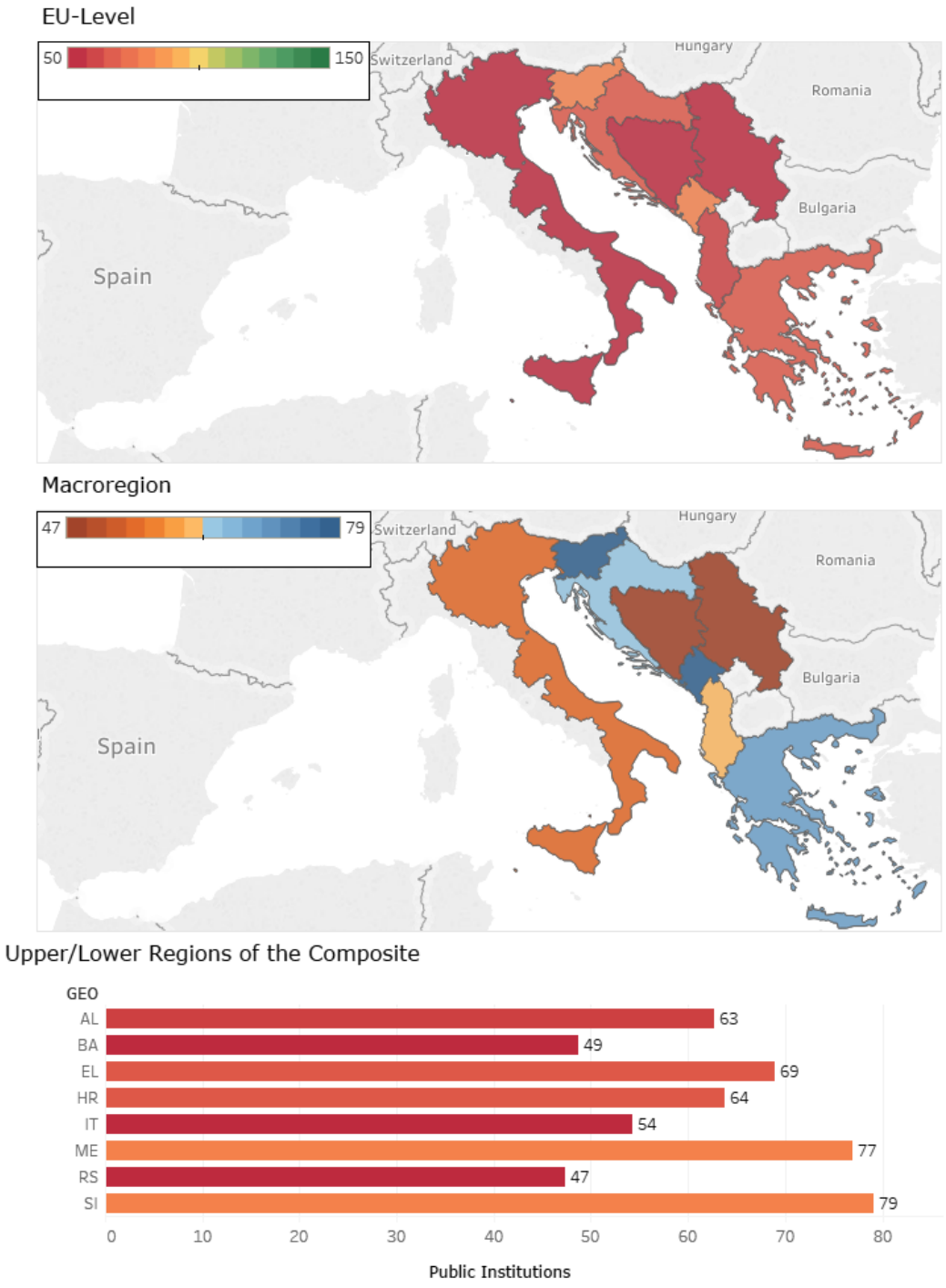
[90] URL: http://info.worldbank.org/governance/wgi/pdf/wgi.pdf

[91] URL: http://info.worldbank.org/governance/wgi/#home

Overall, the governance indicator points to important challenges all across the macro-region although there are differences. Noting that the governance indicator value is low for all concerned countries, it is still higher in the EU Member States than in the countries that are not EU members.

2.6.2 Public Institutions

Figure 2-46: Public Institutions by country in 2015-2016, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-38: Explanation of the indicator: 'Public Institutions'

The indicator on public institutions is a composite of the World Economic Forum's (WEF) Global Competitiveness Index for 2016[92]. This composite consists in turn of indicators on 'property rights', 'ethics and corruption', 'undue influence', 'public-sector performance', and '(public) security'. The public institutions indicator thus reflects the quality with which public entities ensure that the "basic requirements" [93] of a competitive/fair economy are upheld. Vice-versa, it also reflects how much of an existing factor unfair or preferential treatment is. To a limited degree, this indicator also reveals the institutional capacity, mostly reflected through the 'public-sector sector performance' composite. At last, this indicator provides partial inference on the compliance with the EU-Acquis, chapter 23, Judiciary and fundamental rights[94].

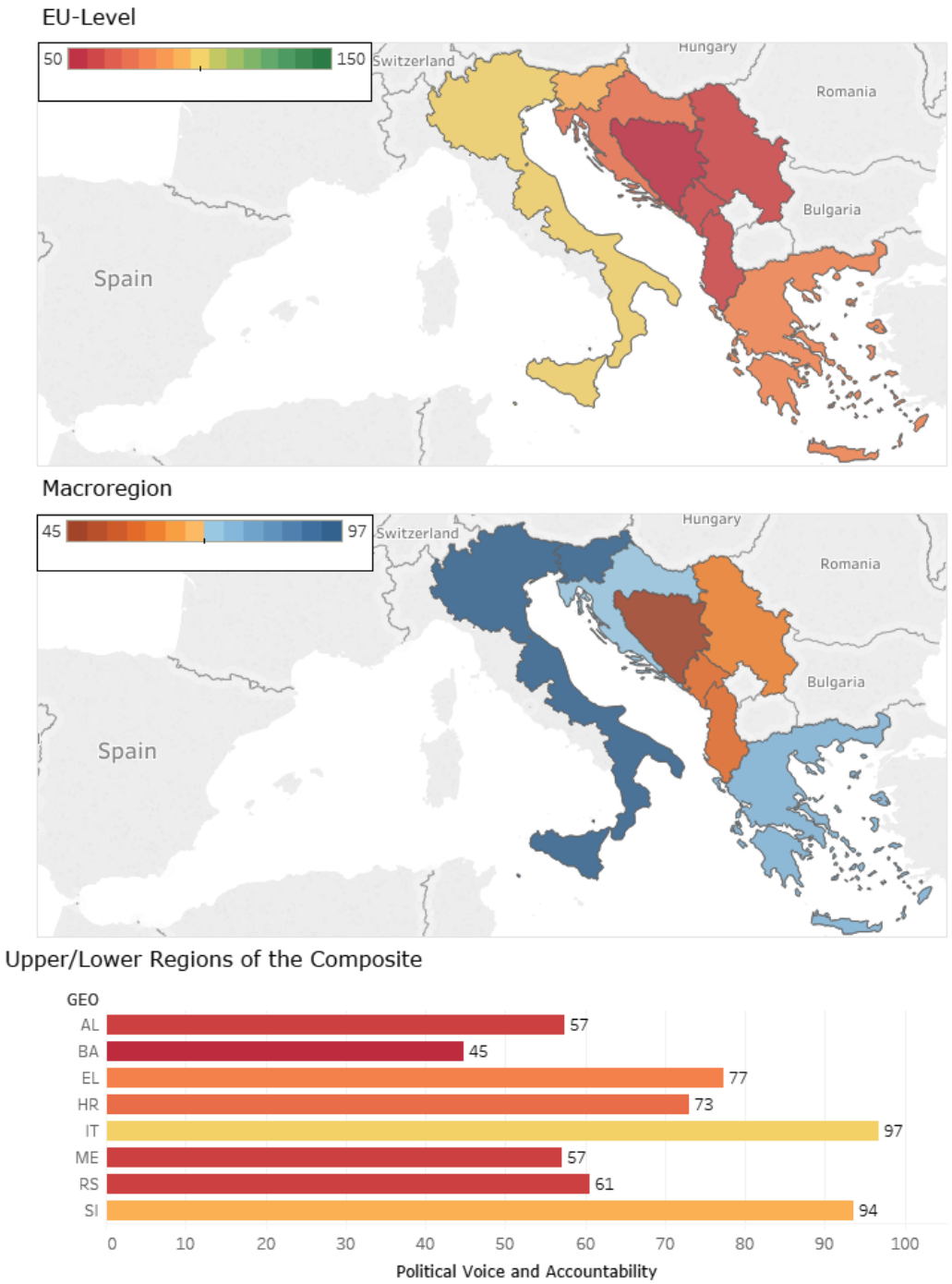
An analysis of the indicator shows that the macro-region as a whole consisted in 2016 only of countries performing below the EU-median. The best performing country is Slovenia (79), which is in line with Slovenia's overall strong performance in the Adriatic-Ionian macro-region. Perhaps the most striking observation however is that Montenegro (77) has the second highest score, surpassing even the old Member States.

The quality of public institutions in the macro-region has improved from 2011 to 2016 in most countries. While the quality of public institutions remained nearly constant in Greece, Bosnia-Herzegovina's and Serbia's performance declined slightly.

[92] World Economic Forum, Global Competitiveness Index, URL: http://reports.weforum.org/global-competitiveness-report-2015-2016/institutions/
[93] World Economic Forum, Global Competitiveness Index, URL: http://reports.weforum.org/global-competitiveness-report-2015-2016/institutions/
[94] URL: https://ec.europa.eu/neighbourhood-enlargement/policy/conditions-membership/chapters-of-the-acquis_en

2.6.3 Voice and Accountability

Figure 2-47: Economic Performance by country in 2015, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-39: Explanation of the indicator: 'Voice and Accountability'

The indicator Voice and Accountability mirrors "*the freedom of a country's citizens in selecting their government, as well as freedom of expression, freedom of association, and a free media*".[95] In its essence, it is an indicator on democracy, i.e. civil freedoms and the therewith indirect accountability of governments', as a result of freedom of expression and free media. As with the public institutions indicator, this indicator provides partial inference on the compliance with the EU-Acquis, chapter 23, Judiciary and fundamental rights[96]. The underlying indicator is part of the Worldbank's broader Worldwide Governance Indicators (WGI) Project of the World Bank Group.

The benchmarking of the indicator Voice and Accountability shows a relatively low performance in 2016 in all the countries of the macro-region. While Italy and Slovenia score slightly below the EU-median (97 and 94 respectively), the other two Member States (Greece and Croatia) perform in the solid lower half of the EU spectrum. The trend from 2011 to 2016 further shows that these two countries' performance has declined.

The (potential) candidate countries perform as well as the lower EU spectrum: Albania, Montenegro and Serbia score between 45 and 61 points, of which the latter two's scores declined since 2011. Bosnia-Herzegovina, which is a potential candidate, performs with 45 points the lowest.

[95] http://info.worldbank.org/governance/wgi/pdf/va.pdf

[96] https://ec.europa.eu/neighbourhood-enlargement/policy/conditions-membership/chapters-of-the-acquis_en

2.6.4 Human Trafficking

Figure 2-48: Human trafficking in Europe. Source: Eurostat Report on Trafficking in Human Beings 2015

Country of origin / citizenship of victims reported	Countries reporting victims in 2010 - 2012, sorted in decreasing order of the number of registered victims by citizenship EU, EFTA, EU Candidate and Potential Candidate Countries																											Total Registered Victims
	RO	BG	NL	HU	PL	FR	SK	DE	LV	CZ	RS	LT	UK	ES	EE	HR	IE	EL	SI	BE	IT	CH	FI	DK	CY	LU	MT	IS	
Romania	3 230		218	<5	65	427		434		6	<5		493	464		<5	19	126	<5	62	472	13	5	23	24	7	<5		6 101
Bulgaria		1 698	421		44	167	<5	370		35	<5		63	29			5	75	<5	49	50	13		<5	15	<5	<5		3 043
Netherlands			1 079										<5																1 080
Hungary	<5		394	153	<5	40		156					243				<5	<5	9	<5		41		<5					1 046
Poland			187		263	12		92		<5		<5	405				5			6		<5	<5	<5	<5				976
France			<5			476		<5					6													<5		<5	491
Slovakia			49				78	26		10			296						6	6		<5		<5					477
Germany		<5	19			<5		389					<5																415
Latvia			12					25	277	<5			34				<5	<5						<5	<5				355
Czech Republic		<5	26			<5		41		34			233				<5		5	<5			<5	<5					351
Serbia	<5		<5			5		20			230		<5			<5		<5	<5	5									269
Lithuania			22			<5		16				50	146				<5	<5						<5		<5			244
United Kingdom			6			<5							197							<5									205
Spain			<5			8		<5					<5	117															132
Estonia			<5					<5					<5		55								8		<5	5			77
Turkey			11					41			<5		<5							<5			<5		<5				61
Croatia			<5								<5					25				<5		<5							32
Ireland													<5				31												32
Portugal			9			<5		<5					7							<5				<5		<5			27
Greece	<5		5					<5										4							<5				14
Slovenia								<5											12										13
Belgium			<5			<5		<5					<5																8
Italy			<5		<5	<5		<5					<5																6
Montenegro								<5			5																		6
Austria			<5			<5					<5											1							4
Switzerland						<5																	<5						3
Finland			<5																				1						2
Norway								<5																					2
Denmark																								1					1
Cyprus																									1				1
Total victims	3 233	1 700	2 476	156	375	1 153	79	1 626	277	87	241	51	2 138	610	55	29	66	212	40	142	522	73	20	39	47	22	4	1	15 474

Key: Citizens of reporting country; 10 – 99 victims; 100 – 399 victims; 400+ victims

Text Box 2-40: Explanation of the indicator: 'Human Trafficking

According to the Eurostat Report of Trafficking in Human Beings a person is considered to be a victim of trafficking in human beings when the crime against her/him fulfils the constituent elements of trafficking in human beings as defined in the EU Directive 2011/36 on preventing and combating trafficking in human beings, protecting its victims. An "identified victim" is defined as "a person who has been formally identified as a victim of trafficking in human beings by the relevant formal authority in a Member State". [97]

According to the Eurostat Report of Trafficking in Human beings it is generally difficult collect data on trafficking. The primary reason being that victims do not always report the crime to the police or do not even want to cooperate with the police. Registering victims in an accurate manner is further largely depended on the capacity to identify victims in the form of formal authorities or the existence of a national register[98]. The data on Human Trafficking in the EU Member States used for the current analysis covers a three year period from 2010 to 2012. To avoid population sizes of countries having an effect on the interpretation of the statistics, a registered victim prevalence rate has been calculated for victims of trafficking, by expressing the number of registered victims with citizenship of a particular country as a proportion of that country's population, averaged across 2010-2012.

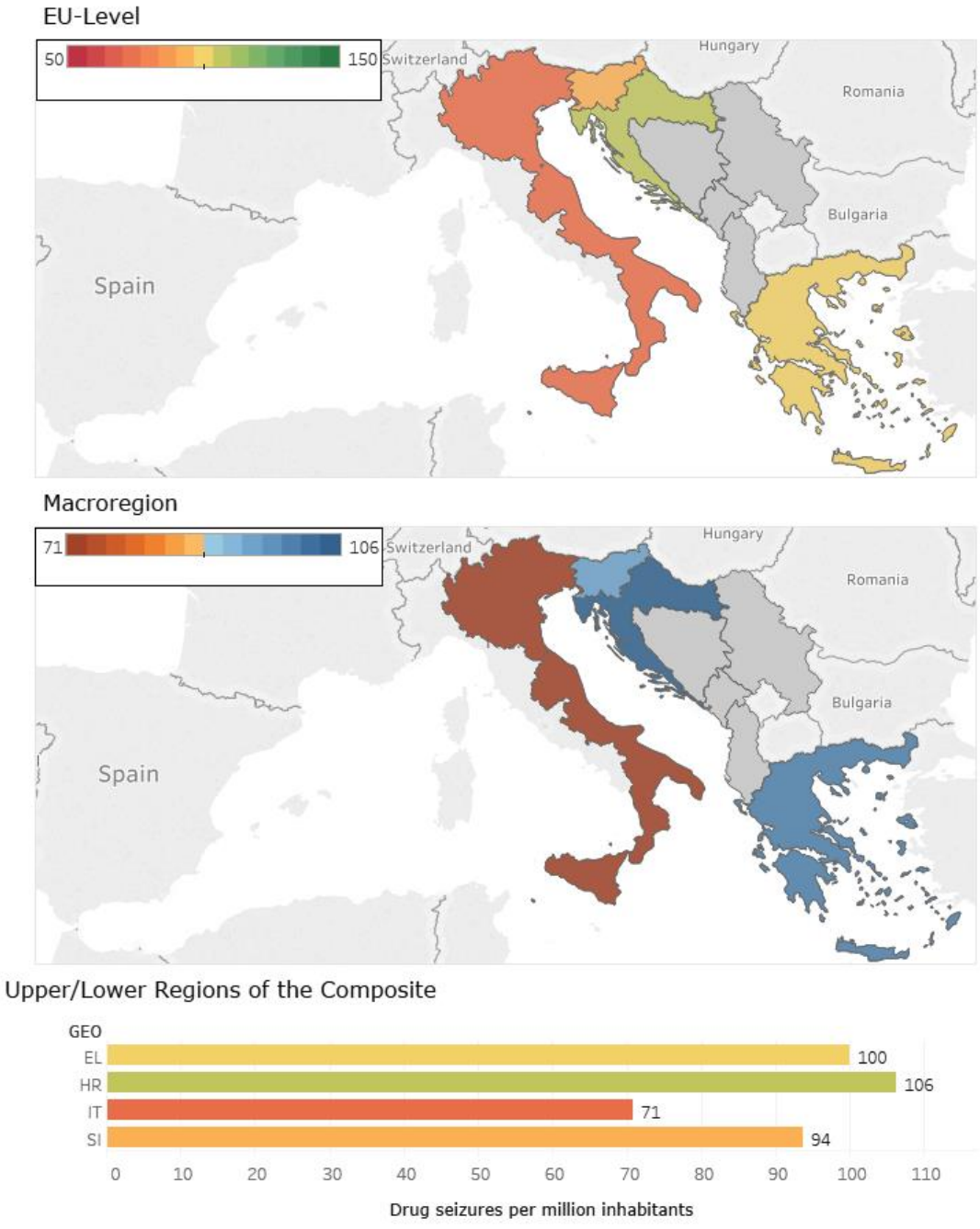
In the macro-region, countries like Italy and Greece report the highest number of victims who are citizens of the new EU Member States, of which particularly Romania and Bulgaria. They do not report any victims among their own citizens. Victims of human trafficking from Croatia, Serbia, and Slovenia have been mostly registered as victims in their countries of origin. Only few victims from these countries (less than five per each country) have been registered as victims of human trafficking in Germany.

[97] Publications Office of the European Union (2015): Trafficking in Human Beings, Luxembourg, 2015.

[98] Publications Office of the European Union (2015): Trafficking in Human Beings, Luxembourg, 2015.

2.6.5 Number of Drug Seizures

Figure 2-49: Drug Seizures by country in 2014, on an EU-wide (top) and Macro-regional (middle) comparison. The bottom figure shows the Upper/Lower Regions, including their components



Text Box 2-41: Explanation of the indicator: 'Number of Drug Seizures'

Europe is an important market for drugs. The drugs are either locally produced or they are produced in other world regions and are trafficked in Europe. There are regional differences in stimulant consumption patterns across Europe. Cocaine use appears higher in Western and Southern European countries, while amphetamines are more used in Northern and Eastern Europe.[99]

An analysis of the number of drug seizures per 1 million inhabitants for the year 2014 gives a picture of the drug consumption and the countries' capacity to combat drug trafficking. The source of the data on the number of drug seizures is the European Drug Report 2016 and Eurostat for the data on population. The data on drug seizures are available only at country level, no data are available for NUTS-2 regions.

In the macro-region, Croatia and Slovenia record the highest number of drug seizures per 1 million inhabitants with 344 and 227 respectively (and scores of 110 and 103). These two countries are also the only countries of the macro-region that exhibit higher activity than the EU-median.
Italy performs with 121 seizures in the lower half (score of 80). The lowest number of drug seizures in the region are found in Greece with 69 seizures, which is a particularly striking observation given that Greece is part of one of the main import routes for heroin on the so-called Southern route.

The underlying results point to a mixed capacity in the combat against the drug trafficking infrastructure. However, it is difficult to assess the actual degree of drug consumption in these countries, as for example Greece is possibly to a large extent merely an intermediate stop for imports destined for the more central regions of Europe.

[99] European Monitoring Centre for Drug and Drug Addiction (2016): European Drug Report, Trends and Developments, Luxembourg: Publications Office of the European Union, 2016, ISBN: 978-92-9168-890-6, doi:10.2810/04312

2.7 Meta-analysis

2.7.1 Macroeconomic Indicators

Regional development is a complex, multidimensional concept. Various factors such as: endowment with natural resources, quantity and quality of labour, availability of and access to capital, investment in physical and technological infrastructure, factor productivity dynamics, sectorial structure of the economy impact on regional development.[100]

Economic Performance

The macro-region is has a heterogeneous composition in terms of economic development: It consists of advanced countries like Italy and Slovenia, less advanced countries like Croatia and Greece and (potential) candidate countries, of which particularly the latter group is in a process to economically converge towards the EU's leading economies. The Adriatic Ionian macro-region is home to some of the countries that were hit hard by the economic and financial crisis. While Slovenia and Croatia managed to recover, Italy and Greece still face banking and debt crises. Since 2008, Greece has lost 25 percentage points of its GDP per capita, while the performance of the Italian economy fell below the EU average. The candidate and potential candidate countries, Serbia, Montenegro, Albania and Bosnia-Herzegovina, are characterised by low levels of development and a slow convergence progress due to deep structural problems in their economies that still need to be addressed. While the northern regions of Italy and Slovenia perform above average on the Social Progress, other regions need to improve significantly.

Whereas regional disparities between urban and rural regions are wide in Italy and Greece as well as in the candidate and potential candidate countries, disparities in Slovenia and Croatia are lower. Urban regions and especially the regions where the capital cities are located show higher development levels and GDP growth rates compared to the other regions in the countries. "Agglomeration advantages" in terms of e.g. the number of companies or research institutions in these regions support high GDP and skilled labour force concentrations and fast growth in urban centres. Businesses may benefit from lower transport costs as they are closer to their markets and their infrastructure is better developed. They may take advantage of learning from others, as they are closer to information sources and they may be part of clusters where the availability of skilled and more productive workers is higher. Furthermore, the overall regional productivity may increase in such urban agglomerations due to more intensive use of infrastructure by a larger number of firms.

Employment

While unemployment has been reduced considerably during the recent years in Slovenia and Croatia, it is still very high in Greece at about 23%, Bosnia and Herzegovina (28%) and the three candidate countries, Serbia, Montenegro, and Albania (above 17%) and quite high in Italy (about 11%). Youth unemployment

[100] Nijkamp P. and M. Abreu (2003). Regional development theory. PN218MA-EOLSS. URL: ftp://dlib.info/opt/ReDIF/RePEc/vua/wpaper/pdf/20090029.pdf

is very high in Bosnia and Herzegovina and in the candidate countries. Unemployment rates rose strongly following the economic and financial crisis. In the last two years, some progress has been made in reducing unemployment. The activity rate is very low in some Italian and Greek regions as well as in Bosnia and Herzegovina. Challenges remain with regard to further reducing overall unemployment, and in particular youth unemployment and long-term unemployment in the countries of the macro-region.

To conclude, there are wide disparities inside the macro-region on the macroeconomic and social fronts in the individual countries. There are large internal disparities (especially in Italy and Greece as well as in the candidate and potential candidate countries) between the urban regions and the rural and peripheral regions in the individual countries. No progress has been observed towards lowering these internal disparities.

2.7.2 Macro-regional Integration

During the last two decades, the fast growth of trade in intermediate inputs contributed to the enhancing growth of the countries in the macro-region. Multinational firms account for a large share of input trade. They create global vertical production networks by locating input processing in their foreign affiliates. Vertical production networks allow multinational firms to take advantage of lower wages for less-skilled labour and lower production costs, lower trade costs, and lower corporate income tax rates.[101]

Trade & Energy Integration

Looking at the trade relations between the countries of the macro-region, besides the strong role of multinational companies, traditional, neighbourhood and historical relations dominate the picture. Integration in the macro-region is high, above the EU average. Italy is the main partner for four countries. However Italy's, Greece's and Slovenia's integration in the macro-region are comparably low. This is explained by the fact that the macro-region is economically not as important of a trade partner as the rest of Europe. Albania, on the other hand, exhibits the highest trade integration within the countries of the Adriatic Ionian macro-region. All countries in the region, except Italy and Greece show very high levels of energy integration, much higher than the EU median.

Capital Integration

Capital integration in the macro-region is however lower than the EU average. The new Member States and the (potential) candidate countries are host countries to FDI from Italy and Greece.

The relations are very strong among the countries of former Yugoslavia. A large share of trade, investment and migration takes place inside this group. They are main trade partners for each other. Compared to the EU average the Adriatic

[101] Hanson, G. H., R. Mataloni Jr. M. J. Slaughter (2003). Vertical production networks in multinational firms. NBER Working Paper Series. Working Paper 9723 http://www.nber.org/papers/w9723

Ionian macro-region shows an above average integration intensity, which increased in 2015 compared to 2008.

Labour Integration

The data on migration as well as remittances also show a high degree of labour integration in the Adriatic Ionian macro-region (above the EU average). The highest labour integration level is observed for Albania, Bosnia-Herzegovina, Montenegro, Croatia, Slovenia and Serbia. Italy has the lowest labour integration level with the countries in the macro-region. Statistical evidence discloses the importance of geographical proximity, historical and cultural ties and language for labour integration. The flow of migrants goes from east to west (Italy and Greece) or from the candidate and potential candidate countries to the EU-15 Member States, the flow of remittances takes the opposite direction. The organisations in the countries of the macro-region were strongly involved in the regional cooperation programmes. A divide between the urban regions with more organisations being part of strong networks and rural regions with less organisations is observed. The macro-region displays an above EU-average Integration intensity in the energy sector.

Accessibility Potential

Generally, road transport infrastructure needs to be improved, especially in the new Member States and in the (potential) candidate countries. Considerably progress has been made in recent years in enhancing the primary high capacity road network, expressways and motorways, mostly with co-financing from the EU Cohesion Funds. [102] Budgetary limitations make extensive renovation and upgrading of railway infrastructure difficult. Relatively, the regions (particularly the northern ones) in Italy as well as regions in Slovenia and Croatia show the best accessibility values for all transport modes in the macro-region. Serbia has medium accessibility in terms of road and by rail transport while Albania, Montenegro, Greece, and Bosnia-Herzegovina have the lowest accessibility of the macro-region for all transport modes, being best accessible by multimodal transport modes or by air.

2.7.3 Competitiveness

In recent years, efforts at regional level have been intensified to improve location-specific conditions for production and services and/or the performance of headquarters functions, which at the same time intersected with a more focused approach to attract potential investors. Regions do no longer delegate the acquisition of foreign direct investment to the national level but get themselves engaged such activities with region-specific institutions and instruments (for example in the form of an autonomous regional brand

[102] Examples are the newly built Ionian highway in Greece, or the East Slovenian part of the Maribor-Slivnica-Draženci-Gruškovje motorway. See, http://ec.europa.eu/regional_policy/en/newsroom/news/2017/09/09-05-2017-smoother-faster-road-connections-in-greece-thanks-to-eu-investments, and http://ec.europa.eu/regional_policy/index.cfm/en/projects/slovenia/major-new-link-in-europes-motorway-network for more information.

management).[103] As a result, the markets are shaped more according to regional instead of national boundaries. This implies a second level of interregional competition.

Economic Competitiveness

The regions are struggling to adapt to constantly changing conditions in order to at least maintain competitiveness and, if possible, to increase it.[104] In the framework of this study, competitiveness has been analysed by using various indicators. The overall competitiveness indicators measured by indicators such as EU Regional Competitiveness Index, Regional Innovation Scoreboard, EU Digitalisation Index, and Education places the Adriatic/Ionian macro-region in a modest position. The best performing regions are located in Slovenia (Zahodna Slovenija), Northern Italy and Attiki in Greece. The Croatian regions perform averagely on competitiveness. Low performing regions are found in Southern Italy and Greece. For the EU candidate and potential candidate countries, data availability on competitiveness is very limited. Only slight improvements on these indicators are observed for these countries.

Education

The two education indicators available for the (potential) candidate countries show that Montenegro and Serbia are good performers with a low share of early school leavers and a high share of the population aged 30-34 years having completed tertiary or equivalent education. Bosnia and Herzegovina and Albania, on the other hand, perform poorer on these indicators. However, since 2011, all four countries were able to improve their performance.

Business environment

The sluggish economic development in the countries of the macro-region after the economic and financial crisis is reflected by the unfavourable development in the indicator 'business population growth' between 2012 and 2014. The only region showing positive development in this period was Jadranska Hrvatska (which is located at the Adriatic coast of Croatia), whereas the vast majority of regions performing significantly below the EU median. The SMEs play an important role in the macro-region, thus their share of total value added is above the EU average in all countries, except in Croatia.

Transport

Looking at the completion of the trans-European transport network, Greece is the best performer in the macro-region, followed by Italy and Slovenia, which are both medium performers. Croatia lags behind, partly due to its young EU membership status. The completion of transport infrastructure for road and rail is at different levels, while the completion of water infrastructure is at a quite advanced level. The best performing country on logistics (LPI) is Italy, while the rest of the countries need to improve substantially.

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[103] Grozea-Helmenstein D., C. Helmenstein, T. Slavova (2009). *Who is the best? Insights from the benchmarking of border regions.* Trames. Journal of the Humanities and Social Sciences, 13(63/58), (3). pp. 285-302.

[104] Grozea-Helmenstein D., C. Helmenstein, T. Slavova (2009). *Who is the best? Insights from the benchmarking of border regions.* Trames. Journal of the Humanities and Social Sciences, 13(63/58), (3). pp. 285-302.

Tourism

Among the key competitiveness factors of the macro-region is its relatively good position in tourism, with the best performers being Croatia, Montenegro and Slovenia. On the other hand, fisheries are relatively important to regional output in general. With respect to employment, this can only be said for some Croatian and Greek NUTS-3 regions. Italy is the best performing country on blue growth while the other countries in the macro-region perform below the EU median.

Energy and Environment

Performance on eco-innovation and energy efficiency is for most of the countries below the EU average. However, Serbia and Montenegro as the countries with the highest energy intensity of this macro-region have shown substantial improvements in the 2008-2014 period. Yet, when compared to the overall improvement seen in the EU, this development shows only little improvement on the benchmark score of Serbia.

The performance on environmental indicators is mixed, with some Greek and Italian regions performing better than other regions, however the performance is relatively low, if compared to the rest of the EU. Overall, all countries in the macro-region show a strong performance on inland waterbodies compared to the EU-wide performance. In comparison, the status of waterbodies in the sea is less sound. The share of coastal and transitional waterbodies with good ecological status is highest in Greece and Croatia and lowest in Italy. Being considered a hotspot for biodiversity, [105] the macro-region performs relatively well on biodiversity, but generally has high soil erosion rates; the highest being recorded in the Italian NUTS-2 regions. This is due to prevalent climatic and topographical conditions.

2.7.4 Political, Institutional and Governance arrangements

Governance

The development of governance from 2008 to 2015 shows a mixed picture. The scores on the Governance indicator improved among the candidate countries, mainly due to considerable improvements on the indicator on Regulatory Quality. [106] At the same time, scores deteriorated in the EU Member States, resulting in lower performance on both the regulatory quality and government effectiveness indicators in 2015. However, the lowest scores are found in the macro-region's potential candidate country (Bosnia-Herzegovina). This shows the progress of the candidate countries in reaching the governance standard of the EU, apart from the potential candidate country (Bosnia-Herzegovina), which is still far below that standard.

[105] Final Ex-Ante Strategic Environmental Assessment Adriatic-Ionian Cooperation Programme 2014 - 2020 & IUCN, 2017, Atlas of the Mediterranean seamounts and seamount-like structures

[106] The indicator on Governance consists of the World Governance Indicators on Government Effectiveness and Regulatory Quality. Please refer to the 'Data and Analytical Report' of the EUSAIR for more details.

Public Institutions

All countries of the macro-region are performing below the EU median on the indicator 'Public Institutions'. [107] The best performing country is Slovenia while Montenegro is the second best performer, surpassing even Greece and Italy. The quality of public institutions in the macro-region has improved from 2011 to 2016 in most countries. The performance of Bosnia-Herzegovina and Serbia declined slightly.

Voice and Accountability

The countries of the macro-region also perform poorly on the indicator Voice and Accountability. While Italy and Slovenia score slightly below the EU median Greece and Croatia perform in the lower half of the EU spectrum. Between 2011 and 2016, the performance of these two countries even declined. The (potential) candidate countries also perform in the lower end of the EU spectrum.

Crime

Italy and Greece have the highest number of identified human trafficking victims in the macro-region. The victims originate nearly exclusively from the new Member States. Victims of human trafficking from Croatia, Serbia, and Slovenia have mostly been registered as victims in their countries of origin.
Croatia and Slovenia record the highest number of drug seizures per 1 million inhabitants. These two exhibit higher activity than the EU median. The lowest number of drug seizures in the region are found in Greece, which is remarkable since one of the main heroin trafficking routes, the Southern route, passes Greece.

To summarise, the macro-region is a relatively modest performer on effectiveness of policy implementation. The divide inside the region between Italy and Slovenia and the other countries is evident when looking at the performance regarding governance (government effectiveness and regulatory framework), quality of public institutions and voice and accountability.

[107] This composite consists of indicators on 'property rights', 'ethics and corruption', 'undue influence', 'public-sector performance', and '(public) security'. Please refer to the 'Data and Analytical report' on the EUSAIR for more details.

REVIEW OF THE MACRO-REGIONAL STRATEGIES

EUSAIR (TASK 2)

3 Review of the Macro-regional Strategies (Task 2)

3.1 Introduction to Task 2

The below sets out the key research questions that have framed the conduct of the analyses presented in this report on Task 2 for the EUSAIR, as well as the sources of information that have been consulted to answer these research questions.

Each macro-regional strategy contains a range of context specific elements. Terminologies are not always the same, but in essence all strategies define their objectives, their priorities, their focus areas and provides related indicators for monitoring. In terms of governance each strategy has its own multi-layered structure which ensures transparent and consistent decision making and the ability to implement: across regions/countries and sectors, and within regions/countries. Bearing this in mind, and given that the information to inform the answering of the below research questions must to a large extent be based on primary data collection, the summaries are based on a targeted collection of data.

Approach

The approach to the analysis of the macro-regional strategies has been to select a number of policy/priority/pillars (hereafter called PAs) in each strategy as case studies. Interviews have been made around the cases PA. For the EUSAIR, Pillar 4, Sustainable tourism, was selected as the case study.

Outline of this report

This report is structured in four sections – one per sub-task, corresponding to the research questions as listed in Table 3-1.

Table 3-1 Overview of Task 2 research themes

Research themes		Source of information
a	Description of objectives via relevant indicators, examination of the strategic relevance of the macro-regional level for the priorities selected	Desk review and expert interviews
b	Description of the main achievements of the strategies – content-wise and process-wise – whether it is new actions and new projects or adjustments or new developments of the policies concerned	Desk review, interviews, focus groups, case studies
c	Compare the objectives with the achievements, assess the quality of the objectives setting and the extent to which they have been achieved as well as the added value provided by the macro-regional approach for tackling the shared issues identified. Analyse in particular for which priorities the macro-regional approach proved especially relevant and providing the participating countries and regions with more effective results than would have been the case had these priorities been pursued in a different geographical scope – more limited or larger	Data gathering and analytical results from 2a and 2b, Contribution analysis, interviews, case studies, desk research, surveys
d	Description and assessment of a) whether the macro-regional strategies (MRS) have influenced the implementation of European Structural and Investment Funds (ESIF) programmes, b) Whether and how programmes are contributing the implementation of MRS – and the strengths and weaknesses of current approach and c) whether and how a macro-regional approach contributes to strengthening the territorial cohesion objectives of EU	Interviews, surveys, EU spending programmes

3.2 Methodology for Task 2

Research theme a

Task 2a reviews the objectives of each Strategy. This is done by examining the strategical relevance of each objective in the macro-regional context. In other words, this task scrutinises whether a given objective (1) corresponds to an identified need or opportunity for intervention, and (2) whether the macro-regional approach provides a concrete benefit.

The need for intervention

The need for intervention is primarily identified through a pre-defined set of indicators that have been developed and are reported on in section 2 of this report. Where needed, additional indicators or external literature supplement the judgement. The need for intervention is considered at three geographical levels: i) the macro-region as a whole, ii) the macro-region's individual countries, and iii) internal levels (e.g. urban vs rural).

The macro-regional relevance

The macro-regional relevance is established through expert knowledge and external literature. The results of the review were tested and discussed with independent regional experts on each of the four macro-regions.
The review applies a traffic light methodology to categorise each objective in terms of need and macro-regional relevance. Further details about the methodology as well as the detailed results of this task can be found in Appendix A.

Research theme b

The focus of Subtask 2b is to describe the implementation of concrete activities linked to the policy fields covered by the strategies. This provides an understanding of the progress towards achieving the specific objectives set out in the formative strategic documents.

We illustrate the actual performance of each strategy at the PA level through a set of case studies. These case studies investigate the ways that the MRS structure facilitates, and otherwise affects, the cooperation between stakeholders towards achieving progress in the PAs at an 'operational level'. From these, we can then develop concrete examples of the various factors that contribute to the achievements. A particular focus will be on the way that contents and processes of the strategies helped stakeholders to drive progress. The application of case studies brings about additional advantages, which mostly evolve from generating an insight into specific contextual mechanisms and the ways in which the frameworks provided by the MRSs support progress in the PAs, especially concerning cooperation.

The core research team will prepare the frameworks for processing the data we obtained in the interviews. The responses will be integrated to facilitate the sorting of qualitative responses across different countries and stakeholder types.

Organising and documenting the findings

Information from the cases, interviews, and desk research is synthesised into evidence matrices, which each provide overviews of the results and impacts for each MRS. The developed intervention logic provides the typology of categories for the types of results and impacts observed. Information from the cases will be extracted to demonstrate the areas in which stakeholders created new actions, projects, adjustments, or policies. All examples of results and impacts will be summarised in the evidence matrix, and the source of evidence will be identified.

Research theme c

This section includes an analysis of the objectives (from the Action Plan), targets (from road maps or workplans)[108], achievements (progress reports), and indicators (where available) of the PAs analysed for the four macro-regional strategies. These are illustrated in a logframe for each PA. For each PA, the progress towards targets and objectives is tracked through examples of achievements and progress registered in the progress report. The achievements are discussed drawing on the analysis of the achievements in Section 3.1.

Verifiable indicators

Where possible, the progress towards achieving the objective has been illustrated via one or more objectively verifiable indicators (OVI). The indicators used are either those included in the target by the PAs (where available), or examples of those that were identified/analysed in in Task 1 and Task 2a. To the

[108] List of European Union Strategy for the Danube Region (EUSDR) Targets. Validated in the meeting of national Coordinators and Priority Area Coordinators held in Bratislava on 23 May 2016.

extent possible, data for two periods is included for the indicators in order to describe the progress. These periods are however not identical for all indicators but span the period 2010-2017.

Research theme d

Subtask 2d Impact of MRSs on ESIF and vice-versa

This subtask focusses on analysing the linkages between the MRSs and the ESIF programmes that support territorial cohesion.

The coordination between the structures of the MRSs and the relevant Operational Programmes in the Member States and ETC programmes is examined to determine the influence of the MRSs on the formation of the OP and the impact they have had on complementary spending programmes.

Activity 2.12 Linkages between MRSs and EU spending programmes

The first part of this analysis will look at the extent to which the MRSs are used to influence the design of ESIF programmes in the macro-regions. Influence shall be defined as the (used) possibility of the MRSs to steer/guide the activities funded under the ESIF programmes. This would be done either through incorporating the priorities of the MRSs or securing that the actions/activities of the spending programmes support the objectives and PAs of the MRSs. The analysis will concentrate on a desk review of programme documents and programme portfolios.

Data collection methods

This analysis report is based on an integrated data collection framework, driven by the approaches used to address the analytical tasks and intended to provide a picture as comprehensive as possible. This task draws on evidence through three major stages of data collection: desk research, an interview programme with 82 stakeholders, and a survey of approximately 6000 actors. The interview programme and survey have be used to gather qualitative data to answer questions related to each research theme and sub-themes, i.e. the research themes analysed in this report, as well as research themes relating to Task 3 and Task 4.

Desk research

As a first step, a desk research of the strategies has been conducted, relying on existing data. This has been accomplished by studying, in particular:

- the strategy's Action Plans (and other strategic documents),
- the work plans of the individual PAs, and
- the progress or implementation reports of the PAs
- supplemented with other data, e.g. from the strategy's or individual area's websites and publications.

Most of the reviewed data is published and thus readily available, but particularly with respect to the progress and implementation reports, much of the information material we have relied on concerns draft versions requested from the individual area's coordinators.

Appendix A presents a list of sources consulted. It includes for example several documents produced as part of various evaluation initiatives for cohesion policy programmes, as well as academic and analytical publications on the MRSs. Further, also documents have been analysed that outline the European policy framework related to cohesion policy, such as Communications, regulations, and evaluations linked to specific regional programmes. These documents support the analysis of the context in which the strategies have been developed as well as the rationale for the development of MRSs in addition to or instead of initiatives taken at the local, national, or European level.

Identification of case studies

Twelve case studies have been conducted in order to investigate the ways that the MRS structure facilitates, and otherwise affects, the cooperation between stakeholders towards achieving progress in the PAs at an 'operational level'.

Initially, a pre-selection of the case studies was made based on preliminary desk research (as presented in the inception report), which subsequently was elaborated based on explorative interviews with key stakeholders and representative at EU level. Accordingly, the final and current selection of cases was made informed by inputs from key stakeholders and the Commission. The case are presented in fact-sheet and used in the analysis across case studies.

Interviews

The interviews have been carried out in a structured format. They cover the core analytical themes and issues identified in through the desk research and through explorative interviews. Standard interview guides have supported us in addressing the identified analytical dimensions. In addition, the guides have assured conformity of the interviews with the objectives of assigning attribution, evaluating progress and outlining the value-added of each strategy.

The interviews with relevant stakeholders were conducted in the 12 selected policy/priority/thematic/action areas (case studies). Interviewees were identified and selected in cooperation with the relevant Directorates-General (DGs) as well as the PAs' coordinators. The interview period runs over a span of five months, namely from April 15th to September 15th. For each area, an average of 6-7 interviews have been conducted.

Validity and bias of interview finding

The interview findings are used in the analysis as a key source. All interviews are recorded by the study team in reports. Throughout the analysis, selected interview findings are present in tables and text (shortened and adapted by the team in order not to reveal the identity of the interviewee). The study team has identified relevant interview statements (answers to the question, which reflect the content of the question). To the extent possible, the selected statements reflect a condensation of both positive and negative assessments and opinions of the interviewed stakeholders (where available). A certain bias may be inherent in the statements as those stakeholder, who agree to partake in an interview, are often more involved and active stakeholders and thus generally more positive (biased).

In the table below, an overview of the case studies and the respective interviews conducted is presented.

Table 3-2 Overview of case study interviews conducted

Strategy	Policy Area / Priority Area / Pillar / Action	No. of interviews conducted
EUSBSR	PA Education	8
	PA Innovation	7
	PA Nutri	6
	PA Safe	8
	PA Transport	10
EUSDR	PA 1A Waterways mobility	5
	PA 4 Water quality	6
	PA 7 Knowledge Society	5
	PA 9 People and skills	11
	PA 11 Security	4
EUSAIR	Thematic Steering Group (TSG) 4 Sustainable tourism	5
EUSALP	(AG) 6 Natural / cultural resources	5
Explorative Interviews		9
Total		**88**

Survey

The third part of the data collection framework consists of conducting a survey of approximately 6000 stakeholders – comprising key actors such as the PAs' coordinators and steering group members, as well as other stakeholders. Lists[109] of stakeholders were provided by each strategy (PA coordinators or communication officers) or the EU Commission.

The questionnaire used for the survey was initially drafted based on the findings of the desk research. Subsequently, it was further elaborated based on the explorative interviews/case study interviews and the first analysis, and was finalised in accordance with comments from DG REGIO.

The survey has been designed with the objective to test the insights already gained through desk research, case studies and interviews with regard to the intervention logic of the macro-regional strategies and the PAs. Therefore, the survey serves to verify and confirm findings and thus validate the evidence upon which the analysis of Task 3 and Task 4 is based. Moreover, the survey has provided the opportunity for stakeholders to contribute with additional insights through open answers and commenting opportunities, which numerous respondents have taken advantage of.

The survey respondents consist of different types of stakeholders in the four strategies, and have been sent an electronic invitation to participate in the

[109] Based on conference participation, newsletter subscription lists, among others.

online-survey based on their association with a (or several) strategies. The table below presents an overview of how many stakeholders the invitation was sent to as well as the number of respondents. This report is based on the final survey data extracted on 14.09.2017.

On the survey closing date, 14 September 2017, 999 respondents (Table 3-3) had answered the survey (around 16%). The names and contact data of the 6000 respondents invited to answer the electronic survey were provided by the four macro-regional strategies. It is assumed that these lists cover a representative selection of actors in the four macro regions. Data is drawn at strategy level, as the numbers per policy/priority/thematic/pillar vary considerably. An uneven level of responses may bias the results. Across the four strategies more respondents at policy level than project level have answered. Since the questions for policy and project area are separated, this should not result in a bias.

Table 3-3 Overview of survey recipients and respondents

Strategy	No. of recipients to whom the survey was sent	No. of answers received[110]
European Union Strategy for the Baltic Sea Region (EUSBSR)	3891	429
European Union Strategy for the Danube Region (EUSDR)	927	233
European Union Strategy for the Adriatic-Ionian Region (EUSAIR)	1003	258
European Union Strategy for the Alpine Region (EUSALP)	264	79
Total	**6085**	**999**

Finally, Table 3-4 below provides a brief overview of the timeline of the survey.

Table 3-4 Timeline of survey

Event	Date (2017)
Survey open & invitations sent	7 July
1st reminder sent	21 July
2nd reminder sent	4 August
3rd reminder sent	21 August
4th reminder sent	6 September
Survey closing date	14 September

[110] On survey closing date, 14.09.2017

3.3 Review of the EUSAIR (Task 2a) – Summary

Contents of section

This section contains a summary of Task 2a, the review of the EUSAIR. The main report, as well as the methodological framework applied, can be viewed in Appendix A below.

Review of EUSAIR (summary)

The table below shows the summarised results of the review of the EUSAIR's topics through relevant indicators. The assessment concludes that all Topics demonstrate a need for intervention and, furthermore, all prove to be macro-regionally relevant. The EUSAIR responds to internal issues (i.e. weaknesses in the SWOT methodology) and external challenges (i.e. threats).

The EUSAIR's constellation, numbering two new Member States and four (potential) candidate countries out of eight countries in total, includes a high share of countries that are either the EU's least developed regions (i.e. eligible for the Cohesion Fund) or still in the pre-accession process. The (potential) candidate countries perform generally low on the chosen indicators (where data is also available). The specific cases being topics 2.1, 2.2, 3.2, 4.1. The performance is, however, not exclusively below the EU level, and sometimes better than the lowest performing region of the EU. The (potential) prospect of accession for these countries further reconfirms the need for intervention.

The macro-regional relevance is demonstrated in several forms, such as addressing issues and opportunities which, among other things:

- require a communal approach to an effective solution (esp. Topics 1.3, 3.1.a, 3.1.b);
- build on a wider geographical scope to optimise the utilisation of resources (esp. Topics 1.1, 1.2, 2.3);
- harvest from the advantage of common features (esp. Topics 1.1, 1.2, 2.1, 4.1, 4.2);
- are not affected by national borders (esp. Topics 3.1.a, 3.1.b, 3.2); or
- enforce territorial cohesion (esp. Topics 2.1, 2.2, 2.3). [111]

The Strategy's topics are furthermore relevant for the future accession of the (potential) candidate countries, as the addressed themes are also relevant for some EU key policies (e.g. targets 1, 2, and 4 of the EU Biodiversity Strategy, the EU Energy Union, the Blue Growth Strategy, or the Water Framework Directive).

[111] 1.1 Blue technologies, 1.2 Fisheries and Aquaculture, 1.3 Maritime and Marine Governance and Services; 2.1 Maritime Transport, 2.2 Intermodal Connections to the Hinterland, 2.3 Energy Networks; 3.1.a The Marine Environment - Threat to coastal and marine biodiversity, 3.1.b The Marine Environment - Pollution of the Sea, 3.2 Transnational Terrestrial Habitats and Biodiversity; 4.1 Diversified Tourism, 4.2 Sustainable and responsible tourism management

The review of the EUSAIR's topics concludes that the selected themes all address prevailing issues. Furthermore, the selected Topics are all relevant in the macro-regional context and in different forms; either to effectively solve issues or to benefit from the common context in the region.

Table 3-5: Summarised review of the EUSAIR's topics

Topics	Theme of intervention	SWOT	Traffic Light
1.1 Blue technologies	Blue Innovation	Weakness	Corresponds to need + Macro-regionally relevant
1.2 Fisheries and Aquaculture	Fisheries and Aquaculture	Weakness	Corresponds to need + Macro-regionally relevant
1.3 Maritime and Marine Governance and Services	Maritime & Marine Governance	Threat	Corresponds to need + Macro-regionally relevant
2.1 Maritime Transport	Maritime Transport	Weakness	Corresponds to need + Macro-regionally relevant
2.2 Intermodal Connections to the Hinterland	Accessibility	Weakness	Corresponds to need + Macro-regionally relevant
2.3 Energy Networks	Energy Integration	Threat	Corresponds to need + Macro-regionally relevant
3.1.a The Marine Environment - Threat to coastal and marine biodiversity	Marine Biodiversity	Threat	Corresponds to need + Macro-regionally relevant
3.1.b The Marine Environment - Pollution of the Sea	Marine Pollution	Weakness	Corresponds to need + Macro-regionally relevant
3.2 Transnational Terrestrial Habitats and Biodiversity	Terrestrial Biodiversity	Threat	Corresponds to need + Macro-regionally relevant
4.1 Diversified Tourism	Diversified Tourism	Weakness	Corresponds to need + Macro-regionally relevant
4.2 Sustainable and responsible tourism management	Sustainable Tourism	Weakness	Corresponds to need + Macro-regionally relevant

The survey validates the finding that the action plan addresses existing needs in the macro-region, as the major challenges are reflected: 27% strongly agree and 58% somewhat agree. The opinion is similar on whether the identified needs also reflect future global challenges to the macro-region.
More than one-third of the respondents furthermore somewhat disagree that the Action Plan is regularly adapted to changing needs. Here it should be noted that the Action Plan is from 2015, and hence still of a young age.

Three quarters of the respondents either somewhat agree (56%) or strongly agree (25%) that the identified needs and opportunities are well-suited for regional cooperation. This picture is similar, but less positive, when it comes to the coherence of the identified needs with national/local priorities.

Overall, the survey results support the above conclusion that the EUSAIR's Action Plan addresses relevant needs. This holds for the major current challenges as well as future global challenges. Similarly, there is broad

agreement with the macro-regional relevance of the identified needs: They are suitable for regional cooperation and mostly reflect the national/local priorities.

Table 3-6 Survey results (EUSAIR): Does the action plan for the policy/priority/pillar/thematic area include needs relevant for the macro-region?[112]

Percentage distribution of answers/ Sub-question	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Do not know	Respondents	Standard deviation
The major challenges for the macro-region are reflected in the action plan	27%	58%	9%	2%	3%	91	0,86
There is a regular revision/update of the action plan to adapt to changing needs	15%	41%	30%	7%	8%	91	1,07
Needs identified in the action plan are well-suited for regional cooperation	25%	52%	14%	4%	4%	91	0,98
The needs identified for the macro-region reflect future global challenges affecting the area	25%	56%	14%	0%	4%	91	0,89
The needs identified are coherent with national/local priorities	19%	56%	15%	3%	7%	91	1,01
					Total	91	0,96

3.4 Achievements of the EUSAIR (Task 2b)

For the analysis of the EUSAIR, one Thematic Pillar was selected for a case study: Pillar 4, Sustainable Tourism. An analysis of the achievements of this thematic area is presented in the sections below. The section is divided into two subsection: 1) achievements content-wise (subsection 3.4.1) and 2) process-wise (subsection 3.4.2). The tables included in the following subsections show the key findings from the interviews, the survey and the desk study. Pillar 4 is described in a factsheet at the end of the chapter (Section 3.7). The fact sheet is based on data from the action plans, other Pillar 4 documents and interviews.

3.4.1 Achievements – content-wise

Content achievements of the EUSAIR (2b)

The EUSAIR is a relatively young strategy and the achievements are limited and concentrate on achievements related to setting up the cooperation in the Thematic Pillar. The initial achievements of the analysed Pillar 4 are summarized through the survey results presented in Table 3-7 and key recent examples presented in Table 3-8. A more complete list of achievements is included in the logframe (Table 3-14). A detailed discussion on the aspect of achievements (content-wise) follows below.

Progress in the initial years

These results of the survey concerning progress in the initial years (Table 3-7) indicate that the first steps of the cooperation have been taken, but that the more formalised cooperation is not developed yet. In the survey, respondents were asked to reflect on questions regarding achievements in the short term (1-

[112] Results per 14.09.17 (policy level)

2 years). Only very few respondents were unable to answer these questions. The highest scores in this group of questions are given to the sub-questions related to: technical capacity increase, common strategy/work plan, and that stakeholders were brought together. Respondents find to a slightly lesser extent that tools and procedures have been developed. It is noted that the rules and procedures were adopted in June 2015[113], according to the progress report.

The analysis of each of the aspects will detail this assessment through the case study in the section below.

Table 3-7 Survey results (EUSAIR): What is/was the progress in the initial years (the first 1-2 years) in your policy/priority/pillar/thematic area?[114]

Percentage distribution of answers/ Sub-question	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Do not know	Respondents	Standard deviation
Increase in capacity for cooperation	18%	54%	21%	5%	2%	84	0,87
Developed common strategy/work plan/road map with common sub-objectives	18%	50%	26%	4%	2%	84	0,86
Developed tools for cooperation (websites, platforms, labels)	14%	37%	32%	11%	6%	84	1,05
Bringing stakeholder of the macro-region together through activities	21%	42%	27%	5%	5%	84	1,01
Rules, procedures, and processes for the cooperation are developed and functioning	17%	38%	26%	13%	6%	84	1,1
Total						84	0,98

The following table (Table 3-8) presents an overview of key recent examples of content-wise achievements of Pillar 4, sustainable tourism, of the EUSAIR.

[113] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

[114] Survey results per 14.09.17 (policy level)

Table 3-8 EUSAIR summary table: Findings from interviews, survey and desk research – examples of achievements content-wise

(Types of) achievements content-wise	Results - examples from progress report[115]	Interviews – selected findings[116]	Survey – results[117]
Policy dialogue	Processes / facilities in member countries to support TSG 4 (e.g. in Italy: Design of a new strategic plan for tourism and regional governance processes to support EUSAIR, in Albania: Joint tourism forums)	There is more dialogue, experience shows more exchange, but not far enough Round table – SG meet two or three times a year – we have tried to integrated into – we have 4 dialogue meetings with MAs + key implementers in the programmes	31% and 56% of the respondents at policy level strongly or somewhat agree that the MRS process facilitates synergies between policies; helps better understand the big picture at the policy level
Mobilisation of finance	Work on aligning EUSAIR priorities with ESIF Programmes (regional ESF and ERDF Programmes) + with national ESIF Programmes (ERDF National Programmes)	Project that has been approved thanks to the strategy (while AIR was still under approval), it wasn't labelled but as it was within the framework – so this was why it was approved, [respondent] thinks Regarding the funding there - if Horizon, SF - there the issue is that the TSG should work on preparing the projects. ADRION programmes funds a lot of new projects Project that has been approved thanks to the strategy (while AIR was still under approval) of network of universities. Have designed ERASMUS programme for the area ('Sunbeam-project')	12% and 27% of respondents at policy level strongly or somewhat agree that the MRS process facilitates access to funding (the cooperation leads to an increase in funding)
Joint development of projects and generation of project ideas	Priority actions selected (3 actions for each of the two topics in Action Plan)	All countries have their own projects in their OPs. However, in some CB programmes it works. In SI and HR, the CBCs don't accept. Difficult to join and match wishes to do projects together In the absence of a plan we worked on a basket of products	18% and 54% of respondents strongly or somewhat agree that there is an increase in capacity for cooperation
Cooperation on major issues in the macro-region	Not included in progress report	We need a SWOT analysis. Without it will never know what you should work on. Since we didn't have that we worked on a basket of products	27% and 58% of respondents strongly or somewhat agree that the major challenges for the macro-region are reflected in the action plan
Implementation of (regional/EU) polices in the macro-region	Too early to be included in progress report	At the moment no; not for regional policy Our members are usually the directors of tourism in their group (same people who are in DG GROW; transfer of policy is very directly	The survey showed that 41% of the respondents (6% and 35% strongly or somewhat agree) thought that an increase in implementation of EU policies in the macro-region would be the outcome in the medium term (3-5 years)

Policy dialogue

31% and 56% of the respondents at policy level strongly or somewhat agree that the MRS process facilitates synergies between policies and helps better understand the big picture at the policy level. The findings in the interviews show that it is still early days with regard to increase in policy dialogue. The progress report identified that in Italy, a new strategic plan for tourism and regional governance processes to support EUSAIR is being designed, and in

[115] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

[116] Interviews with Pillar stakeholders May-September 2017

[117] Survey results per 14.09.17 (policy level)

	Albania, joint tourism forums have been conducted. These activities indicate that the initial steps towards policy dialogue and joint development of policy may already have been taken. The interviewed stakeholder echoed this development (Table 3-8 above). It is too early for the EUSAIR and Pillar 4 to show any progress on development of joint/common polices. However, one stakeholder replied that the initial step had be taken by inviting a guest from an EU NGO who organised an event concerning sustainable international tourism. This resulted in a networking event where actors could share experiences.
Mobilisation of finance	In the EUSAIR, 12% and 27% of respondents at policy level strongly or somewhat agree that the MRS process facilitates access to funding (the cooperation leads to an increase in funding). One interviewed stakeholder knew of projects of a network of universities that had been approved thanks to the strategy (while EUSAIR was still under approval). This was funded by the ERASMUS programme for the area ('Sunbeam-project'). Another stakeholder found that EUSAIR provides the connection to all existing programmes. This is corroborated by the progress report for Pillar, which mentions the TSG's work on aligning EUSAIR priorities with ESIF Programmes (Table 3-8). Mobilisation of funds is, however, difficult as you first need indicators to demonstrate progress. Another stakeholder noted that there is still a lack of knowledge in the region with regard to what the EUSAIR is and what it does. Labelling has only very recently been initialised, and has yet to be agreed upon in TSG4.
Joint development of projects and generation of project ideas	The progress report mentions that one of the achievements is that priority actions have been selected; namely three actions for each of the two topics in the Action Plan. Furthermore, a list of projects from TSG4 has been presented to ADRION (see Table 3-13). Interviewed stakeholders confirm that the projects had been developed within the framework of the TSG. Some stakeholder expressed that the joint development of projects was very dependent on the funding. The survey results indicate a rising tendency for collaborative activities, in that 18% and 54% of the respondents at the policy level strongly or somewhat agreed to there being an increase in the capacity for cooperation.
Increased cooperation on major issues in the macro-region	None of the interviewed stakeholders answered the question regarding the increase in cooperation on major issues. The survey, however, shows that, amongst the respondents, a relatively high level of 27% and 58% strongly or somewhat agree that the EUSAIR reflects the major challenges for the macro-region (Table 3-9). This indicates that there is potential for cooperation on major issues. Due to the 'immaturity' of the EUSAIR, the focus lies on setting up the structure (process), and the cooperation in terms of content may/will come later.

Table 3-9 Survey results (EUSAIR): Does the action plan for the policy/priority/pillar/thematic area include needs relevant for the macro-region?[118]

Percentage distribution of answers/ Sub-question	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Do not know	Respondents	Standard deviation
The major challenges for the macro-region are reflected in the action plan	27%	58%	9%	2%	3%	91	0,86
There is a regular revision/update of the action plan to adapt to changing needs	15%	41%	30%	7%	8%	91	1,07
Needs identified in the action plan are well-suited for regional cooperation	25%	52%	14%	4%	4%	91	0,98
The needs identified for the macro-region reflect future global challenges affecting the area	25%	56%	14%	0%	4%	91	0,89
The needs identified are coherent with national/local priorities	19%	56%	15%	3%	7%	91	1,01
Total						91	0,96

Increase in implementation of (regional/EU) polices in the macro-region

As the EUSAIR is a new strategy and the cooperation is starting up, it is unrealistic at this point in time to expect that there should have been a real increase in implementation of EU policies in the region – not including the EUSAIR itself. The progress report for Pillar 4, for instance, does not mention any results in terms of increased implementation of regional/EU policies. Expectedly, the interviewed stakeholders also do not fully agree on this topic: One interviewed stakeholder stated that this it too early, and another stated that due to the existing cooperation in the topic of tourism, the link to EU policy is already there through the actors involved. The survey results reflect a similar picture, with 6% and 35% of respondents strongly or somewhat agreeing that an increase in implementation of regional and EU policies would be a likely outcome in the medium term, i.e. within the next 3-5 years (see Table 3-8).

3.4.2 Achievements – process-wise

Process achievements of the EUSAIR

In this section, the process-related results of the EUSAIR are analysed for the case area, Pillar 4. Overall, the analysis finds achievements 'process-wise' in a number of areas. The survey shows that the value added of the EUSAIR is in particular in relation to 'bringing together new actors across sectors', 'across countries' and 'bringing together actors across levels (national/regional) and type (public/private)'. The three question score very high with 91%, 88% and 87% of respondents, respectively, that agree strongly or somewhat (Table 3-10).

[118] Survey results: 14.09.17 (policy level)

Table 3-10 Survey results (EUSAIR): What is the added value of cooperation under the macro-regional strategies (MRS) in the policy/priority/pillar/thematic area?[119]

Percentage distribution of answers/ Sub-question	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Do not know	Respondents	Standard deviation
The MRS process brings together (new) actors across sectors (cross-sectoral cooperation)	45%	46%	4%	2%	4%	85	0,91
The MRS process brings together actors across countries	53%	35%	8%	0%	4%	85	0,9
The MRS process brings together actors across levels (national/regional) and type (public/private)	43%	44%	8%	0%	5%	84	0,95
The MRS process facilitates access to funding (the cooperation leads to an increase in funding)	12%	27%	40%	15%	6%	85	1,04
The cooperation brings legitimacy to the work and increases recognition of issues/needs/challenges	18%	56%	20%	1%	5%	85	0,9
The MRS process facilitates/deepens cooperation with third countries	35%	38%	18%	4%	6%	85	1,09
The MRS process facilitates synergies between policies; helps better understand the big picture at the policy level	31%	56%	8%	0%	5%	85	0,9
Total						85	0,96

The following table (Table 3-11) presents an overview of key recent examples of process-wise achievements of Pillar 4, sustainable tourism, of the EUSAIR.

[119] Survey results per 14.09.17 (policy level)

Table 3-11 EUSAIR summary table: Findings from interviews, survey and desk research – examples of achievements in EUSAIR process-wise

(Types of) achievements content-wise	Results – examples from progress report[120]	Interviews – selected findings[121]	Survey – results[122]
Building on collaboration in topic/area which already existed in the region (before the strategy	Not relevant	Collaboration already existed in the "real" sector Tourism is a very competitive sector, both nationally and regional – there is a conflict nationally and regionally More strict cooperation since AIR was approved. "Thanks to the strategy, cooperation is much more developed."	38% and 45% of the respondents at policy level strongly or somewhat agree that they are continuing on from previous cooperation and building on existing transnational networks
The MRS–process brings together (new) actors across sectors and countries	Liaising with other TSG and possible stakeholders	Yes, because it's tourism and culture working together. Some of the projects we screened (7) from tourism got a green light in first call. One got a letter of recommendation. Some projects with green light eventually received funding Now, e.g. [actors] working together, who before just were working together sporadically. (So can already see results.)	45% and 46% of the respondents at policy level strongly or somewhat agree that the MRS process brings together (new) actors across sectors (cross-sectoral cooperation) 53% and 35% of the respondents at policy level strongly or somewhat agree that the MRS process brings together actors across countries
The MRS-process brings together actors across levels (national/regional) and type (public/private)	Work on awareness-raising, information + communication (events, development of stakeholder platform, website)	Organised an event with EWTO. We often send invitations to ministries with representative in other TSGs. All cooperation is close to our activities NGO not yet, CPMR [Conference of Peripheral Maritime Regions] lobby will be following closely the work of the TSG 4 – network of business angles Stakeholder platform is still not ready – at the moment we only work with a few organisations – the stakeholder platform will open it up to more plays and will be very beneficiary for the round tables Once we have a database – this will change and open the cooperation. It will be funded by the ADRION projects	43% and 44% of the respondents strongly or somewhat agree that the MRS process brings together actors across levels (national/regional) and type (public/private)
Increase in cooperation with sector relevant EU Commission service	Not included in progress report	COM Tourism services have been reduced. Definitely more cooperation with DG REGIO. DG Growth is primary, and the answer is no Loose cooperation with MARE and Growth (in COSME and EMFF) – nautical tourism, culture For Pillar 4, DG MARE is highly involved – but doesn't know whether this is due to the strategy. There's also some involvement of DG NEAR	Not covered by the survey
Cooperation with third-countries	Too early to be included in progress report	Two coordinators per pillar, to the none-EU members the same importance Participation is very depended on funding. For blue growth and sustainable tourism they all come (all time) Problems with funding (at governance level) – in relation to participation of member countries; non-EU members don't have many resources for EUSAIR	35% and 38% of the respondents strongly or somewhat agree that the MRS process facilitates/deepens cooperation with third countries

[120] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

[121] Interviews with Pillar stakeholders May-September 2017

[122] Survey results per 14.09.17 (policy level)

Building on collaboration in topic/area which already existed in the region (before the strategy)

Several stakeholders stated that collaboration already existed before the strategy, but also mentioned that cooperation has become more structured since the EUSAIR was approved. As one stakeholder remarked: "Thanks to the strategy, cooperation is much more developed." Another stakeholder is yet to see more concrete projects and results, but says that there definitely is more cooperation. Some interviewed stakeholders also refer to the existing cooperation under ADRION as well as under several of the bilateral CBC programmes in the AIR (see also section 3.6, 'ADRION Transnational Programme'). This cooperation is a strong building block and provides a good basis for development in the region and in Pillar 4.

One stakeholder was very sceptical in relation to the development of cooperation stating that tourism is a very competitive sector, both nationally and regional. The overall survey results, however, point to that the EUSAIR builds on collaboration in a topic/area, which already existed previously in the region – with 38% and 45% of the respondents at policy level strongly or somewhat agreeing (Table 3-11).

The MRS process brings together (new) actors across sectors and countries

Stakeholders agree, both in interviews and in the survey (91% and 88% of respondents agreeing strongly or somewhat, concerning sectors and countries, respectively), that the EUSAIR bring actors together across sectors, countries and levels (Table 3-11). One stakeholder stated that actors who before just were working together sporadically now work together on a regular basis. The progress report of TSG 4 also mentions liaising with stakeholders as well as other TSGs. The EUSAIR is, in particular, bringing tourism and culture together (cross-sectoral cooperation). Some of the projects from tourism that got a green light in the first call have a cultural element: Maritime routes, cultural heritage, sustainable tourism and archeologic heritage. In addition, one stakeholder added that there is an impetus to participate in China next year as a common brand (this would amount to working together on a common policy/or a major challenge).

Also on the project level, the aspect concerning involvement of new actors – including across borders – is rated as important. When asked about the added value of running a project within the macro-regional strategy, a large percentage of respondents from the EUSAIR agreed (52% and 34% agreed strongly and somewhat, respectively) that they were able to involve new partners and increase the geographical scope (Table 3-12).

Table 3-12 Survey results (EUSAIR): What is the added value of running a project within the macro-regional strategy (MRS) in your area?[123]

Percentage distribution of answers/ Sub-question	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Do not know	Respondents	Standard deviation
We were able to involve new partners and increase the geographical scope (working within new thematic areas and/or geographical regions)	52%	34%	3%	1%	10%	115	1,19
We have been able to develop new concepts/ideas for tackling issues	45%	37%	10%	1%	6%	115	1,06
We have been able to attract new or additional funding	24%	42%	21%	4%	9%	115	1,14
We have developed new skills for cooperation on the issues in the area/topic	43%	43%	9%	0%	6%	115	1,02
We have been able to involve different levels of government/administration (multi-level governance)	25%	49%	17%	1%	8%	115	1,07
Total						115	1,1

The MRS process brings together actors across levels (national/regional) and type (public/private)

One of the important activities of Pillar 4, Sustainable Tourism, is the organisation of a stakeholder platform[124]. The stakeholder platform will open the area up to more actors, and will be very supportive for the round tables. The stakeholder platform (to be funded by the ADRION Transnational Programme) will change and open the cooperation, according to the interviewed stakeholders. There are currently three active fora in the EUSAIR: 1) chambers of commerce, 2) universities, and 3) cities – the first of which is mostly active in relation to the current action plan. This year, they all meet for one event. Interviewed stakeholders explained that that they see two types of actors: 1) public authorities, some of which are very active and motivated, and 2) private companies, which are difficult to motivate, but if the content is relevant (training or advice), they will participate.

According to the progress report, TSG4 is working on awareness-raising, information and communication in relation to stakeholders, which appears to begin to have results: 43% and 44% of the survey respondents strongly or somewhat agree the MRS process brings together actors across levels (national/regional) and type (public/private) (Table 3-11).

Increase in cooperation with sector-relevant EU Commission service

Stakeholders see an increase in the cooperation with DG REGIO, DG GROW and DG MARE. One stakeholder was unsure whether the involvement of DG MARE was due to EUSAIR or the Maritime Strategy. There is also some involvement of DG NEAR, especially in relation to the use of the IPA funding to EUSAIR (Table 3-11).

[123] Survey results 14.09.17 (project level)

[124] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

Cooperation with third countries

For the EUSAIR, 35% and 38% of the respondents strongly or somewhat agreed that the MRS process facilitates/deepens cooperation with third countries. This question primarily explores the cooperation with countries either outside the strategy or non-EU members. As all the countries in the EUSAIR are either EU MS or candidate countries, most of the interviewed stakeholders based their answers on the cooperation between the MS and the candidate countries (Table 3-11). Several interviewed stakeholders mentioned that there is an issue relating to funding of participation in steering group meetings and other governance work. If the travel is not paid (by ADRION or other), representatives from candidate countries will not always participate.

3.5 Comparison of objectives of the EUSAIR with achievements (Task 2c)

Comparison of objectives of EUSAIR with achievements (2c)

This section includes an analysis of the objectives (from the Action Plan), targets (from the Action Plan)[125], achievements (progress reports), and indicators (where available) of the analysed pillar for the EUSAIR. These are illustrated in a logframe. The progress towards targets and objectives is tracked through examples of achievements and progress registered in the progress report. The achievements are discussed drawing on the analysis of the achievements in Section 3.4.

Verifiable indicators

The action plan includes five targets. Targets are a mixture of impact, output and results targets. Some of the targets include indicators and two of these can be verified externally. The other indicators are either Pillar internal – can be verified from the reporting of the Pillar or are not measureable (missing an indicator, or not time bound, etc.).

Reporting and indicators

The Pillar 4 was recently established and procedures were agreed in 2015. There is very little/limited recording/documentation of the achievements of PAs (reporting). The report does not report progress on the targets or indicators.

TSG 4, Sustainable tourism – Objectives vs. achievements

TSG 4, Sustainable tourism

Pillar 4 aims at developing the sustainable and responsible tourism potential of the Adriatic-Ionian Region through innovative and quality tourism products and services. It also aims at promoting responsible tourism behaviour on the part of all stakeholders (wider public, local, regional and national private and public actors, tourists/visitors) across the Region. Facilitating the socio-economic perspectives, removing bureaucratic obstacles, creating business opportunities

[125] COMMISSION STAFF WORKING DOCUMENT. Action Plan concerning the European Union Strategy for the Adriatic and Ionian Region. 17.6.2014

and enhancing the competitiveness of SMEs are essential for the development of tourism[126].

The logframe for TSG 4

For Pillar 4, Sustainable tourism, 4 targets are inserted in the logframe in Table 3-14. A number of activities and outputs/results have been identified from the progress report. Pillar 4 focuses on a number of activities during the first years of operation, according to the progress report. The activities can be grouped into awareness raising, networking, project and finance identification (see also Table 3-14). Some of the interviewed stakeholders confirm that EUSAIR has focused on the identification of project opportunities. Other interviewed stakeholders found that there was still a long way to go as projects tended to be national (or bilateral). However, TSG for Pillar 4 four submitted a list of projects (Table 3-13) for funding to the ADRION programme. Finding funding in general and aligning with ESIF are another activities of the TSG. Here, stakeholders confirm progress and development of awareness amongst stakeholders, but also stated that finding funding was a challenge. Furthermore, one interviewed stakeholder found that the EUSAIR has provided the connection with all existing (funding) programmes.

An important activity and output of the work for the TSG is the progress on establishing a stakeholder platform. Some interviewed stakeholders explained that the absence of the stakeholder platform was limiting the cooperation. The stakeholder platform is a database where actors can identify cooperation partners for projects. The most important existing tool in this regard is a series of roundtables (cities, NGO, academia) established under the Adriatic Ionian Initiative (AII), which bring types of actors together[127]. One stakeholder mentioned that there were plans to merge the three roundtables into one thanks to the EUSAIR. The merger would make these roundtables even more relevant to the actors.

Table 3-13 EUSAIR Pillar 4 - Labelled projects submitted to ADRION (ETC Transnational Programme)

- Development of Gastro tourism in the Adriatic and Ionian Region (SLO, ITA, CRO, SRB, ALB, GRE)
- Construction of artificial lake on the top of the mountain Jahorina (SLO, SRB)
- Innovative region for an innovative tourism-Enhancing the regional SME skills and competitiveness (ITA, SLO, CRO, SRB, BIH, MNE, ALB)
- The Adventure Tourism – a smart economic drive for Adriatic – Ionian Region (ITA, SLO, CRO, SRB, BIH, MNE, ALB)
- Experimentation of Tourism Policies in the Framework of Welcoming and Attractiveness Policies in Adriatic and Ionian Rural Areas (CRO, ALB SRB, BIH, MNE)
- WineSenso (ITA, SLO, CRO, SRB, BIH, MNE, ALB)
- AITIS, Adriatic-Ionian Initiative for Tourism Innovations and Sustainability (CRO, BIH, MNE, ITA, SRB)

[126] COMMISSION STAFF WORKING DOCUMENT. Action Plan concerning the European Union Strategy for the Adriatic and Ionian Region. 17.6.2014

[127] http://www.aii-ps.org/index.php/news-events/events/item/245-17-forum-adriatic-ionian-chambers-cities

Whether the activities of the TSG will contribute to the target set is difficult to assess so early in the cooperation. It is likely that projects generated and promoted under the TSG for Pillar 4 will contribute to 'creating 5 new macro-regional routes'. Whether the activities of the TSG will contribute to the 'improving of hotel standards' will depend on whether projects will be targeting the framework conditions and capacity developed for improving hotel standards. The increase in tourist arrivals will depend on a number of other factors than the work of the TSG of Pillar 4 and the projects initiated, and the direct contribution is not very likely. This does not mean that there, in the long term, could not be an impact on arrivals due to cooperation in relation to joint marketing such as the effort which is made in China this year.

Table 3-14 Logframe for TSG 4 Sustainable tourism[128]

Input	Examples of activities	Examples of outputs/results	Targets
People/ organisations Funding Other (e.g. infrastructure, facilities, services)	• Drafting of Rules of Procedure • Identifying top priorities of TSG 4 • Creating Pillar 4 specific criteria • Identification of funding sources + related problems • Work on aligning EUSAIR priorities with ESIF Programmes (regional ESF and ERDF Programmes) + with national ESIF Programmes (ERDF National Programmes) • Organising meetings (TSG) • Liaising with other TSG and possible stakeholders • Identification of project opportunities • Work on awareness-raising, information + communication (events, development of stakeholder platform, website) • Internal dissemination of information (update of Intranet)	• Rules of Procedure defining responsibilities/functions for TSG 4 (adopted at the 2nd TSG 4 meeting in Zagreb, June 2015) • TSG 4 members [country representatives] identified • Priority actions selected (3 actions for each of the two topics in Action Plan) • Processes / facilities in member countries to support TSG 4 (e.g. in Italy: Design of a new strategic plan for tourism and regional governance processes to support EUSAIR, in Albania: Joint tourism forums)	5 new macro-regional routes created Conformity with EU standards and best practice by hotels and museums 50% increase in tourist arrivals from countries outside the Region 50% increase in tourism arrivals during the off-season period

Measuring progress via indicators

Progress towards the targets is not measured in the progress report yet. The progress toward Targets 1 and 2 is difficult to verify without monitoring data from the TSG. The indicators provided in Target 3 and 4 can be verified with data from Tasks 1 and 2a (see also Table 3-15).

The indicator 'Arrivals at tourist accommodation establishments' registers a score of 89 points on the benchmark for 2015. The tourism sector is therefore underdeveloped, when benchmarked against the EU median level. The scoring differs, however, strongly across the macro-region. About half of the NUTS2 regions (for which data was available) score on the median level of 100 or above, whereas the other half of the regions score partially very low. As mentioned above, it is unlikely that the work of Pillar four will directly contribute. It would be useful to establish some intermediate targets that can be influenced by Pillar 4 cooperation.

[128] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

Table 3-15 Progress on targets – TSG 4 Sustainable tourism

Objectives	Targets[129] and indicators	Progress according to progress report[130]	Progress towards objectives via indicators (OVIs)
•Diversification of the macro-region's tourism products and services along with tackling seasonality of inland, coastal and maritime tourism demand.	5 new macro-regional routes created	Not recording in the progress report yet.	Arrivals at tourist accommodation establishments (Benchmark) 89 (2015)
	Conformity with EU standards and best practice by hotels and museums	Not recording in the progress report yet.	
•Improving the quality and innovation of tourism offer and enhancing the sustainable and responsible tourism capacities of the tourism actors across the macro-region.	50% increase in tourist arrivals from countries outside the Region	Not recording in the progress report yet.	
	50% increase in tourism arrivals during the off-season period	Not recording in the progress report yet.	

3.6 EUSAIR and ESIF (Task 2d)

Funding of the EUSAIR is an issue, which concerns many of the stakeholders and actors of the macro-region.

The key funding mechanism is the ADRION Interreg Transnational Programme and the various CBC programmes in the macro-region. EU Programmes (Horizon, BONUS, and LIFE) are not assessed to be supporting activities of Pillar 4, yet. ERDF and ESF are relatively new, and alignment processes are still underway. In this section, the funding sources identified through the interviews, the desk research and the survey, are discussed.

To begin with, Table 3-16 below provides an overview of the findings from the interviews, the survey and desk research on funding issues in the EUSAIR.

[129] COMMISSION STAFF WORKING DOCUMENT. Action Plan concerning the European Union Strategy for the Adriatic and Ionian Region. 17.6.2014

[130] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

Table 3-16 EUSAIR: Findings from interviews, survey and desk research – summary table for ESIF and EUSAIR

Question	Results – examples from progress reports[131]	Interviews – selected findings[132]	Survey – results[133]
It is difficult to find financing for the projects	Rules of Procedure adopted, which (among others) pinpoint funding sources. In order to be able to reach the set targets, member countries tried to identify possible sources; issues were identified (see below)	Funding is only slowly coming together: Co-financing is an issue preventing project generation; late arrival of funding (refinancing) Visibility of the MRS can't be achieved, as no funds It is not easy to find funds – but we have experience since 2003We are known in the community, there are a lot of funding possibilities. (We live from projects) Stakeholders to AIR have to make use of all available funds. In the mind-set of people: much reliance on the Adrian programme The availability of funding is very different between the countries (non-EU and EU). Strategies are built on [the 3] no's – [stakeholders] will very soon lose interest	40% and 40% of the respondents strongly or somewhat agreed to that it is difficult to find financing
The MRS-process has help reflect MRS priorities in the ESIF programmes in the macro-region	Member countries realised that problems will arise in national funding (no transnational component for OPs)	Also now ADRION For tourism, we have an additional issue. Tourism is not a TO [thematic objective] – need to relate to SMART or to SME, ICT. Light investments are 5 million EUR – it is not clear for the programme how to do this – this is a barrier Projects have received Horizon funds	Not included in survey
There is an increase in alignment between ESIF funding - it has become easier to combine different EU funds	A coordination process for aligning regional ESIF Programmes (regional ESF and ERDF Programmes) and EUSAIR priorities was undertaken (by Italian Regions) + same process begun regarding national ESIF Programmes (ERDF National Programmes)	Combining funds is always very complicated. There's a reluctance from MAs to be bothered to combine funds Lack of funding – how to persuade OPs to include [MRS priorities]? the MRS actors do not speak to the OP – it is two different worlds For tourism, the additional issue is that tourism is not a TO [thematic objective]– therefore it has to be related to other themes and TOs (SMART or to SME, ICT.) to find funding.	12% and 38% of the respondents strongly or somewhat agree that there is an increase in alignment between the macro-regional strategy and ESIF funding – it is easier to get ESIF funding
MRS-actors have been involved in programming of ESIF and/or are in dialogue with Managing Authorities (MA) for ESIF	At the 3rd TSG 4 meeting, the representatives of the ADRION managing Authority and Adriatic Ionian Secretariat were present	Not as much as they would like, but to some extent; mostly because – the dialogue is better; not yet the programming Direct management programmes EMSF, COSME, line DG are responsible for these programmes. – We wanted them to give 'bonus' to MRS, but they have a horizontal approach and local programmes	31% and 56% of the respondents strongly or somewhat agreed to that the MRS process facilitates synergies between policies; helps better understand the big picture at the policy level
Funding has been obtained from other EU programmes (see also Q12)	Member countries realised that problems will arise due to incompatibility of ESIF and IPA funds (different priorities, not always possible to join planned activities together).	Greek projects have received Horizon funds National funds and IPA CBC help a lot, as tourism is a priority for these programmes CF and ESF are the most advanced – they are more keen (from pilot research and from dialogue meeting) It is more easy to convince and to give reasons for 'regions', that have developed SMART specialisation strategies, to participate – e.g. the region of Ionian Islands will include an MRS bonus	38% and 40% of the respondents strongly or somewhat agree that the competition for funding is very high in EU Programmes (Horizon 2020, LIFE, etc.)
It has been possible to attract outside financing (financial institutions, national/regional resources, other	Albania was given task to coordinate IPA countries, as they have different situation/rules for financing projects. Working on resolving	Possible funding from GIZ (German bilateral)	26%, 33% and 17% of the respondents have obtained funding from other sources (IFI, national/regional, private)

[131] EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

[132] Interviews with Pillar stakeholders May-September 2017

[133] Survey results per 14.09.17 (policy level)

international (non-EU) and private funding	incompatibility of ESIF and IPA funds (see also above).		

It is difficult to find financing for the projects

Co-financing and refinancing are key financing issues. Stakeholders find that it is difficult to find funding, as they cannot provide the co-financing. The availability of funding varies between the countries (non-EU and EU). Not all stakeholders find that funding is 'impossible' and state that experience is important for finding funding. Also, the CBC and ADRION programmes are funding projects. One stakeholder finds that there is too much reliance on ADRION (Table 3-16).

A relatively high percentage (80% strongly agree or somewhat agree) of the survey participants finds that it is difficult to find/obtain funding (Table 3-17). This concerns both funding for the projects/activities, and for the administration/coordination. The survey respondents furthermore find that the competition in the EU programmes is very high (38% and 40%). There is not enough added value in being part of EUSAIR – 17% and 40% of the respondents strongly or somewhat agree that when applying for funding, the labelling does not assist in obtaining funding. However, the newness of the strategy should be considered when interpreting the results of the survey; there is limited experience in working within the EUSAIR.

Table 3-17 Survey results (EUSAIR): Is financing available for collaboration within the policy/priority/pillar/thematic area?[134]

Percentage distribution of answers/ Sub-question	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Do not know	Respondents	Standard deviation
It is difficult to find financing for the projects/activities	40%	40%	12%	4%	4%	82	1
Funding for the administration and the coordination is not available or difficult to find	37%	40%	16%	5%	2%	82	0,97
The competition for funding is very high in EU Programmes (Horizon 2020, LIFE, etc.)	38%	40%	9%	4%	10%	82	1,22
There is an increase in alignment between the macro-regional strategy and ESIF funding – it is easier to get ESIF funding	12%	38%	24%	10%	16%	82	1,25
There is no added value being part of a MRS when applying for EU funding (labelling does not make a difference)	17%	40%	27%	9%	7%	82	1,1
Total						82	1,1

ADRION Transnational Programme

60% and 51% of the respondents at policy and project level, respectively, confirmed that the Pillar had received (will receive) funding from the ADRION Transnational Programme. Also, a high number of respondents (56% and 53% at policy and project level) agreed that Interreg (CBC) programmes are an important funding source in the macro-region (Table 3-18). Most of the interviewed stakeholders are well aware of, and used to, working with the CBC Interreg programmes. The reliance on Interreg may be particular strong for

[134] Survey results per 14.09.17 (policy level)

Pillar 4, Sustainable Tourism, as tourism is a priority for these programmes. There are not so many other financing possibilities, EU or other, that target tourism.

Table 3-18 Survey results: Funding for EUSAIR activities (policy and project level)[135]

Survey results	a. The policy area has received funding from the following sources		b. Projects in the policy area have applied for or tried to get funding from the following sources – without success or with limited success		Number of respondents	
	Policy level	Project level	Policy level	Project level	Policy level	Project level
Interreg: Transnational	53%	40%	45%	35%	53	68
Interreg: Cross-Border Cooperation	53%	47%	35%	39%	51	75
ERDF/CF	43%	25%	30%	28%	40	32
EAFRD	18%	29%	21%	14%	28	21
ESF	10%	29%	27%	33%	30	21
IPA/ENI Cross-Border Cooperation	35%	57%	28%	28%	43	53
	15%	56%	27%	28%	33	32
Horizon 2020	22%	26%	41%	36%	37	47
LIFE	19%	12%	34%	35%	32	34
Erasmus	20%	21%	33%	36%	30	28
International Financial Institution (loans)	26%	4%	26%	35%	34	26
National/regional	33%	50%	33%	26%	36	50
Private	17%	29%	37%	21%	30	28
Other	14%	13%	36%	33%	14	15
I do not know	63%	60%	74%	70%	27	20
					73	104

ESIF and the EUSAIR

For the EUSAIR, 12% and 38% of the respondents strongly or somewhat agree that there is an increase in alignment between the macro-regional strategy, and some interviewed stakeholders do not find that there is an alignment (yet) with the ESIF (Table 3-16). There is a timing problem, as the OPs were drafted in 2012 and the EUSAIR was adopted in December 2014, which has made alignment with EUSAIR difficult. Interviewed stakeholders also found that the link between ESIF and EUSAIR was not only done with a reference to how OPs should strive to include EUSAIR priorities. A closer connection between the OP and the EUSAIR will have to be made in the future.

[135] Survey results per 14.09.17 (policy and project level)

Furthermore, the four pillars of the EUSAIR have little direct connection with ESIF and the Thematic Objectives of the ESIF OPs, according an interviewed stakeholder (Table 3-16). For tourism, there is no specific TO, which in the case of Pillar 4 makes it even more difficult to match the ESIF funding with the Pillar 4 activities. With limited funds, interviewed stakeholders were worried that it would be difficult to persuade OP to include EUSAIR priorities in the programme. The MRS actors do not speak to the OP and vice versa – these are two different worlds, as one stakeholder phrased it. Table 3-19 shows the results of a survey conducted by the EU COM, where 37 programmes (out of 112 relevant programmes) replied to the survey. 6 programmes in total replied that they have taken measures to support the implementation of the EUSAIR.

Table 3-19 ESIF contribution to EUSAIR (findings of survey conducted by the EU Commission)[136]

Types of alignment between ESIF and MRS	Number of programmes
Reported on financial contribution to the EUSAIR.	2 ESI Funds programmes and 4 national IPA II
Reported that measures were taken for contributing to the EUSAIR, such as: › EUSAIR key implementers participating in the Monitoring Committees; › Have attributed extra points to the EUSAIR projects; › Planning EUSAIR targeted calls for proposals.	17 programmes (4 country-specific, 6 Interreg and 7 IPA II programmes) › 16 programmes (9 ESI Funds, 4 IPA II national, and 3 IPA II) › 9 ESI Funds programmes › 1 ESI Funds programme (Western Greece region)
Have already financed a total of 11 EUSAIR projects	2 programmes (the transnational ADRION programme (1 project) and Slovenia ERDF programme (10 projects))
Have provided information on compatibility with and contribution to specific thematic areas of the EUSAIR. The most supported areas are: SMEs development (20), Pillar 3 'Environmental Quality' (18), Pillar 4 'Sustainable Tourism' (16), Pillar 1 'Blue Growth' (16), Pillar 2 'Connecting the Region' (15), Strengthening R&D, Innovation (10) and capacity building (7).	31 out of 37 programmes

Community programmes

According to one interviewed stakeholder, one or several Greek projects related to Pillar 4 have received Horizon funds. Another stakeholder stated that ERASMUS+ has funded a project linked to Pillar 4 (before the real work of the EUSAIR began). Competition for EU Programmes is fierce, according to interviewed stakeholders, and most actors in the macro-region do not have references and experience from past EU programme projects. Furthermore, it is often difficult to find a suitable lead partner with the technical and managerial capacity as well as relevant experiences.

Other funding

[136] European Structural and Investment Funds programmes' contribution to the EU macro-regional strategies. DG REGIO 16.02.17

One stakeholder mentioned possible funding from GIZ (German bilateral). The IFIs (EIB) will in general go for infrastructure projects, of which there is little or none in Pillar 4. EIB loans may be relevant to other pillars (sectors) in EUSAID. None of the other interviewed stakeholders mentioned other funding possibilities.

3.7 EUSAIR TSG 4 – fact sheet

Table 3-20 Profile/factsheet of the Thematic Steering Group 4 Sustainable Tourism

	Name of macro-regional strategy: EUSAIR		**Policy/Priority/Pillar: TSG 4 4 Sustainable Tourism**
Description	Pillar 4 intends to: • develop the sustainable and responsible tourism potential of the Adriatic-Ionian Region, through innovative and quality tourism products and services • and to promote responsible tourism behaviour on the part of all stakeholders (wider public, local, regional and national private and public actors, tourists/visitors) Moreover, it aims at facilitating the socio-economic perspectives, removing bureaucratic obstacles, creating business opportunities and enhancing the competitiveness of SMEs[137]	Drivers/barriers	• Common driver to widen the offer for tourists with the result of new business opportunities, a reduced dependence of the sector on seasonal tourism, a limited environmental footprint, and a better consideration of climate change impacts. • Common challenge: A large imbalance of tourist attraction between areas considered highly and less attractive, and no recognised common image of the region. • Existing international organizations and networks (The Adriatic & Ionian initiative (AII), the Adriatic Ionian Euroregion (AIE), the Forum of the Adriatic and Ionian Chambers of Commerce (AIC Forum))
Objectives	The objective for EUSAIR's Thematic Steering Group 4 is twofold: • Diversification of the macro-region's tourism products and services along with tackling seasonality of inland, coastal and maritime tourism demand. • Improving the quality and innovation of tourism offer and enhancing the sustainable and responsible tourism capacities of the tourism actors across the macro-region.[138]	Targets/Indicators	• Indicators are under development

[137] COMMISSION STAFF WORKING DOCUMENT Action Plan, Accompanying the document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS concerning the European Union Strategy for the Adriatic and Ionian Region {COM(2014) 357 final} {SWD(2014) 191 final}, SWD(2014) 190 final

[138] http://www.adriatic-ionian.eu/about/pillars/pillar-4

Outputs	• Rules of Procedure defining responsibilities/functions for TSG 4 (adopted at the 2nd TSG 4 meeting in Zagreb, June 2015) • TSG 4 members [country representatives] identified • Priority actions selected (3 actions for each of the two topics in Action Plan) • Processes / facilities in member countries to support TSG 4 (e.g. in Italy: Design of a new strategic plan for tourism and regional governance processes to support EUSAIR, in Albania: Joint tourism forums)	Results	• Focus on two topics with 3 actions each: Topic 1 - Diversified tourism offer (products and services) - Actions for topic 1: Development of sustainable thematic routes, fostering Adriatic-Ionian cultural heritage, improvement of SMEs performance and growth-diversification Topic 2 - Sustainable and responsible tourism management (innovation and quality). - Actions for topic 2: R&D, training and skills in the field of tourism businesses (vocational and entrepreneurial skills), expanding the tourist season to all-year round and developing network of sustainable tourism businesses
Operational aspects:	• TSG 4 works based on the Action Plan (2014) and has drafted its Rules of Procedure defining responsibilities/functions for TSG 4 (adopted at the 2nd TSG 4 meeting in Zagreb, June 2015).	Organisation ..	• Two coordinators from Croatia and Albania coordinate the pillar 4 and thus chair the TSG 4. • The Thematic Steering Group for pillar 4 is tasked with implementing the strategy, considering which projects/actions would best contribute to achieving the pillar's and strategy's objectives.
Projects:	Projects (submitted to interreg): • Development of Gastro tourism in the Adriatic and Ionian Region (SLO, ITA, CRO, SRB, ALB, GRE) • Construction of artificial lake on the top of the mountain Jahorina (SLO, SRB) • Innovative region for an innovative tourism-Enhancing the regional SME skills and competitiveness (ITA, SLO, CRO, SRB, BIH, MNE, ALB) • The Adventure Tourism - a smart economic drive for Adriatic - Ionian Region (ITA, SLO, CRO, SRB, BIH, MNE, ALB) • Experimentation of Tourism Policies in the Framework of Welcoming and Attractiveness Policies in Adriatic and Ionian Rural Areas (CRO, ALB SRB, BIH, MNE) • WineSenso (ITA, SLO, CRO, SRB, BIH, MNE, ALB) • AITIS, Adriatic-Ionian Initiative for Tourism Innovations and Sustainability (CRO, BIH, MNE, ITA, SRB)TSG 4 is in the process of identifying project opportunities	Flagships/labelled projects	• All projects listed (to the left) are labelled projects
Financing:	• In the process of identifying funding sources, aligning ESIF funding with EUSAIR. • Have so far received funding from: • Interreg CBC + Adrion Transnational Programme, IPA, GIZ, Seed Money Facility,	Phases/development	• The 1st TSG 4 meeting was held in 2015. Accordingly, TSG 4 is still in the process of developing the basic functions, guidelines, etc. and is thus in phase I.

APPENDICES

EUSAIR

Appendix A TASK 2a: Review of the EUSAIR

A.1 Introduction

Task 2a reviews the objectives of each of the four Macro-regional Strategies. This is done by examining the strategical relevance of each objective in the macro-regional context. In other words, this task scrutinises whether a given objective (1) corresponds to an identified for intervention, and (2) whether the macro-regional approach provides a concrete benefit.

The (1) need for intervention is primarily identified through a pre-defined set of indicators that were developed in Task 1 of this study. Where needed, additional indicators or external literature supplement the judgement. The need for intervention is differentiated on three geographical levels:
i) the macro-region as a whole, ii) the macro-region's individual countries, and iii) internal levels (e.g. urban vs rural).

The (2) macro-regional relevance is established through expert knowledge and external literature. The results of the review were tested and discussed with independent regional experts for each macro-region.
The review applies a traffic light methodology to categorise each objective in terms of need and macro-regional relevance.

A.2 Methodological Framework

A.2.1 Review of objectives

The review of the objectives hence utilises the previously gained insights to the degree possible. In some cases, literature had to be used instead. In order to provide an appropriate judgement on the objectives, which were defined in 2009 for the EUSBSR, the indicator data uses the years 2008 – 2010 (where possible).

Each objective is categorised into 'themes of intervention', to support a suitable choice for the relevant indicator. The themes generalise the objectives into broader categories such as RDI, competitiveness, or the aquatic environment.

The review occurs on three strands of needs:

- i) Aggregate,
- ii) Individual, and
- iii) Internal.

The Text Box below provides an explanation on the logic behind this definition.

Text Box 3-1: Explanation on the terminology used for the scopes of need

The preceding task benchmarks the four macro-regions on three strands:
i) Macro-region against Europe,
ii) Country against macro-region, and
iii) Internal differences (e.g. rural-urban, where applicable).

These three strands essentially analyse the i) **aggregate** performance of an entire macro-region, ii) the performance of the macro-region's **individual** countries, and lastly iii) the macro-region's **internal** performance (to the extent possible).

The underlying review uses judgement criteria to provide a justified traffic light assessment. The judgement criteria are as follows:

Table 3-21: Judgement criteria and associated indicators

Judgement criteria	Indicators
1) To which extent does the objective reflect an actual need for intervention?	The entire macro-region is a "bottom-performer" according to scope **i)** (see next section)
	A significant number of countries are "bottom-performers" according to scope **ii)** (ca. > 1/3 of the countries)
	Internal "bottom-performance" according to scope **iii)** (e.g. rural-urban)
2) Is the objective strategically relevant in a macro-regional context?	There is concrete evidence of an advantage in the macro-regional context (e.g. synergies, opportunities to learn from others, improved competitiveness of one country benefits all others)

The traffic light ruling is as follows in the table below.

Table 3-22: Traffic Light Ruling

Number judgement criteria fulfilled	Traffic Light
2	Corresponds to need + Macro-regionally relevant
1	Corresponds to need - OR – Macro-regionally relevant
0	No need + Not macro-regionally relevant

A.2.2 Composite Benchmarks

Composite Indices

Composite indices bundle separate (component) indicators into one index which allows the values of the whole bundle expressed as only one measure[139]; examples of such indices are the Human Development Index, Environmental

[139] See http://www.investopedia.com/terms/c/compositeindex.asp

Sustainability Index, and stock indices like the NASDAQ Index. In the course of gathering indicator data, the data have been grouped into sets of related indicators according to appropriately identified themes.

Composite Benchmarks

The benchmarking analysis focuses on the four macro-regions and the four dimensions inside each macro-region compares countries and/or NUTS-2 regions inside the individual macro-region based on a common reference framework of EU countries. The reference framework for each component indicator or composite index is delineated by the "top performer" of EU28 countries (benchmarked at 150), the "lowest performer" (50) and the median performer(s) at 100[140]. Throughout this analysis, a 'bottom performer' refers to a score below 100, while a 'top performer' refers to a score above 100. A high benchmarking score always reflects a more "desirable" situation. Taking unemployment rates as an example, higher scores reflect lower unemployment rates. In this way, the benchmarking results can always be read as showing whether – and to what extent – they are above or below the median in the EU at country level. This common framework enables observations to be made across different regions, even though the main focus remains within each macro-region.

The benchmark is always scaled on a country level against all EU28 Member States. The benchmarking score hence indicates a country's or region's relative position to all EU28 countries. This means in turn that one can observe values above 150 and below 50 in the cases summarised in the table below.

Table 3-23: Cases with benchmarking scores above 150 and below 50

Case	Explanation
Regional analyses (NUTS-2 level)	A NUTS-2 region may out-/underperform its country. Such as Stockholm (SE), performing higher than Sweden as a whole.
Non-EU countries	A non-EU country is not included in the benchmarking scale. Thus, a country like Ukraine may score above 150 or below 50, as they are not included in the scaling.
Macro-regional Integration analyses	Countries that are stronger/weaker integrated in a macro-region than the EU's 'top performing'/'bottom performing' country is integrated in the EU28 (see paragraphs below). For example, Germany's trade integration with countries in the Danube region comprises only a small share of its trade with all EU28 countries and is at the same time lower than that of the EU's 'bottom performer'.

Integration Indices

The chapter on integration includes new integration indices. These IHS-proprietary indices cover respectively Labour Integration (three indices plus a composite of these 3 components), Capital Integration (Foreign Direct

[140] The median is the point in a dataset in which a split of that dataset results in two sets with an equal number of data points. See http://www.investopedia.com/terms/m/median.asp for more details

Investment (FDI), Energy Integration, and Trade Integration. Each of these seven indices is constructed on a similar principle, which is outlined as follows.

When the amount or value of labour, capital etc. supplied by a country to another country (a 'partner'), or, equivalently, received from a partner, increases, it can be said that the level of integration between the two has increased. Considering a particular group of countries, the focus is on the bilateral flows between them. For the task of estimating integration within macro-regions, i.e. between individual countries belonging to the macro-region in question, the first step is the development of a "Bilateral Flow Matrix", as shown in the table below.

Table 3-24: Energy Integration Example (Baltic Sea), energy exports (kTOE)

Partner	Denmark	Germany	Estonia	Latvia	Lithuania	Poland	Finland	Sweden
Denmark	0.0	1,917.4	0.0	0.0	0.0	0.0	505.6	3,503.5
Germany	3.5	0.0	0.0	0.0	0.0	916.5	0.0	0.0
Estonia	0.0	0.0	0.0	522.7	0.0	0.0	25.6	0.0
Latvia	0.0	0.0	0.4	0.0	293.9	0.0	0.0	0.0
Lithuania	0.0	0.0	79.7	14.4	0.0	51.4	0.0	0.0
Poland	0.0	251.7	0.0	0.0	5.6	0.0	0.0	1.7
Finland	0.0	0.2	432.8	0.0	0.0	0.0	0.0	0.1
Sweden	477.6	168.3	0.0	0.0	0.0	302.0	1,484.4	0.0

Immediately, certain strong relationships between certain country-pairs are visible. What such a table of absolute values does not make clear is the 'importance' of a bilateral relationship for a specific country. A second step therefore converts the data to a relative share of all its exports (or foreign investments, migration flows, remittances) (in worldwide).

Table 3-25: Energy Integration Example, Share of total exports to partner country (in %)

Partner	Denmark	Germany	Estonia	Latvia	Lithuania	Poland	Finland	Sweden
Denmark	0.0	11.8	0.0	0.0	0.0	0.0	3.1	21.5
Germany	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Estonia	0.0	0.0	0.0	24.8	0.0	0.0	1.2	0.0
Latvia	0.0	0.0	0.0	0.0	13.8	0.0	0.0	0.0
Lithuania	0.0	0.0	0.9	0.2	0.0	0.6	0.0	0.0
Poland	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
Sweden	2.6	0.9	0.0	0.0	0.0	1.6	8.1	0.0

The new integration index provides a common basis for measuring integration in each of the four macro-regions, just as the case for every other indicator considered in this study. Given that the number of countries in the macro-regions vary, the total share of e.g. energy exports to the macro-region would grow with the number of member countries. Therefore, to provide a measure of integration that is not affected by the size of a macro-region, the chosen

measure for each country's degree of integration within its macro-region is its per partner share (ppShare); i.e. the average flow to a destination country.

Table 3-26: Energy Integration Example, resulting per partner share

Partner	ppShare
Denmark	5.21
Germany	0.22
Estonia	3.72
Latvia	1.98
Lithuania	0.23
Poland	0.18
Finland	0.83
Sweden	1.90

Benchmarking Integration Indices

In the case of integration indices, the procedure to establish the benchmark is identical in formation as for the other indices, except that in this case the bilateral flow matrix is 28 x 28 for the EU28. Thus, the benchmark is defined by the average share that each Member State exports to the EU28 countries. This results in a per partner share of each Member State, but to the whole EU28, instead of a macro-region.

In other words, using the per partner share as a unit of measure enables the degree of integration within each macro-region to be benchmarked against the degree of integration in the EU as a whole. This provides a deep insight into the question of whether the common geographical basis (and more) for the macro-regions is actually, and to what extent, of particular relevance compared to the entire setting of all EU countries, which may in general cover a more or less contiguous area, but which course also comprise (even more) multiple regional contexts. As mentioned in Table 2-1 above, there are many cases found to score well below 50 or well above 150. This is entirely consistent: The reason, expressed mathematically, is that the two-dimensional flow matrices gives rise to country index values in macro-regions that are not subsets of the EU index; for non-integration indices, in contrast the (EU) country indicator values form by definition a subset of the EU28.

A.3 Blue Growth

A.3.1 Blue Technologies (1.1)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-27: Summary of Assessment – EUSAIR – 1.1 Blue Technologies

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	1.1 Blue Technologies		X		
Theme of intervention		**Indicator**			
Blue Innovation		'Regional Innovation Scoreboard'			
Judgement on the strands of need					
Aggregate	*Not applicable*				
Individual	The Adriatic-Ionian Sea consists nearly exclusively of 'Moderate' innovators. In 2016, only Zahodna-Slovenija in Slovenia and Friuli-Venezia Giulia were 'Strong' innovators. On the bottom-end, Greece and Croatia have each four and one region that performs as a 'Modest' performer. The innovation scoreboard performance was better in 2008: Five regions dropped down to being 'Modest' innovators, while only Friuli-Venezia Giulia in Italy managed to improve its status. The innovation scoreboard shows that the Adriatic-Ionian Macroregion is a clear bottom performer on innovation.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	Based on the available indicator, the innovative capacity in the Macroregion is mostly only 'Moderate' or 'Modest', and that picture is fairly homogeneous. In connection to the Commission's long-term strategy on Blue Growth, which also includes innovation, there is a justified to address the innovative capacity. The conclusion rests however on an assessment that also includes non-coastal regions, as Eurostat's dedicated indicator only included information for Slovenia. The Topic on Blue Technologies is chosen in a geographic context where 'Strong' innovative capacities are commonly low, and exists thus as a commonly shared weakness. Several characteristics of the Adriatic-Ionian Sea are common in different parts of the coasts/sea, e.g. in terms of habitats and species, which can provide scope for the exchange on commonly shared experiences, problems or the alike. A Macroregional approach can therefore be considered beneficial.				

Theme of Intervention & Relevant Sources

The strategy's topic seeks to enhance "brain circulation between research and business communities" with respect to blue technologies, to better capitalize on economic growth opportunities and employment in the blue growth sectors. [141]

The Task 1 exercise includes an indicator on patent applications in the coastal regions, which is at the same time a dedicated Blue Growth indicator on Eurostat, but only includes data for Slovenia, which allows no conclusive assessment. [142] The Regional Innovation Scoreboard measures innovation at the NUTS-2 level, and can provide an overall insight on the innovativeness of the NUTS-2 regions on the coast. The categories of this indicator are 'Leader', 'Strong', 'Moderate', and 'Modest'. Note that the Eurostat definition of coastal areas occurs on the NUTS-3 level and the indicator provides therefore also information of non-coastal regions which may not count as blue growth regions.

Strand of Need: Aggregate

Not applicable

Strand of Need: Individual

The Adriatic-Ionian Sea consists nearly exclusively of 'Moderate' innovators. In 2016, only Zahodna-Slovenija in Slovenia and Friuli-Venezia Giulia were 'Strong'

[141] Action Plan concerning the European Union Strategy for the Adriatic and Ionian Region, SWD(2014) 190 final.

[142] http://ec.europa.eu/eurostat/web/maritime-policy-indicators/data/database

innovators. On the bottom-end, Greece and Croatia have each four and one region that performs as a 'Modest' performer. The innovation scoreboard performance was better in 2008: Five regions dropped down to being 'Modest' innovators, while only Friuli-Venezia Giulia in Italy managed to improve its status. The innovation scoreboard shows that the Adriatic-Ionian Macroregion is a clear bottom performer on innovation.

Strand of Need: Internal

Not applicable

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

Based on the available indicator, the innovative capacity in the Macroregion is mostly only 'Moderate' or 'Modest', and that picture is fairly homogeneous. In connection to the Commission's long-term strategy on Blue Growth, which also includes innovation, there is a justified to address the innovative capacity. The conclusion rests however on an assessment that also includes non-coastal regions, as Eurostat's dedicated indicator only included information for Slovenia.

› *Is the objective strategically relevant in a macro-regional context?*

The Topic on Blue Technologies is chosen in a geographic context where 'Strong' innovative capacities are commonly low, and exists thus as a commonly shared weakness. Several characteristics of the Adriatic-Ionian Sea are common in different parts of the coasts/sea, e.g. in terms of habitats and species, which can provide scope for the exchange on commonly shared experiences, problems or the alike. A Macroregional approach can therefore be considered beneficial.

A.3.2 Fisheries and Aquaculture (1.2)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-28: Summary of Assessment – EUSAIR – 1.2 Fisheries and Aquaculture

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	1.2 Fisheries and Aquaculture		X		
Theme of intervention		**Indicator**			
Fisheries and Aquaculture		*No indicator from Task 1, external sources:* Randone, M. (2016), MedTrends Project: Blue Growth Trends in the Adriatic Sea - the challenge of environmental protection. WWF Mediterranean.			
Judgement on the strands of need					
Aggregate	The Adriatic Sea experienced a peak in fish landings in 1980s (with 220,000 tonnes a year), and overall trends have remained negative. The total landings of fish halved by 2000, and the fishing capacity has been continuously decreasing between 200 and 2010. The Catch Per Unit Effort (CPUE) has according to Randone (2016) however been decreasing, which indicates overall less available fish stock. The expected trend indicates no major increase of the fisheries sector. Despite no expected increase, the current situation is already adversely impacting the environmental status, of which especially biodiversity and food webs. [143] Aquaculture has a major economic importance for the Adriatic Sea: More than 250,000 jobs are directly or indirectly connected to the production. The future outlook predicts about 10,000 additional direct jobs in the Mediterranean Sea. The major sub-region of the Mediterranean Sea that produces most aquaculture by far is the Aegean-Levantine sub-region, while the Adriatic and Ionian Sea produced merely about 10% of former in 2011. The growth of aquaculture may therefore not as strong as in Aegean-Levantine sub-region. With respect to the sustainability of aquaculture, the outlook on the indicators of the Marine Strategy Framework Directive looks pessimistic. Areas to be more intensively addressed in the future are therefore Biodiversity, Non-indigenous species, Commercial stock depletion, Food webs, eutrophication, and contamination to name a few aspects.				
Individual	*Not applicable*				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The outlook on fisheries shows that no major increase of fishing activities is expected for the next 15 years due a decreasing Catch Per Unit Effort (CPUE) as well as the accession of Croatia. The latter will require Croatia to adapt its fishing behaviour to the EU standards. Randone's (2016) analysis shows despite no major expected increase that environmental action is needed to ensure sustainable commercial fisheries. The picture on aquaculture predicts an increase in the production, with detrimental impacts on the environment; the Good Environmental Status is threatened on several domains. Again, the analysis concludes a need for intervention to ensure sustainable aquaculture. The Adriatic-Ionian Sea is a shared resource for all countries of the Macroregion. Any action to ensure sustainable fishing/aquaculture practices goes generally to the benefit of the countries of this Macroregion, due to absence of any borders in the sea. Furthermore, the combination of environmentally sustainable practices with a strongly profitable sector can require a lot of knowledge and experience. Countries struggling with the sustainability part may therefore deprioritise sustainability over profitability. Knowledge sharing, as is also suggested in the action plan, can be pivotal in ensuring the achievement of both priorities.				

[143] http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

Theme of Intervention & Relevant Sources	The strategy's topic focuses on sustainable and profitable fisheries and aquaculture in the macro-region. With respect to fisheries, the competitiveness of the sector shall be ensured. Further, a currently weak framework against overexploitation shall be strengthened, due to weaknesses on control, monitoring and compliance. For aquaculture, the topic seeks to address a potential to increase the production capacity to reduce dependency on imports and reduce pressures on wild stocks. This utilization of potential shall occur in a manner that ensures profitable, yet sustainable aquaculture for the macro-region. This Topic is cross-cuts with the 'Maritime and Marine Governance and services' in the sense that spatial planning of aquaculture is acknowledged as a key to success. The Task 1 exercise does not include a suitable indicator. The literature provides one study by Randone (2016), which assesses the future trends of aquaculture and fisheries in the Adriatic Sea. [144] The Ionian Sea was out of the scope of this study.
Strand of Need: Aggregate	The Adriatic Sea experienced a peak in fish landings in 1980s (with 220,000 tonnes a year), and overall trends have remained negative. The total landings of fish halved by 2000, and the fishing capacity has been continuously decreasing between 200 and 2010. The Catch Per Unit Effort (CPUE) has according to Randone (2016) however been decreasing, which indicates overall less available fish stock. The expected trend indicates no major increase of the fisheries sector. Despite no expected increase, the current situation is already adversely impacting the environmental status, of which especially biodiversity and food webs. Aquaculture has a major economic importance for the Adriatic Sea: More than 250,000 jobs are directly or indirectly connected to the production. The future outlook predicts about 10,000 additional direct jobs in the Mediterranean Sea. The major sub-region of the Mediterranean Sea that produces most aquaculture by far is the Aegean-Levantine sub-region, while the Adriatic and Ionian Sea produced merely about 10% of former in 2011. The growth of aquaculture may therefore not as strong as in Aegean-Levantine sub-region. With respect to the sustainability of aquaculture, the outlook on the indicators of the Marine Strategy Framework Directive looks pessimistic. [145] Areas to be more intensively addressed in the future are therefore Biodiversity, Non-indigenous species, Commercial stock depletion, Food webs, eutrophication, and contamination to name a few aspects.
Strand of Need: Individual	*Not applicable*

[144] Randone, M. (2016), MedTrends Project: Blue Growth Trends in the Adriatic Sea - the challenge of environmental protection. WWF Mediterranean.

[145] http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

Strand of Need: Internal

Not applicable

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The outlook on fisheries shows that no major increase of fishing activities is expected for the next 15 years due a decreasing Catch Per Unit Effort (CPUE) as well as the accession of Croatia. The latter will require Croatia to adapt its fishing behaviour to the EU standards. Randone's (2016) analysis shows despite no major expected increase that environmental action is needed to ensure sustainable commercial fisheries. The picture on aquaculture predicts an increase in the production, with detrimental impacts on the environment; the Good Environmental Status is threatened on several domains. Again, the analysis concludes a need for intervention to ensure sustainable aquaculture.

› *Is the objective strategically relevant in a macro-regional context?*

The Adriatic-Ionian Sea is a shared resource for all countries of the Macroregion. Any action to ensure sustainable fishing/aquaculture practices goes generally to the benefit of the countries of this Macroregion, due to absence of any borders in the sea. Furthermore, the combination of environmentally sustainable practices with a strongly profitable sector can require a lot of knowledge and experience. Countries struggling with the sustainability part may therefore deprioritise sustainability over profitability. Knowledge sharing, as is also suggested in the action plan, can be pivotal in ensuring the achievement of both priorities.

A.3.3 Maritime and Marine Governance and Services (1.3)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-29: Summary of Assessment – EUSAIR – 1.3 Maritime and Marine Governance and Services

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	1.3 Maritime and Marine Governance and Services				**X**
Theme of intervention		**Indicator**			
Maritime & Marine Governance		*No indicator from Task 1, external sources:* Randone, M. (2016), MedTrends Project: Blue Growth Trends in the Adriatic Sea - the challenge of environmental protection. WWF Mediterranean.			
Judgement on the strands of need					
Aggregate	The conflicts of use will according to Randone (2016) increase in the Adriatic Sea with time. In the coastal areas, an increased number of conflicts due to the growth of marine aquaculture, coastal tourism and recreational fishing are expected to arise, as is also shown in the figure below. This observation points to a need of improved coastal zone management. The prospective off shore shows that oil and gas activities will probably interfere with maritime transport, commercial fisheries, dredging and mining. The study points to the conclusion that no appropriate coastal and maritime spatial planning can endanger the achievement of good environmental status as envisioned by the Marine Strategy Framework Directive. [146]				
Individual	*Not applicable*				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The study by Randone (2016) expects an increase in activity for all traditional sectors of the Macroregion, but professional fisheries and military activity, until 2030. In addition, Randone's (2016) findings expect an additional growth of new or developing sectors like renewable energy. The increase of activity will lead to conflicts of use and endanger the achievement of good environmental status in accordance with the Marine Strategy Framework Directive. A need for intervention conclusively exists. The cooperation on governance and services is in the context of the Adriatic-Ionian Macroregion relevant for two reasons. Successful Maritime Spatial Planning involves coordination with other countries to avoid potential conflicts in the utilisation and protection of the sea, which can further lead to an inefficient allocation of resources and forgone synergies.[147] The prospect of accession provides an opportunity to improve the capacity of the (potential) candidate countries to cooperate, which may ultimately result in a better integration into the EU-territory but also help to overcome cultural differences of the past.				

Theme of Intervention & Relevant Sources

The strategy's topic tries to bring together multiple national and regional planning activities in the maritime and marine space, to achieve joint planning efforts. The justification is that there are still imbalances in the level of confidence between the individual countries as well as diverse degrees of

[146] http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

[147] https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en

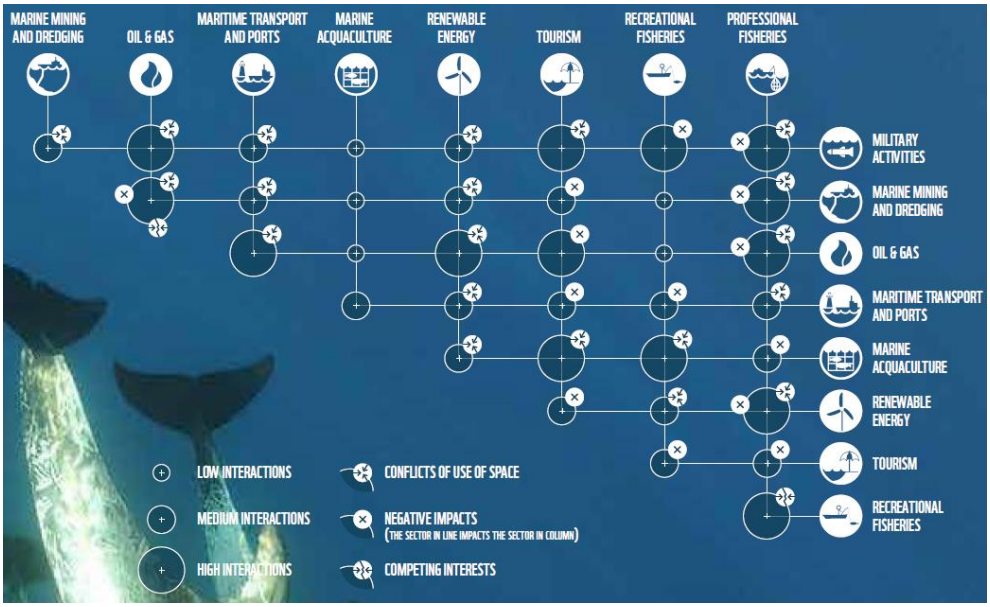
institutional capacities. The allocated theme of intervention derives from the name of the topic: Maritime & Marine Governance.

The Task 1 exercise does not include a suitable indicator. The literature provides one study by Randone (2016), which assesses the potential conflicts of use in the Adriatic Sea.[148] The Ionian Sea was out of the scope of this study.

Strand of Need: Aggregate

The conflicts of use will according to Randone (2016) increase in the Adriatic Sea with time. In the coastal areas, an increased number of conflicts due to the growth of marine aquaculture, coastal tourism and recreational fishing are expected to arise, as is also shown in the figure below. This observation points to a need of improved coastal zone management. The prospective off shore shows that oil and gas activities will probably interfere with maritime transport, commercial fisheries, dredging and mining. The study points to the conclusion that no appropriate coastal and maritime spatial planning can endanger the achievement of good environmental status as envisioned by the Marine Strategy Framework Directive. [149]

Figure 3-1: Potential conflict of interests, negative impacts, and competing interests in the Adriatic Sea, as in Randone (2016).



Strand of Need: Individual

Not applicable

Strand of Need: Internal

Not applicable

[148] Randone, M. (2016), MedTrends Project: Blue Growth Trends in the Adriatic Sea - the challenge of environmental protection. WWF Mediterranean.

[149] http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The study by Randone (2016) expects an increase in activity for all traditional sectors of the Macroregion, but professional fisheries and military activity, until 2030. In addition, Randone's (2016) findings expect an additional growth of new or developing sectors like renewable energy. The increase of activity will lead to conflicts of use and endanger the achievement of good environmental status in accordance with the Marine Strategy Framework Directive. A need for intervention conclusively exists.

› *Is the objective strategically relevant in a macro-regional context?*

The cooperation on governance and services is in the context of the Adriatic-Ionian Macroregion relevant for two reasons. Successful Maritime Spatial Planning involves coordination with other countries to avoid potential conflicts in the utilisation and protection of the sea, which can further lead to an inefficient allocation of resources and forgone synergies.[150] The prospect of accession provides an opportunity to improve the capacity of the (potential) candidate countries to cooperate, which may ultimately result in a better integration into the EU-territory but also help to overcome cultural differences of the past.

[150] https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en

A.4 Connecting the Region

A.4.1 Maritime Transport (2.1)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-30: Summary of Assessment – EUSAIR – 2.1 Maritime Transport

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	2.1 Maritime transport		X		
Theme of intervention		**Indicator**			
Maritime Transport		'Logistics Performance Index', *supplementary:* Goods handled in ports, and Passengers (dis-)embarked in ports			
Judgement on the strands of need					
Aggregate	The 'Logistics Performance Index' for 2016 shows that the macro-region performs far below the EU-median with 58 points. The region scores low on all aspects, with the exception of competitively priced shipments. The low scores range between 57 and 70 points on the five components, and highlight a strong need to intervene on the general infrastructure. Looking at the transport of goods and passengers in 2014, the Macroregion scores on 83 points on the transport of goods and 101 points on transported passengers, which points to an aggregate need to increase the number of transported goods.				
Individual	The performance of the individual countries shows that the (potential) candidate countries clearly lag behind on the logistics performance. Furthermore, all of them perform even significantly lower than the lowest performing country in the EU. Nevertheless, the performance of the Member States is with the exception of Italy substantially lower than the EU-median. Seven out of eight countries are bottom performers. The weight of goods handled is lower than the EU-median in four countries: the new Member States and Montenegro. In terms of the number of (dis-) embarked passengers, only Montenegro and Slovenia perform below the EU-median; yet to a significant extent. There was no data available for this indicator on Albania, Bosnia-Herzegovina, and Serbia.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The analysis shows that there is a need for intervention on the aggregate and individual dimension. The performance on the quality of logistics is especially low, but one should keep in mind that this indicators concerns also other modes of transportation (air, rail, road). The comparison with the performance on handled goods underlined however that there are also weaknesses on the quantitative dimension of maritime transport. The performance on passenger transport corresponds to an average European picture. Yet, data was missing for three (potential) candidate countries, which are likely to perform low these indicators as well. Maritime transport is macro-regionally relevant. Concerning the transport of passengers, cruise ships, yachts and the alike are likely to approach several ports of the same region, which makes it a commonly shared issue. On the dimension of the transport of goods, a higher level of short-shipping activity requires that both ends of vessel routes are capable to handle increased traffic, as port congestions makes increased short-shipping less attractive. The benefits of the harmonisation of port procedures increases with the number of participating countries, which makes this Topic again macro-regionally relevant. Due to the nearly uniform and low performance on the indictors, this Topic responds to a Weakness of the region.				

Theme of Intervention & Relevant Sources

The topic aims to develop the maritime transport infrastructures in the Adriatic-Ionian ports, with the aim to make substantial growth on passenger traffic (particularly for tourism) and cargo traffic. Innovation, modernisation of infrastructure, and the reductions of procedural and administrative constraints are of priority in this topic. The allocated theme of this intervention is thus Maritime Transport.

The indicator 'Logistics Performance Index' from 2016 [151] provides information on the quality of logistics, which includes 1) the efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; 2) the quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology);3) the ease of arranging competitively priced shipments; 4) the competence and quality of logistics services (e.g., transport operators, customs brokers); 5) the ability to track and trace consignments; 6) the timeliness of shipments in reaching destination within the scheduled or expected delivery time.[152]
This index addresses however the nation-wide logistics systems. Therefore, this indicator is complemented by the 'gross weight of goods handled in all ports' and 'passengers (dis-)embarked in all ports' in 2014.

Strand of Need: Aggregate

The 'Logistics Performance Index' for 2016 shows that the macro-region performs far below the EU-median with 58 points (see table below). The region scores low on all aspects, with the exception of competitively priced shipments. The low scores range between 57 and 70 points on the five components, and highlight a strong need to intervene on the general infrastructure.

Table 3-31: Benchmarking score on the Logistics Performance Index and its components for 2016. Source: Eurostat

	LPI	Customs	Infrastructure	International shipments	Logistics quality and competence	Logistics quality and competence	Tracking and tracing
AL	27	42	34	184	36	33	38
BA	37	64	61	215	38	51	30
EL	76	72	91	135	61	95	93
HR	71	83	77	122	79	77	61
IT	109	101	114	77	114	111	105
ME	25	41	38	174	26	43	13
RS	47	55	56	163	54	66	50
SI	72	73	86	124	78	81	67
EUSAIR Average	58	66	70	149	61	70	57

Looking at the transport of goods and passengers in 2014, the Macroregion scores on 83 points on the transport of goods and 101 points on transported passengers, which points to an aggregate need to increase the number of transported goods, as is shown in the table below.

[151] There is also data for the year 2014, which however excludes Albania

[152] The World Bank, Logistics Performance Index, International Scorecard, http://lpi.worldbank.org/international/scorecard

Table 3-32: Benchmarking score on gross weight of goods and number of passengers handled in ports in 2014. Source: Eurostat; not in Task 1 report

	Goods	Passengers
AL	n/a	n/a
BA	n/a	n/a
EL	109	145
HR	60	111
IT	137	150
ME	49	51
RS	n/a	n/a
SI	59	50
EUSAIR Average	83	101

Strand of Need: Individual

The performance of the individual countries shows that the (potential) candidate countries clearly lag behind on the logistics performance. Furthermore, all of them perform even significantly lower than the lowest performing country in the EU. Nevertheless, the performance of the Member States is with the exception of Italy substantially lower than the EU-median. Seven out of eight countries are bottom performers.
The weight of goods handled is lower than the EU-median in four countries: the new Member States and Montenegro. In terms of the number of (dis-) embarked passengers, only Montenegro and Slovenia perform below the EU-median; yet to a significant extent. There was no data available for this indicator on Albania, Bosnia-Herzegovina, and Serbia.

Strand of Need: Internal

Not applicable

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The analysis shows that there is a need for intervention on the aggregate and individual dimension. The performance on the quality of logistics is especially low, but one should keep in mind that this indicators concerns also other modes of transportation (air, rail, road). The comparison with the performance on handled goods underlined however that there are also weaknesses on the quantitative dimension of maritime transport. The performance on passenger transport corresponds to an average European picture. Yet, data was missing for three (potential) candidate countries, which are likely to perform low these indicators as well.

› *Is the objective strategically relevant in a macro-regional context?*

Maritime transport is macro-regionally relevant. Concerning the transport of passengers, cruise ships, yachts and the alike are likely to approach several ports of the same region, which makes it a commonly shared issue. On the dimension of the transport of goods, a higher level of short-shipping activity requires that both ends of vessel routes are capable to handle increased traffic,

as port congestions makes increased short-shipping less attractive. The benefits of the harmonisation of port procedures increases with the number of participating countries, which makes this Topic again macro-regionally relevant. Due to the nearly uniform and low performance on the indictors, this Topic responds to a Weakness of the region.

A.4.2 Intermodal connections to the hinterland (2.2)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-33: Summary of Assessment – EUSAIR – 2.2 Intermodal connections to the hinterland

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	2.2 Intermodal connections to the hinterland		X		
Theme of intervention		**Indicator**			
Accessibility		'Potential Accessibility'			
Judgement on the strands of need					
Aggregate	The Macroregion scores on average below the EU-median on all transport modes, which indicates a need for intervention (as shown in the table below). On the accessibility through air, the performance is however only moderately below the EU-median.				
Individual	Most of the countries in this Macroregion score below the EU-median. Italy and Slovenia score as the only Member States above the median for all transport modes. The (potential) candidate countries score all well above the EU's bottom score of 50. Transport modes that score particularly low in the individual countries are road and rail. More than three countries score below the median in all transport modes, which fulfils the judgement criteria.				
Internal	The indicator shows that the capital regions have a higher accessibility. Or more concretely, those regions with an international airport.				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The analysis shows clearly that the Adriatic-Ionian Macroregion as a whole, but also the majority of countries exhibit low accessibility on the EU-wide comparison. Only two countries score above the median on all categories. The (potential) candidate countries score to the greatest extent in the clear bottom half, but still above the least accessible country of the EU. The accessibility of the region is a strong factor in the territorial cohesion, as strong infrastructures facilitate the commute across countries and the macro-region as a whole. Since this Macroregion consists further of several (potential) candidate countries with dated infrastructures, addressing intermodal connections occurs on the basis of a comment need. At last, a coordination of infrastructures helps to ensure time-efficient transport routes from a macro-regional and not just national perspective.				

Theme of Intervention & Relevant Sources

The topic addresses the low accessibility in the region, of which particularly the areas on the continental ends of this region. The theme of intervention is therefore Accessibility with the indicator 'Potential Accessibility' for 2014. The underlying index measures the accessibility of NUTS-3 regions by four transport modes: multimodal, air, rail, and road. For this analysis, the values of accessibility of the NUTS-3 regions were aggregated as averages into country levels.

Strand of Need: Aggregate

The Macroregion scores on average below the EU-median on all transport modes, which indicates a need for intervention (as shown in the table below). On the accessibility through air, the performance is however only moderately below the EU-median.

Table 3-34: Benchmarking score on the Potential Accessibility in 2014. Source: ESPON

	Multimodal	Air	Rail	Road
AL	68	88	61	65
BA	78	87	63	65
EL	71	76	58	65
HR	90	93	86	98
IT	103	101	107	107
ME	95	104	72	62
RS	80	85	58	87
SI	111	113	108	114
EUSAIR Average	87	93	76	83

Strand of Need: Individual

Most of the countries in this Macroregion score below the EU-median (as shown in the table above). Italy and Slovenia score as the only Member States above the median for all transport modes. The (potential) candidate countries score all well above the EU's bottom score of 50. Transport modes that score particularly low in the individual countries are road and rail. More than three countries score below the median in all transport modes, which fulfils the judgement criteria.

Strand of Need: Internal

The indicator shows that the capital regions have a higher accessibility. Or more concretely, those regions with an international airport.

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The analysis shows clearly that the Adriatic-Ionian Macroregion as a whole, but also the majority of countries exhibit low accessibility on the EU-wide comparison. Only two countries score above the median on all categories. The (potential) candidate countries score to the greatest extent in the clear bottom half, but still above the least accessible country of the EU.

› *Is the objective strategically relevant in a macro-regional context?*

The accessibility of the region is a strong factor in the territorial cohesion, as strong infrastructures facilitate the commute across countries and the macro-region as a whole. Since this Macroregion consists further of several (potential) candidate countries with dated infrastructures, addressing intermodal connections occurs on the basis of a common weakness. At last, a coordination of infrastructures helps to ensure time-efficient transport routes from a macro-regional and not just national perspective.

A.4.3 Energy Networks (2.3)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-35: Summary of Assessment – EUSAIR – 2.3 Energy Networks

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	2.3 Energy networks				X
Theme of intervention		**Indicator**			
Energy Integration		'Energy Integration', *external literature:* Giamouridis, A. & Paleoyannis, S. (2011), Security of Gas Supply in South Eastern Europe			
Judgement on the strands of need					
Aggregate	The Macroregion shows a strong integration of the energy networks, which is particularly strong in the countries of the Western-Balkans. The score on the benchmark of 204 shows that this region is integrated well above the EU's average integration. The literature shows however that the gas supply in the Southeast European region has proven to be very vulnerable, as for example in the case of the gas crisis of 2009 between RU and UA, which had a serious impact on the Western-Balkans and EL.				
Individual	The, the above indicator describes only limitedly the system's resilience towards supply disruptions, particularly from outside the region. The analysis by Giamouridis & Paleoyannis (2011) emphasises that the gas supply in Southeast European region has proven to be very vulnerable, as for example in the case of the gas crisis of 2009 between RU and UA, which had a serious impact on the Western-Balkans and EL. Further, the authors highlight that a significant majority of gas is supplied from RU, but on multiple pathways.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The Macroregion is strongly integrated when it comes to the exports of energy in the region, with the exception of EL and IT. In terms of the security of gas supply however, all of Southeast Europe (and thus all Adriatic-Ionian countries except IT) exhibit a high vulnerability to gas supply disruptions, which constitutes a potential threat to this macro-region. A strongly integrated energy network of an entire macro-region improves the resilience towards disruptions for countries concerned, as a higher diversity of supply sources can be achieved, which reduces the vulnerability from disruption of one geographic source. However, this requires also a diversification in external sources. A macro-regional approach makes alternative sourcing options (like ports for LNG) more feasible, as for example the investment costs can be distributed among multiple countries. At last, a macro-regional energy infrastructure can optimise the distribution of energy due a larger market, which can be particularly advantageous for networks with a high share of intermittent energy sources.				

Theme of Intervention & Relevant Sources

The topic Energy Networks foresees to achieve "well-functioning networks, interconnections and interoperability" for a secure and diversified energy network and effective energy operation. [153] Establishing strong interconnections of national energy networks, particularly gas, and gaining new access to external sources are priorities of this Topic. The indicator 'Energy Integration' for the year 2015 measures the degree to which the countries of this macro-region export energy to each other, and thus measures the degree the networks and

[153] Action Plan European Union Strategy for the Adriatic and Ionian Region, SWD(2014) 190 final, p.34

markets ae integrated. The suitable theme of intervention is hence Energy Integration.

The chosen indicators does not describe the issue of the network's vulnerability to disruptions in the system. Therefore, additional literature is used by Giamouridis & Paleoyannis (2011), which analyses gas supply security in Southeast Europe. [154]

Strand of Need: Aggregate

The Macroregion shows a strong integration of the energy networks, which is particularly strong in the countries of the Western-Balkans (see table below). The score on the benchmark of 204 shows that this region is integrated well above the EU's average integration.

Table 3-36: Benchmarking score on the Energy Integration in 2015. Source: Eurostat

	per partner Share
AL	334
BA	398
EL	65
HR	177
IT	63
ME	188
RS	164
SI	186
EUSAIR average	204

As mentioned, the above indicator describes only limitedly the system's resilience towards supply disruptions, particularly from outside the region. The analysis by Giamouridis & Paleoyannis (2011) emphasises that the gas supply in Southeast European region has proven to be very vulnerable, as for example in the case of the gas crisis of 2009 between Russia and Ukraine, which had a serious impact on the western Balkans and Greece. Further, the authors highlight that a significant majority of gas is supplied from Russia, but on multiple pathways.

Strand of Need: Individual

The indicator shows that most of the countries in the region are well-integrated within the macro-region as compared to the rest of the EU. Greece and Italy score though as bottom performers with scores of about 65 points.

Strand of Need: Internal

Not applicable

[154] Giamouridis, A. & Paleoyannis, S. (2011), Security of Gas Supply in South Eastern Europe, https://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/07/NG_52.pdf

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The Macroregion is strongly integrated when it comes to the exports of energy in the region, with the exception of Greece and Italy. In terms of the security of gas supply however, all of Southeast Europe (and thus all Adriatic-Ionian countries except Italy) exhibit a high vulnerability to gas supply disruptions, which constitutes a potential threat to this macro-region.

› *Is the objective strategically relevant in a macro-regional context?*

A strongly integrated energy network of an entire Macroregion improves the resilience towards disruptions for countries concerned, as a higher diversity of supply sources can be achieved, which reduces the vulnerability from disruption of one geographic source. However, this requires also a diversification in external sources. A Macroregional approach makes alternative sourcing options (like ports for LNG) more feasible, as for example the investment costs can be distributed among multiple countries. At last, a Macroregional energy infrastructure can optimise the distribution of energy due a larger market, which can be particularly advantageous for networks with a high share of intermittent energy sources.

A.5 Environmental Quality

A.5.1 Coastal and Marine Biodiversity (3.1.a)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-37: Summary of Assessment – EUSAIR – 3.1.a Coastal and Marine Biodiversity

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	3.1.a The Marine Environment - Threat to coastal and marine biodiversity				**X**
Theme of intervention		**Indicator**			
Marine Biodiversity		'Environment: Sea Status (Ecologic Status, Chlorophyll-a)', 'Coverage of Marine Protected Areas'			
Judgement on the strands of need					
Aggregate	72% of the coastal and transitional waterbodies are below "Good Ecological Status". The average benchmark score of 109 shows that the share of waterbodies below a good status is slightly lower than in the EU comparison, which does not indicate a need on the aggregate level. The benchmark thus points to no need on the aggregate level. Nevertheless, consideration needs to be made for the fact that the Water Framework Directive prescribes a good status for all waters, and the share below good status is a magnificent 73%, which clearly indicates a need. Data for the (potential) candidate countries was not available; yet, the majority of the coastline is covered. The coverage of marine protected areas in the table below shows that the Adriatic-Ionian Sea has a substantially lower coverage than the other European seas. This is true for the coastal zones within 1 nautical mile (NM), 1-12 NM, and beyond 12 NM. On the higher sea (beyond 12 NM), the coverage is even 0.				
Individual	The indicator on the ecological status shows that most countries have lower shares of coastal and transitional waterbodies below "Good Ecological Status" than the rest of Europe, which is also reflected in the high benchmarking scores. Slovenia has though half of its waterbodies below good status. Italy is the only bottom performer, and that by far. Roughly speaking, nearly all coastal and transitional waterbodies do not conform to a good status. Looking at the chlorophyll-a concentrations, there is only data available for Croatia in 2008. The associated score on the benchmark is 148 points and puts Croatia on the top end of Europe. Due to the low coverage, this indicator is though not accounted for in the judgement.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The indicators show that there is a need to establish marine protected areas and improve the ecological status. With respect to the latter, the countries, with the exception of Italy, and the aggregate Macroregion perform above the EU-median, which does not indicate a need as such. The share of waterbodies below good status is however significant. Human activities on the sea can affect the biodiversity of the sea. If appropriate agreements are not made on the utilisation of the sea, conflicts can arise between sectors and activities, but also lead to inefficient use of water resources[155]. When it comes to the protection of the marine biodiversity through marine protected areas, coordinated maritime spatial planning can enable a more efficient allocation of marine protected areas due to reduced inefficiencies and increased synergies. Under the consideration that coastal and transitional waterbodies may stream further into the deeper sea and decrease the status of the Adriatic-Ionian Sea as a whole, there is a need to improve the ecologic status of waterbodies on a macro-regional scale. All countries can be affected by the behaviour of another. Habitats are at last not constrained by national territories but by the borders of the sea				

[155] https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en

	basin.

Theme of Intervention & Relevant Sources

The topic 'Threat to coastal and marine biodiversity' addresses the threat of overfishing, habitat degradation, alien species invasion, and human use of marine and coastal space. The biodiversity is seen as the basis for tourism, fishing, and cultural heritage. The allocated theme is therefore Marine Biodiversity, as measured by the indicator 'Environment Sea Status' and 'Coverage of Marine Protected Areas'.
The first indicator provides information on eutrophication (as provided by the EEA), the chemical and ecological Status of coastal and transitional waterbodies (as provided by the Water Framework Directive[156]); the chemical aspect is however reviewed in the next section on pollution. Information on the biodiversity on the higher sea is thus not provided.

Strand of Need: Aggregate

The table below shows the share of waterbodies below "Good Ecological Status" in the Adriatic-Ionian coastal and transitional waterbodies. The average benchmark score of 109 shows that the share of waterbodies below a good status is slightly lower than in the EU comparison. The benchmark thus points to no need on the aggregate level. Nevertheless, consideration needs to be made for the fact that the Water Framework Directive prescribes a good status for all waters, and the share below good status is a magnificent 73%, which clearly indicates a need. Action is therefore in principle justified, as long as the share below a good status is not negligible; which it isn't. Data for the (potential) candidate countries was not available; yet, the majority of the coastline is covered.

*Table 3-38: Share of Coastal and Transitional Waters below "Good Ecological Status". Source: Task 1, EEA. * Also Western Mediterranean Waters included*

	Below Good	At least Good	Classified	%<Good	Benchmark
EL	88	205	293	30.0	130
HR	17	33	50	34.0	127
IT*	631	39	670	94.2	62
SI	3	3	6	50.0	117
Adriatic-Ionian Sea	739	280	1019	72.5	109

The coverage of marine protected areas in the table below shows that the Adriatic-Ionian Sea has a substantially lower coverage than the other European seas. This is true for the coastal zones within 1 nautical mile (NM), 1-12 NM, and beyond 12 NM. On the higher sea (beyond 12 NM), the coverage is even 0.

[156] Water Framework Directive requires the Member States to achieve at least "Good Ecological Status" and "Good Chemical Status" of surface waters. Ecological Status refers to biological and hydrological quality of the water, and its "chemical characteristics". The ecological status can be classified into four categories: High, Good, Moderate, and Poor. The chemical status describes in turn the water's quality in terms of it content of chemical substances, and is classified as Good or either Fail.

Table 3-39: Coverage of marine protected areas in 2012. Source: EEA; NM-nautical miles

Macro-region	MPA assessment area regions and sub-regions	% of 0-1 NM zone covered by MPAs	% of 1-12 NM zone covered by MPAs	% of 12 NM-END zone covered by MPAs
Baltic Sea macro-region	**Baltic sea**	36,1	16,4	3,9
	North-east Atlantic Ocean	52,1	16,4	2,3
	Mediterranean Sea	30,6	14,2	6,1
	Western Mediterranean Sea	60,4	29,6	10,1
Adriatic Ionian macro-region	Ionian and Central Mediterranean Sea	30,5	2,7	0
	Adriatic Sea	17	1,4	0
	Aegean and Levantine Sea	14,2	2,4	0
	Black Sea	77,9	19,3	0

Strand of Need: Individual

The indicator on the ecological status shows that most countries have lower shares of coastal and transitional waterbodies below "Good Ecological Status" than the rest of Europe, which is also reflected in the high benchmarking scores (see table above). Slovenia has though half of its waterbodies below good status. Italy is the only bottom performer, and that by far. Roughly speaking, nearly all coastal and transitional waterbodies do not conform to a good status. Looking at the chlorophyll-a concentrations, there is only data available for Croatia in 2008. The associated score on the benchmark is 148 points and puts Croatia on the top end of Europe. Due to the low coverage, this indicator is though not accounted for in the judgement.

Strand of Need: Internal

The geographic solution of the data (i.e. country level) does not enable an internal assessment.

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The indicators show that there is a need to establish marine protected areas and improve the ecological status. With respect to the latter, the countries, with the exception of Italy, and the aggregate Macroregion perform above the EU-median, which does not indicate a need as such. The share of waterbodies below good status is however significant.

› *Is the objective strategically relevant in a macro-regional context?*

Human activities on the sea can affect the biodiversity of the sea. If appropriate agreements are not made on the utilisation of the sea, conflicts can arise between sectors and activities, but also lead to inefficient use of water

resources[157]. When it comes to the protection of the marine biodiversity through marine protected areas, coordinated maritime spatial planning can enable a more efficient allocation of marine protected areas due to reduced inefficiencies and increased synergies.

Under the consideration that coastal and transitional waterbodies may stream further into the deeper sea and decrease the status of the Adriatic-Ionian Sea as a whole, there is a need to improve the ecologic status of waterbodies on a macro-regional scale. All countries can be affected by the behaviour of another. Habitats are at last not constrained by national territories but by the borders of the sea basin.

[157] https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en

A.5.2 Pollution of the Sea (3.1.b)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-40: Summary of Assessment – EUSAIR – 3.1.b Pollution of the Sea

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	3.1.b The Marine Environment - Pollution of the Sea		X		
Theme of intervention		**Indicator**			
Marine Pollution		'Environment – Sea Status (Ecologic & Chemical Status)', *External literature:* Vlachogianni *et al.* (2017), Marine Litter Assessment in the Adriatic & Ionian Seas 2017,			
Judgement on the strands of need					
Aggregate	The review of the topic 'Coastal and Marine Biodiversity (3.1.a)' showed that the macro-region scores on an aggregate level 109 points on the benchmark. In absolute terms, 73% of the sea is below "Good Ecological Status", which indicates a need. The share of coastal and transitional waterbodies with a "Failing Chemical Status" is in comparison less concerning: the aggregate macro-region scores 107 points on the benchmark and has a share of just 2% with a failing status. A marine litter assessment by Vlachogianni *et al.* (2017) shows that 48% of the region's beaches qualified as 'very dirty', 'dirty' or 'moderate', as measured by the Clean Coast Index. The study shows further that the pollution by marine litter on the sea bed is 2-5 times higher than for other reported seas. The prevalence of litter in the gut contents of fishes varies strongly by area, with a frequency of occurrence of 2.6% in the Northern Adriatic Sea and 26% in the Southern Adriatic Sea.				
Individual	The analysis in the preceding section showed that about 1/3 of the waters in Greece and Croatia are below good status, while this is the case for half of the waters in Slovenia. All three score above the EU-median. Italy is the only bottom performer of this region, due to a share of 94% below good status. The perspective on the chemical status shows that only Slovenia is a clear bottom performer in the region. 83% of its coastal and transitional waterbodies are in a failing status.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The indicators on the sea environment show do not flag a specific need when measured by the benchmarking: The Adriatic-Ionian region performs above the EU-median. However, the share of coastal and transitional waterbodies below "Good Ecological Status" high on the aggregate as well as individual level. The "Chemical Status" exhibits in turn only a large failing share for Slovenia of 83.3% and score of 59. The assessment of the marine litter dimension highlights a clear need for intervention due to pollution levels of beaches and sea-beds that are substantially higher than in other seas. At last, the frequency of occurrence of marine litter in fish's guts is only in some regions high. Seas are not constrained by national borders and damaging contents may distribute around the sea over time, which can affect all adjacent countries. A sea with a desirable status (be it ecologically, chemically, or litter-wise) is therefore the responsibility and interest of all countries in the macro-region.				

Theme of Intervention & Relevant Sources

The topic 'Pollution of the Sea' intervenes on pollution by oil spills, noise, insufficient wastewater treatment, ecologically-unsound aquaculture practices, eutrophication, and marine litter.

All these factors constitute a weakness of the macro-region, as the internal activities impact an important source of economic income (e.g. tourism and

fishing). The allocated theme of intervention is therefore Marine Pollution. The assessment of this topic uses, as in the case of the preceding topic, components of the indicator 'Environment – Sea Status': Ecologic Status and Chemical Status as defined in the Water Framework Directive[158]. The review is complemented by an assessment of marine litter by Vlachogianni *et al.* (2017)[159].

Strand of Need: Aggregate

The review of the topic 'Coastal and Marine Biodiversity (3.1.a)' showed that the macro-region scores on an aggregate level 109 points on the benchmark. In absolute terms, 73% of the sea is below "Good Ecological Status", which indicates a need.

The share of coastal and transitional waterbodies with a "Failing Chemical Status" is in comparison less concerning (see table below): the aggregate macro-region scores 107 points on the benchmark and has a share of just 2% with a failing status.

*Table 3-41: Share of Coastal and Transitional Waters with "Failing Chemical Status". Source: Task 1, EEA. * Also Western Mediterranean Waters included*

	Fails	Good	Classified	% Fails	Benchmark
EL	7	286	293	2.4	126
HR	4	46	50	8.0	98
IT*	4	666	670	0.6	144
SI	5	1	6	83.3	59
Adriatic-Ionian Sea	20	999	1019	2.0	107

The marine litter assessment by Vlachogianni *et al.* (2017) shows that 48% of the region's beaches qualified as 'very dirty', 'dirty' or 'moderate', as measured by the Clean Coast Index. The study shows further that the pollution by marine litter on the sea bed is 2-5 times higher than for other reported seas. The prevalence of litter in the gut contents of fishes varies strongly by area, with a frequency of occurrence of 2.6% in the Northern Adriatic Sea and 26% in the Southern Adriatic Sea.

Strand of Need: Individual

The analysis in the preceding section showed that about 1/3 of the waters in Greece and Croatia are below good status, while this is the case for half of the waters in Slovenia. All three score above the EU-median. Italy is the only bottom performer of this region, due to a share of 94% below good status.

The perspective on the chemical status shows that only Slovenia is a clear

[158] Water Framework Directive requires the Member States to achieve at least "Good Ecological Status" and "Good Chemical Status" of surface waters. Ecological Status refers to biological and hydrological quality of the water, and its "chemical characteristics". The ecological status can be classified into four categories: High, Good, Moderate, and Poor. The chemical status describes in turn the water's quality in terms of it content of chemical substances, and is classified as Good or either Fail.

[159] Vlachogianni *et al.* (2017), Marine Litter Assessment in the Adriatic & Ionian Seas 2017, http://mio-ecsde.org/wp-content/uploads/2017/02/Final-MLA-pages_final.pdf

bottom performer in the region. 83% of its coastal and transitional waterbodies are in a failing status.

Strand of Need: Internal

Not applicable

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The indicators on the sea environment show do not flag a specific need when measured by the benchmarking: The Adriatic-Ionian region performs above the EU-median. However, the share of coastal and transitional waterbodies below "Good Ecological Status" high on the aggregate as well as individual level. The "Chemical Status" exhibits in turn only a large failing share for Slovenia of 83.3% and score of 59.
The assessment of the marine litter dimension highlights a clear need for intervention due to pollution levels of beaches and sea-beds that are substantially higher than in other seas. At last, the frequency of occurrence of marine litter in fish's guts is only in some regions high.

› *Is the objective strategically relevant in a macro-regional context?*

Seas are not constrained by national borders and damaging contents may distribute around the sea over time, which can affect all adjacent countries. A sea with a desirable status (be it ecologically, chemically, or litter-wise) is therefore the responsibility and interest of all countries in the macro-region.

A.5.3 Transnational Terrestrial Habitats and Biodiversity (3.2)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-42: Summary of Assessment – EUSAIR – 3.2 Transnational Terrestrial Habitats and Biodiversity

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	3.2 Transnational terrestrial habitats and biodiversity				**X**
Theme of intervention		**Indicator**			
Terrestrial Biodiversity		'Biodiversity: Natura 2000', *external literature:* EEA, 2010, Environmental trends and perspectives in the Western Balkans: future production and consumption patterns			
Judgement on the strands of need					
Aggregate	The share of Natura 2000 sites in the Adriatic-Ionian macro-region are among some of the EU's highest shares with nearly one-third on average (see the table below). The resulting benchmark of 132 clearly demonstrates that this Macroregion is a strong top performer. The share of designated area was for the enlargement countries substantially lower in 2007, as the table below shows. This data is nearly a decade older than the EU counterparts and it is reasonable to assume that this share increased by 2015.				
Individual	The data indicates that the region's enlargement countries (excluding Montenegro) lag far behind the progress of the Member States. However, due to the old data, it is not clear whether this is still the case.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The data does not highlight a need for action with certainty due to the old data included for the (potential) candidate countries. The omnipresent impact of climate change and the dedicated attention to it in the European Structural and Investment of this budget period underline however the relevance of action in the European context. [160] Terrestrial habitats are not affected by national borders and can stretch over a transnational geography. A coordination in the preservation and protection of biodiversity is therefore relevant in the Macroregional context.				

Theme of Intervention & Relevant Sources

The underlying topic's aim is to protect and preserve terrestrial ecosystems. The main focus under this topic is to build resilience of ecosystems towards climate change and environmental risks (e.g. forest fires). Vulnerable ecosystems constitute a threat to the macro-region, as a low biodiversity goes in hand with a weak ecosystem overall, with reduced ecosystem services. A suitable theme of intervention is Terrestrial Biodiversity.

The Task 1 exercise did not identify an indicator that directly measures biodiversity and does not contain too many data gaps. As an indirect approximate of the degree of conservation of biodiversity, the indicator

[160] https://ec.europa.eu/clima/sites/clima/files/docs/01-climate_mainstreaming_fact_sheet-esif_introduction_en.pdf

'Biodiversity: Natura 2000' provides inference on the terrestrial share designated as Natura 2000 site in 2015.
Since the Natura 2000 data does not include the macro-region's enlargement countries, a separate report by the EEA informs about the size of designated areas in the Western Balkans in 2007.[161]

Strand of Need: Aggregate

The share of Natura 2000 sites in the Adriatic-Ionian macro-region are among some of the EU's highest shares with nearly one-third on average (see the table below). The resulting benchmark of 132 clearly demonstrates that this Macroregion is a strong top performer.

Table 3-43: Share of territory designated as Natura 2000 site in 2015 by country-level. Source: Task 1, EEA.

	% of territory designated as Natura 2000 site	Benchmarked value
EL	27	125
HR	37	147
IT	19	105
SI	38	150
Member States	30	132

The share of designated area was for the enlargement countries substantially lower in 2007, as the table below shows. This data is nearly a decade older than the EU counterparts and it is reasonable to assume that this share increased by 2015.

Table 3-44: Share of territory as designated area in 2007 by country-level. Source: EEA.

	% of territory as designated area
AL	10.9
BA	0.8
RS	7.0
Enlargement Countries	5.6

Strand of Need: Individual

The data indicates that the region's enlargement countries (excluding Montenegro) lag far behind the progress of the Member States. However, due to the old data, it is not clear whether this is still the case.

Strand of Need: Internal

Not applicable

[161] EEA, 2010, Environmental trends and perspectives in the Western Balkans: future production and consumption patterns, https://www.eea.europa.eu/publications/western-balkans/

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The data does not highlight a need for action with certainty due to the old data included for the (potential) candidate countries. The omnipresent impact of climate change and the dedicated attention to it in the European Structural and Investment of this budget period underline however the relevance of action in the European context. [162]

› *Is the objective strategically relevant in a macro-regional context?*

Terrestrial habitats are not affected by national borders and can stretch over a transnational geography. A coordination in the preservation and protection of biodiversity is therefore relevant in the Macroregional context. The comparably low level of designated areas in the enlargement countries, combined with the high shares of the Member States provides further an opportunity to support the accession countries with obtaining the European standard.

[162] https://ec.europa.eu/clima/sites/clima/files/docs/01-climate_mainstreaming_fact_sheet-esif_introduction_en.pdf

A.6 Sustainable Tourism

A.6.1 Diversified Tourism Offer (4.1)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-45: Summary of Assessment – EUSAIR – 4.1 Diversified Tourism Offer

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	4.1 Diversified tourism offer (products and services)		X		
Theme of intervention		**Indicator**			
Diversified Tourism		'Accessible Tourism Services', *external literature:* Simonella, I. (2008), ADRION PROJECT MASTER PLAN, Integrated tourism in the Adriatic Ionian area			
Judgement on the strands of need					
Aggregate	A study by Simonella (2008) identified the following weakness and threats. There is a large imbalance of tourist attraction between areas considered highly and less attractive. Further, there is no recognised common image about the Adriatic-Ionian region, which is at the same time one of the proposed actions in the strategy's action plan. With the absence of effective and integrated promotion initiatives for the region, the study evaluates at last that there is a threat of internal competition.				
Individual	The offer of accessible tourism (e.g. handicapped-friendly) is low in Albania, Serbia, and Slovenia with less than 100 identified services. The other Member States of this region, Croatia, Greece, and Italy belong in turn to the higher end of the scale. Given the small size of Croatia, the density of accessible services is higher than in for example Italy. There is thus a significant share of countries with low accessibility.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	The study by Simonella (2008) highlights several weakness in the macro-region's tourism offers, due to e.g. the absence of a common recognizable image is one important aspect and a strong imbalance between the highly attractive areas and those considered by tourists only marginally attractive. The indicator 'Accessible Tourism Services' shows also that a significant share of countries exhibits a low accessibility for handicapped tourists. A tourism macro-region can be subject to competition among the individual regions, as each region naturally tries to attract the most tourists. However, a Macroregional approach can help to establish a common brand. As a result, tourists that arrive in the Macroregion may pursue plans to visit several countries in the Macroregion, given the proximity of the countries.				

Theme of Intervention & Relevant Sources

The topic aims to widen the offer for tourists with the result of new business opportunities, a reduced dependence of the sector on seasonal tourism, a limited environmental footprint, and a better consideration of climate change impacts. The preceding analysis in Task 1 showed that the Adriatic-Ionian region performs between the EU-median and EU bottom performance, when measured by the arrivals at tourism establishments, which shows that the region is not particularly strong on tourism.

In line with the action plan, the indicator 'Accessible Tourism Services' shows how handicapped friendly the macro-region is.[163]
The analysis in Task 1 did not include a dedicated indicator for the diversity of tourism offer. The analysis is therefore complemented by a study on the tourism systems in the macro-region (Simonella, 2008).[164]

Strand of Need: Aggregate

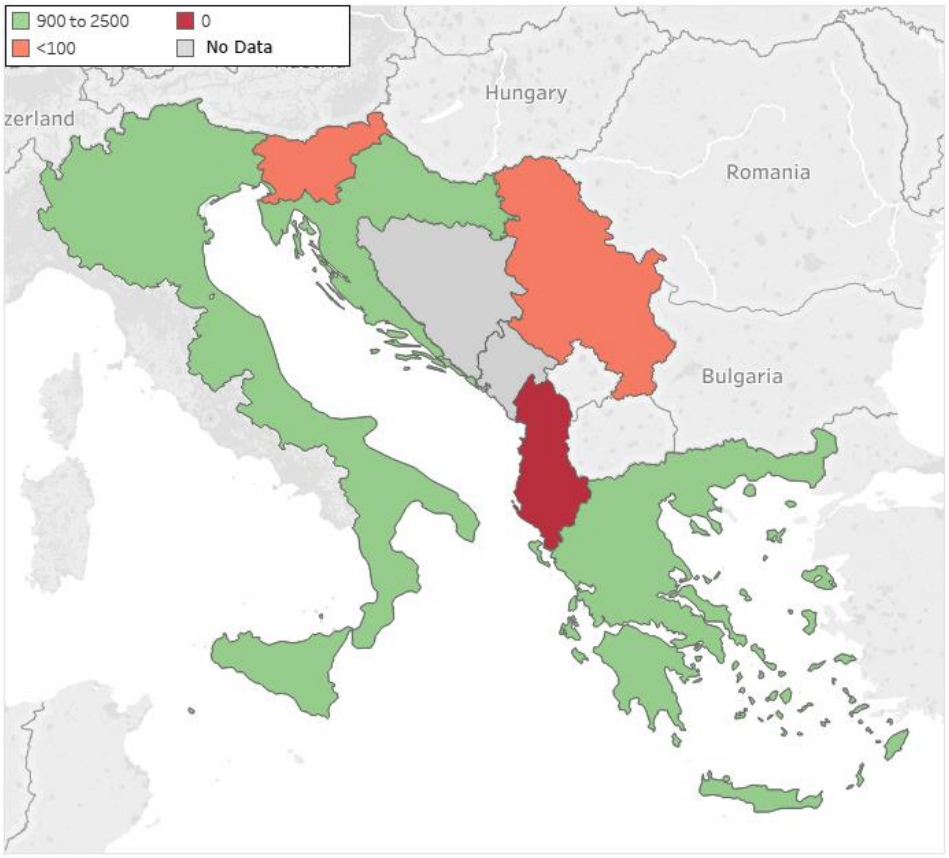
A study by Simonella (2008) identified the following weakness and threats. There is a large imbalance of tourist attraction between areas considered highly and less attractive. Further, there is no recognised common image about the Adriatic-Ionian region, which is at the same time one of the proposed actions in the strategy's action plan. With the absence of effective and integrated promotion initiatives for the region, the study evaluates at last that there is a threat of internal competition.

Strand of Need: Individual

The figure below shows the number of accessible tourism services in 2014. As can be seen, the results of the study indicate low accessible tourism for Albania, Serbia, and Slovenia with less than 100 identified services. The other Member States of this region, Croatia, Greece, and Italy belong in turn to the higher end of the scale. Given the small size of Croatia, the density of accessible services is higher than in for example Italy. There is thus a significant share of countries with low accessibility.

[163] ENAT, Mapping and Performance Check of the Supply of Accessible Tourism Services, Final Report, Annex 8. URL: http://www.accessibletourism.org/?i=enat.en.reports.1740
[164] Simonella, I. (2008), ADRION PROJECT MASTER PLAN
Integrated tourism in the Adriatic Ionian area, http://www.forumaic.org/wp-content/uploads/2016/10/turismoEN-16.pdf

Figure 3-2: Number of Accessible Tourism Services by country in 2014. Source: ENAT



Strand of Need: Internal

Not applicable

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

The study by Simonella (2008) highlights several weakness in the macro-region's tourism offers, due to e.g. the absence of a common recognizable image is one important aspect and a strong imbalance between the highly attractive areas and those considered by tourists only marginally attractive. The indicator 'Accessible Tourism Services' shows also that a significant share of countries exhibits a low accessibility for handicapped tourists.

› *Is the objective strategically relevant in a macro-regional context?*

A tourism macro-region can be subject to competition among the individual regions, as each region naturally tries to attract the most tourists. However, a Macroregional approach can help to establish a common brand. As a result, tourists that arrive in the Macroregion may pursue plans to visit several countries in the Macroregion, given the proximity of the countries.

A.6.2 Sustainable Tourism Management (4.2)

Assessment Summary

The table below provides the summary of this objective's assessment. Further detailed information can be found below the table.

Table 3-46: Summary of Assessment – EUSAIR – 4.2 Sustainable Tourism Management

Strategy	Objective	Strength	Weakness	Opportunity	Threat
EUSAIR	4.2 Sustainable and responsible tourism management (innovation and quality)		X		
Theme of intervention		**Indicator**			
Sustainable Tourism		'Arrivals at tourist accommodation establishments'			
Judgement on the strands of need					
Aggregate	The benchmark on the arrivals at tourism accommodations indicates a performance of the Adriatic-Ionian region below the EU-median (see table below). Yet, the score of 89 points to an only moderate performance. This observation points to a limited need on the aggregate level.				
Individual	The indicator on tourism arrivals shown above identifies several countries as bottom performers: Greece, Montenegro and Slovenia. Italy is only slightly below the score of 100. Several countries have thus room for improvement on tourism.				
Internal	*Not applicable*				
Traffic Light	Corresponds to need + Macro-regionally relevant				
Justification	In order to obtain benefits from tourism growth in the long-term, sustainable management is necessary to preserve the competitive characteristics. The indicator shows that the Macroregion possesses overall growth potential. The lack of arrival data on the macro-region's enlargement countries hinders a strong conclusion on this Topic, as for example a weak benchmark performance of those would even more so flag a need to lift the (potential) accession countries tourism sector to the EU's standard, enabling these to stand more competitive on the EU territory. A tourism macro-region can be subject to competition among the individual regions, as each region naturally tries to attract the most tourists. However, a Macroregional approach to sustainable tourism management can ensure that the region Macroregion as a whole, and thus also its brand, maintains a high attractiveness. Under the consideration of the marine environment, sustainable tourism management is beneficial to all countries.				

Theme of Intervention & Relevant Sources

The underlying topic plans to improve the quality of tourism services. The action plan highlights that tourism is only limitedly managed sustainably with adverse impacts on the coastal, marine, and hinterland environment in the form of e.g. waste and water supply pressures. The anticipated result of actions on this matter are the protection of this macro-region's competitive tourism advantages.

The indicator 'Arrivals at tourism establishments' benchmarks the tourism attractiveness as measured by the number of arrivals, and places the Adriatic-Ionian Sea in the context of the EU's overall tourism performance. The indicator is closely in line with the action plan. The deviation is that action plan focuses on off-season arrivals and arrivals from outside the region; data on these indicators could not be identified.

Strand of Need: Aggregate

The benchmark on the arrivals at tourism accommodations indicates a performance of the Adriatic-Ionian region below the EU-median (see table

below). Yet, the score of 89 points to an only moderate performance. This observation points to a limited need on the aggregate level.

Table 3-47: Benchmarked arrivals at tourist accommodation establishments in 2015 by country-level. Source: Eurostat.

	Arrivals (benchmarked)
EL	78
HR	101
IT	96
ME	87
SI	89
EUSAIR	89

Strand of Need: Individual

The indicator on tourism arrivals shown above identifies several countries as bottom performers: Greece, Montenegro and Slovenia. Italy is only slightly below the score of 100. Several countries have thus room for improvement on tourism.

Strand of Need: Internal

Not applicable

Final Assessment

› *To which extent does the objective reflect an actual need for intervention?*

In order to obtain benefits from tourism growth in the long-term, sustainable management is necessary to preserve the competitive characteristics. The indicator shows that the Macroregion possesses overall growth potential.
The lack of arrival data on the macro-region's enlargement countries hinders a strong conclusion on this Topic, as for example a weak benchmark performance of those would even more so flag a need to lift the (potential) accession countries tourism sector to the EU's standard, enabling these to stand more competitive on the EU territory.

› *Is the objective strategically relevant in a macro-regional context?*

A tourism macro-region can be subject to competition among the individual regions, as each region naturally tries to attract the most tourists. However, a Macroregional approach to sustainable tourism management can ensure that the region Macroregion as a whole, and thus also its brand, maintains a high attractiveness. Under the consideration of the marine environment, sustainable tourism management is beneficial to all countries.

Appendix B List of literature

The literature used for and referenced by this study is presented below. It is organised into five sections:

1. Academic publications
2. European Policy Framework
3. Macro-regional Strategies
4. Documents related to each macro-regional strategy
5. Specific Data/Indicator & Internet Sources

1. Academic Publications & Reports

There is an emerging literature on the concept, application, and effectiveness of macro-regional strategies. The sources of these publications are broadly grouped into economic geography research focused on the economic and technical changes that are driving a rescaling process in Europe, and studies that focus on the policy instruments themselves.

Banister D. 2002. Transport Planning, Spon Press, New York.

Bengtsson, R. 2009. "An EU Strategy for the Baltic Sea Region: Good Intentions Meet Complex Challenges," Swedish Institute for European Policy Studies

Bevir, M. 2013. Governance: A very short introduction. Oxford, UK: Oxford University Press.

Bhagwati, J. N. 1987. Quid pro quo foreign investment and welfare: A political-economy-theoretic model. Journal of Development Economics, Volume 27, Issues 1-2, Pages, 127-138.

Bialasiewicz, L.; Giaccaria, P.; Jones, A.; Minca, C. (2013) Re-scaling 'EU'rope: EU macro-regional fantasies in the Mediterranean. European Urban and Regional Studies, Vol. 20, No. 1, 59–76

BMVI Bundesministerium für Verkehr und Digitale Infrastruktur (ed.). 2017. Wirkungen der Transnationalen Zusammenarbeit in Interreg B. Untersuchung ausgewählter Interreg IVB-Projekte nach erzielten Wirkungen und zentralen Gelingensfaktoren. Berlin: BMVI.

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Brenner, N. (2004) New State Spaces. Urban Governance and the Rescaling of Statehood, Oxford: Oxford University Press.

Christiansen, T. 1997. "A European Meso-region? European Union Perspectives on the Baltic Sea Region" in P. Joenniemi (ed.) Neo-nationalism or Regionalism? The Re-structuring of Political Space around the Baltic Rim

Cugusi, B. and Stocchiero, A. 2012. "Macro-regions, "la Nouvelle Vogue" of Transnational Cooperation, the Geopolitical Case of the Mediterranean Basin," in EUBORDERREGIONS Working Paper Series

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Dühr, S. 2013. The added-value of macro-regional strategies from the perspective of spatial planning. Report for the European Commission, DG Regio.

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Foster, N., G. Hunya, O. Pyndyuk and S. Richter. 2011. Revival of the Visegrad Countries' Mutual Trade after their EU Accession: a Search for Explanation. Wiiw Research Report No. 372.

Gänzle S and Kern K. 2011. "Macro-regional Strategies: A New Mode of Differentiated integration in the European Union," Paper for CEPSA Annual Conference.

Gänzle S and Kern K (eds). 2016. A 'Macro-regional' Europe in the Making: Theoretical Approaches and Empirical Evidence.

Gänzle, S. 2014. "Macro-regional Strategies and the EU. Building Inter- and Trans-government Relations," in Public Administration Times.

Geerlings, H. and Stead, D. 2003. The Integration of Land Use Planning, Transport and Environment in European Policy and Research. Transport Policy, Vol. 10, No. 3, pp. 187- 196.

Geurs T. K. and B. van Wee. 2006. Ex-post Evaluation of Thirty Years of Compact Urban Development in the Netherlands, Urban Studies, vol. 43, Issue 1, 2006.

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Grozea-Helmenstein D., C. Helmenstein, T. Slavova. 2009. *Who is the best? Insights from the benchmarking of border regions.* Trames. Journal of the Humanities and Social Sciences, 13(63/58), (3). pp. 285-302.

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Sielker, F. 2016. "What could the future role of Macro-regional strategies in the EU be? –Four scenarios", Working Paper No. 1/2016, Friedrich-Alexander Universität Erlangen-Nürnberg.

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2. European Policy Framework

The European policy framework is driven by developments in overall economic, environmental, and social perspectives, and reinforced by the evaluation of territorial cooperation approaches.

2.A General

European Commission. 20120. EU 2020 - A New European Strategy For Jobs And Growth. COM(2010) 2020, Brussels.

2.B Cohesion Policy

Regulation (EU) No 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006

Common Provisions Regulation (EU) No 1303/2013. Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006. (See page 93 for Common Strategic Framework)

Ex post evaluation of Cohesion Policy programmes 2007-2013 financed by the ERDF and the Cohesion Fund - WP1: Synthesis Report

European Structural and Investment Funds 2014-2020: Official Texts And Commentaries

Regulation (EU) No 1299/2013 of the European Parliament and of the Council of 17 December 2013 on specific provisions for the support from the European Regional Development Fund to the European territorial cooperation goal

Council Regulation (EU) No 1300/2013 of 17 December 2013 on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006

Climate change, impacts and vulnerability in Europe. http://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016

Climate-ADAPT. Website/platform: http://climate-adapt.eea.europa.eu/countries-regions/transnational-regions

Climate change indicators. Website/platform: http://www.eea.europa.eu/data-and-maps/indicators/#c5=climate-change-adaptation&b_start=0

Climate-ADAPT vulnerability maps. Website: http://climate-adapt.eea.europa.eu/knowledge/tools/urban-adaptation/introduction

DG Employment. 2014. Monitoring and Evaluation of European Cohesion Policy-European Social Fund, Guidance Document on Indicators of Public Administration Capacity Building

European Commission. 2004. A new partnership for cohesion. Convergence, competitiveness, cooperation. Third report on economic and social cohesion. Luxembourg: Office for Official Publications of the European Communities.

European Commission. 2010. Fifth Report on economic, social and territorial cohesion - Investing in Europe's future. Luxembourg: Office for Official Publications of the European Communities.

Polycentric crossborder system and transport. Towns as components of an Organised Transport Systems can be found at p. 23-25 of this draft chapter for the Urban agenda of an Euroregion

Pucher, J., Frangenheim, A., Sanopoulos, A., Schausberger, W. 2015. The Future of Cohesion Policy, Report I, Committee of the Regions, Brussels.

S3 platforms contain data about different countries and regions and use "tools" to analyze them. Website/platforms: http://s3platform.jrc.ec.europa.eu/; http://s3platform.jrc.ec.europa.eu/s3-cooperation; http://s3platform.jrc.ec.europa.eu/s3-tools

TEN-T: On the (TEN-T) Corridors dimension and their interrelation with the macro-regional strategies, refer to the EU Coordinators Work Plans, notably for:

- Danube Strategy - > Rhine Danube Corridor
- Alpine Strategy -> Scan-Med corridor (it concerns 3 other corridors too but less involved – interesting to see the governance elements referred to – and partially set-up by the Coordinator, Pat Cox)
- Baltic Sea Strategy -> North Sea- Baltic corridor. Website: http://ec.europa.eu/transport/node/4876

3. Macro-regional Strategies

The concept, application, and spread of macro-regional strategies as policy instruments has been supported by the institutions that comprise the European Union, along with the supporting programmes that support broader territorial cooperation.

3.A Policy Publications

3.A.1 European Commission

Charron, N., Dijkstra, L., Lapuente, V. 2012. Regional Governance Matters: A Study on Regional Variation in Quality of Government within the EU. European Commission, DG REGIO.

European Commission. 2014. A Discussion Paper for the revision of the Action Plan of the EU Strategy for the Baltic Sea Region (EUSBSR), not public

European Commission. 2013a. Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the added value of macro-regional strategies. COM(2013) 468 final.

European Commission. 2013b. Commission Staff Working Document *accompanying the document* 'Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the added value of macro-regional strategies'. SWD(2013) 233 final.

European Commission. 2014. 'Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the governance of macro-regional strategies'. COM (2014) 284 final.

European Commission. 2015. Enabling synergies between European Structural application: and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes.

European Commission (2016), report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies. COM(2016) 805 final.

Samecki, P. (2009) Macro-regional Strategies in the European Union, Discussion Paper presented by Commissioner Pawel Samecki in Stockholm, 18 September, Brussels: DG Regio

3.A.2 European Parliament

European Parliament. 2010. Working Document on the European Union Strategy for the Baltic Sea Region and the role of macro-regions in the future cohesion policy, Committee on Regional development, 06.01.2010

European Parliament. 2012. The evolution of EU macro-regional strategies: present practice and future prospects, especially in the Mediterranean, Motion for Resolution,

European Parliament. 2012b: Resolution from the European Parliament on optimising the role of territorial development in cohesion policy

Common Provisions Regulation (EU) 1303/2013, see page 93 for Common Strategic Framework

European Parliament. 2015. The New Role of Macro-regions in European Territorial Cooperation. Study Commissioned by the Directorate General for Internal Policies, Brussels

European Parliament. 2015. The New Role of Macro-regions in European Territorial Cooperation. Study Commissioned by the Directorate General for Internal Policies, Brussels. (incl. ANNEX)

3.A.3 Committee of the Regions

Committee of the Regions (2013): Opinion concerning the added value of macroregional strategies, CoR 28,29

3.A.4 Supporting programmes

ESPON programme

INTERACT programme

Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies {SWD(2016) 443 final} 16.12.2016 COM(2016) 805 final

The added value of macro-regional strategies seen from a project and programme perspective. Final report Spatial Foresight 2016

Added value of macro-regional strategies: Collecting practice examples. Final report Spatial Foresight 2016

- Interact has been working on the short documents clarifying MRS. MRS Glossary here and Overview on MRS priorities.
  - Website/platform: http://www.interact-eu.net/library?field_fields_of_expertise_tid=33#470

    Website/platform: http://www.interact-eu.net/library?field_fields_of_expertise_tid=33#819

Interact Joint Annual Work Plan for 2017 (at activity level). Website: http://www.interact-eu.net/#news

ESPON provides European-wide comparable. Website/Platform: https://www.espon.eu/main/

4. Documents related to specific strategies

Each macro-region has followed a similar process of identifying functional problems that require flexibility and coordination. The policy process has followed a similar trajectory. However, these needs and strategies are unique to each region, and are contained in the strategies and Action Plans for each region.

4.A Baltic Sea

A beginner's guide to the Baltic Sea Region – Swedish Tillvaxtverket

Action Plan - Working document accompanying the Communication concerning the European Union Strategy for the Baltic Sea Region - SEC(2009) 712 - September 2015 update

Analysis currently under finalisation by University of Geneve on networking patterns in the PAs/HAs related to environment in the EUSBSR. Report to come (Experts working on it are Dr Erik Gløersen (erik.gloersen@unige.ch) and Clément Corbineau (Clement.Corbineau@unige.ch). Please contact colleagues directly for further information.

Annex to the Action Plan: Ongoing and completed flagships of the EUSBSR

COM (2012) 128 final - 23.03.2012 concerning the European Union Strategy for the Baltic Sea Region (2012)

Embedding EUSBSR with ESIF – Case study of Lithuania

ESPON TeMo (BSR Territorial Monitoring System). Website/Platform: http://bsr.espon.eu/opencms/opencms

EU Strategy for the Baltic Sea Region (EUSBSR – 2009)

European Commission (2009a), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – European Union Strategy for the Baltic Sea Region, Brussels, 10.06.2009, COM(2009) 248 final.

European Commission. 2011. Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the EU Strategy for the Baltic Sea Region (EUSBSR). COM(2011) 381 final (June 2011), Brussels.

European Parliament (2010): Report on the European Union Strategy for the Baltic Sea Region and the role of macro-regions in the future cohesion policy.

EUSBSR Policy Area Education Progress Report, draft 24.07.2017

EUSBSR Policy Area on Maritime Safety and Security "PA Safe" Implementation Report 2016; Danish Maritime Authority and Finnish Transport Safety Agency

List of EUSDR Targets. Validated in the meeting of national Coordinators and Priority Area Coordinators held in Bratislava on 23 May 2016.

Newsletter (2009 through to 2014)

Ongoing work on climate action, have a look at the EUSBSR dedicated website. Website: http://www.cbss.org/strategies/horizontal-action-climate/

PA Education – work programme – final. May, 1, 2016 – April, 30, 2018 (2016.04.13).

PA INNO Monitoring Guide – Roles, Targets, Process. Nordic Council of Ministers, 2016.

PA Innovation – draft progress document, August 2018

PA Nutri Progress Report 17.05.16 (Contribution by PA Nutri coordinators to the Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of macro-regional strategies. 17.05.2016

PA Transport Work Plan for 2017 – draft 25.01.2017 TE

Policy Area Innovation Strategy Guide – Putting the Action Plan into Practice. Nordic Council of Ministers, 2016

Policy Area 'Nutri', Work Plan 2017 – DRAFT

Policy Area Transport Implementation Report 2016 – 10.06.2016

Progress Report – 2011 (most recent)

Project-to-policy loop. Meeting of coordinators for the EUSBSR and Interact 25 November 2016. Stockholm, Sweden

Report on the implementation of the Horizontal Action Climate of the EUSBSR in 2015-2016.

Study 'Cooperation methods and tools applied by European Structural and Investment Funds programmes for 2014-2020 to support implementation of the European Union Strategy for the Baltic Sea Region' here. Study was conducted by Spatial Foresight 2016. 1st and 2nd Interim Reports from the study on the EUSBSR web also available. Report link: http://interact-eu.net/library?field_fields_of_expertise_tid=33#809

Trends, challenges and potentials in the Baltic Sea Region. Website/platform: http://www.strategyforum2016.eu/media/reports/trends,-challenges-and-potentials-in-the-baltic-sea-region-33964731

VASAB workshop on territorial monitoring. Website/Platform: http://www.vasab.org/index.php/events/past-events/item/314-vasab-workshop-on-territorial-monitoring-krakow

Website of Policy Area Education, http://groupspaces.com/eusbsr-education/

Website of Policy Area Innovation. http://www.pa-innovation.eu/, Nordic council of Ministers

Website of Policy Area Nutri, http://groupspaces.com/eusbsr-nutrient-inputs/

Website of Policy Area on Maritime Safety and Security – PA Safe. https://www.dma.dk/Vaekst/EU/EUOestersoestrategi/PAsafe/Pages/default.asp

Website of the EUSBSR, https://www.balticsea-region-strategy.eu/, EUSBSR 2017.

4.B Danube

Case study on Water Protection – 2015.

Communication - European Union Strategy for the Danube Region - COM(2010) 715 - 08/12/2010. Website of the EUSDR, http://www.danube-region.eu/, EUSDR 2017.

Cooperation methods and tools applied by EU funding programmes to support implementation of the EU Strategy for the Danube Region. Study is done by Metis to be finalized in March 2017.

Dynamic integrated management with regard to climate change. Report: Edith Hödl, Bratislava, 3 November 2016.

European Commission (2013) Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Concerning the European Union Strategy for the Danube Region, COM(2013) 181 final.

EUSDR | PA9 - Investing in People and Skills. Work Programme "Education and training, labour market and marginalized communities", MARCH 2016.

Implementation Report of EUSDR Priority Area 11 (Priority Area 11 "Security"), reporting period: 01/08/2015 - 30/06/2016.

Implementation Report of EUSDR Priority Area 11 (Priority Area 11 "Security"), reporting period: 01/07/2016 - 31/12/2016.

Implementation Report of EUSDR Priority Area 4 "to restore and maintain the quality of waters", reporing period: 07/2015 - 06/2016 and 07/2016 - 12/2016.

Implementation Report of EUSDR Priority Area 7 "To develop the Knowledge Society (research, education and ICT)", reporting period: 07/2015 - 06/2016.

Implementation Report of EUSDR Priority Area 7 "To develop the Knowledge Society (research, education and ICT)", reporting period: 07/2016 - 12/2016.

Implementation Report of EUSDR Priority Area PA 9 "Investing in People and Skills", reporting period: 07/2015 - 06/2016.

Implementation Report of EUSDR Priority Area PA 9 "Investing in People and Skills", reporting period: 07/2016 - 12/2016.

Implementation Report of EUSDR Priority Area PA1a Mobility | Waterways, reporting period: 01/07/2015 to 30/06/2016 and 07/2016 - 12/2016.

Public consultation on the EU Strategy for the Danube Region – 2010.

RC Scientific Support to the Danube Strategy. Website/platform: https://ec.europa.eu/jrc/en/research/crosscutting-activities/danube-strategy

Report Concerning the EU Strategy for the Danube Region (EUSDR - 2010)

Study on Socio-Economic conditions in the region - 2015.

Website of the Priority Area 11 Security, https://www.danube-security.eu/, PA 11 | Security, 2017.

Website of the Priority Area 4 Water Quality, https://www.danubewaterquality.eu/, PA 04 | Water Quality, 2017.

Website of the Priority Area 7 Knowledge Society, https://www.danubeknowledgesociety.eu/, PA 07 | Knowledge Society, 2017.

Website of the Priority Area 9 People and Skills, http://www.peopleandskills-danuberegion.eu/, EU Strategy for the Danube Region | Priority Area 9 "Investing in People and Skills", 2016.

Website of the Priority Area PA 1A Inland Waterways, https://www.danube-navigation.eu/, PA 1A | Inland Waterways, 2017.

11 Country Fact Sheets.

5th Annual Forum of the EUSDR 2016 - Summaries of the Plenary Sessions and Workshops; http://www.oerok.gv.at/fileadmin/Bilder/4.Reiter-Contact_Point/Portal_MRS/EUSDR/Events/2016-11_EUSDR_5th_Annual_Forum__Summary_notes.pdf.

4.C Adriatic/Ionian

Action Plan - EU Strategy for the Adriatic and Ionian Region (EUSAIR – 2014)

Adriatic and Ionian Euroregion (AIE), https://www.adriaticionianeuroregion.eu/

Communication concerning the European Union Strategy for the Adriatic and Ionian Region

Council Conclusions on the EU Strategy for the Alpine Region, 27 November 2015

Endorsement of the European Union Strategy for the Adriatic and Ionian Region (EUSAIR), European Council, Brussels, 23-24 October 2014

European Commission. 2012. Maritime strategy for the Adriatic and Ionian Seas

EUSAIR: PILLAR 4: Sustainable Tourism – 2015 ANNUAL PROGRESS REPORT; Prepared by Pillar Coordinators and approved by TSG 4 on 29/04/2016

http://www.adriaticionianeuroregion.eu/index.php?lang=it

Supportive Analytical Document Accompanying the communication concerning the European Union Strategy for the Adriatic and Ionian Region

Website of the European Union Strategy for the Adriatic and Ionian region (EUSAIR). http://www.adriatic-ionian.eu/, EUSAIR 2017.

4.C Alpine

Action plan Accompanying the communication concerning a European Union Strategy for the Alpine Region - 28.07.2015 - SWD(2015)

Communication concerning a European Union Strategy for the Alpine Region 2015

Council Decision 96/191/EC of 26 February 1996 concerning the conclusion of the Convention on the Protection of the Alps (Alpine Convention)

EU Strategy for the Alpine Region (EUSALP – 2015)

European Parliament resolution of 23 May 2013 on a macro-regional strategy for the Alps (2013/2549(RSP))

European Union Strategy for the Alpine Region, EUSALP, Action Group 6, June 2016 – June 2019 [Work Plan]

EUSALP post 2020. Input paper for the workshop on 25 January. 2017. Spatial Foresight. 17.01.2017

First Report on the implementation of the EU-Strategy for the Alpine Region, April 2017

4.D Other geographic strategies:

4.D.1 Atlantic Area

Action Plan Maritime for a Maritime Strategy in the Atlantic area Delivering smart, sustainable and inclusive growth

Action Plan. Maritime for a Maritime Strategy in the Atlantic area

European Commission (2011b): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning Developing a Maritime Strategy for the Atlantic Ocean Area, Brussels, 21.11.2011, COM(2011) 782

Maritime affairs and fisheries - Safeguarding the future of our seas, generating new prosperity

4.D.1 Mediterranean Region

European Parliament (2012a): Resolution from the Committee on Regional Development on the evolution of EU macro-regional strategies: present practice and future prospects, especially in the Mediterranean

4.D.2 North Sea Region

Annual Reports

North Sea Programme (Interreg) Ongoing Evaluations

Thematic Papers

5. Specific Data/Indicator & Internet Sources

ESPON (2013). European Territorial Cooperation as a Factor of Growth, Jobs and Quality of Life, Applied Research 2013/1/9 Interim Report | Version 4/04/2011.

European Monitoring Centre for Drug and Drug Addiction (2016). European Drug Report, Trends and Developments, Luxembourg: Publications Office of the European Union, 2016. ISBN: 978-92-9168-890-6, doi:10.2810/04312.

European Network for Accessible Tourism (2015). Mapping and Performance Check of the Supply of Accessible Tourism Services, Final Report, Annex 8.

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Eurostat, (2017). Database.

Eurostat, (2017). Glossary.

European Union Open Data Portal, (2017). Primary production of renewable energy by type (ten00081).

Mizrahi, Y., (2003) "Capacity Enhancement Indicators: Review of the Literature", WBI Evaluation Studies No. EG03-72, World Bank Institute, The World Bank

Odysee-Mure (2017). Database.

OECD (2013). OECD Factbook 2013: Economic, Environmental and Social Statistics. Paris

OECD (2015). Education at a Glance, 2015, Paris.

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Publications Office of the European Union (2015). Trafficking in Human Beings, Luxembourg.

Social Progress Imperative (2016). Social Progress Index 2016.

United Nations (2017). COMTRADE Database.

Internet Sources

https://ec.europa.eu/neighbourhood-enlargement/countries/check-current-status_en

http://www.investopedia.com/terms/m/mature-economy.asp#ixzz4vedfmFqq

http://www.wired.co.uk/article/finland-and-nokia

http://www.socialprogressimperative.org/wp-content/uploads/2016/06/SPI-2016-Main-Report.pdf

http://www.socialprogressimperative.org/custom-indexes/european-union/

http://www.sciencedirect.com/science/article/pii/0022-1996(79)90017-5.

https://www.globalpolicy.org/nations-a-states/political-integration-and-national-sovereignty-3-22.html

https://www.imf.org/external/pubs/ft/bop/2007/pdf/appx5.pdf

http://www.etsg.org/ETSG2011/Papers/Folfas.pdf

https://www.stat.fi/til/ssij/2015/ssij_2015_2016-10-27_en.pdf

http://www.accessibilityplanning.eu/wp-content/uploads/2013/01/Accessibility-Measures-and-Instruments-R.pdf

http://www.odyssee-mure.eu/

https://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/TERCO/TERCO_Interim-Report-and-Annex_FINAL.pdf

http://www.europarl.europa.eu/cmsdata/116220/tent-issues-papers.pdf

https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1

http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/TERCO/Final_Report/TERCO_FR_ExecutiveSummary_Dec2012.pdf

http://ec.europa.eu/regional_policy/en/information/publications/studies/2013/eu-regional-competitiveness-index-rci-2013

http://data.europa.eu/euodp/data/dataset/rxNwNXHw9XYLOrFEezkGIQ

http://ec.europa.eu/growth/industry/innovation/facts-figures/regional_de

http://www.ipex.eu/IPEXL-WEB/dossier/document/COM20150192.do.

http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuId=FTU_5.9.4.html

https://ec.europa.eu/digital-single-market/en/access-digital-single-market

https://ec.europa.eu/digital-single-market/en/desi

https://ec.europa.eu/growth/smes/business-friendly-environment/small-business-act_de

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https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/ten-t-completion-rail-hs_en

http://lpi.worldbank.org/

https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/publications/leaflet-blue-growth-2013_en.pdf

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https://diamondenv.wordpress.com/2010/12/10/particulate-pollution-pm10-and-pm2-5/

http://ec.europa.eu/environment/nature/natura2000/index_en.htm

http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Shannon_evenness_index_(SEI)

http://www.eea.europa.eu/data-and-maps/figures/percentage-cover-of-marine-protected

https://ec.europa.eu/environment/ecoap/scoreboard_en

https://ec.europa.eu/environment/ecoap/scoreboard/resource-efficiency-outcomes

https://ec.europa.eu/environment/ecoap/scoreboard_en

https://www.eea.europa.eu/highlights/more-european-sites-meet-excellent

http://ec.europa.eu/environment/soil/index_en.htm

http://ec.europa.eu/eurostat/statistics-explained/index.php/Agri-environmental_indicator_-_soil_erosion

http://www.eea.europa.eu/data-and-maps/indicators/gross-nutrient-balance-1

https://www.eea.europa.eu/data-and-maps/indicators/gross-nutrient-balance-1/gross-nutrient-balance-assessment-published

http://info.worldbank.org/governance/wgi/#home

http://info.worldbank.org/governance/wgi/pdf/wgi.pdf

http://info.worldbank.org/governance/wgi/pdf/va.pdf

http://www.accessibletourism.org/?i=enat.en.reports.1740

https://www.stat.fi/til/ssij/2015/ssij_2015_2016-10-27_en.pdf

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