



# VZPOSTAVITEV INFORMACIJSKEGA SISTEMA ZA SPREMLJANJE PRIVLAČNOSTI OBMOČIJ IN UPRAVLJANJA POLITIK V JUGOVZHODNI EVROPI

# TOWARDS A MONITORING INFORMATION SYSTEM FOR TERRITORIAL ATTRACTIVENESS AND POLICY MANAGEMENT IN SOUTH EAST EUROPE

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### **ABSTRACT**

Trajnostni in uravnotežen razvoj območij, ki temelji na prostorskih razvojnih politikah, potrebuje strateškim prioritetam in ciljem podrejeno informacijsko podporo. Takšna informacijska podpora mora zagotavljati učinkovit proces odločanja kot tudi učinkovito usklajevanje sektorskih politik. Da bi v prihodnosti dosegli in uresničili prednostno dogovorjene naloge, je Evropska unija začela z izvajanjem strategij, direktiv in pobud, kot so Evropa 2020, INSPIRE etc.. Te informacijsko usmerjene strategije naj bi zagotovile ustrezne odgovore glede razvojnih potreb kot tudi podporo pri oblikovanju ustreznih politik. Osem partnerskih držav in regij si je s projektom "Ocena privlačnosti območij v Jugovzhodni Evropi", ki je bil izbran na četrtem razpisu transnacionalnega programa JV Evropa, zadalo cilj oblikovanja zasnove informacijskega sistema za spremljanje stanja v prostoru na območju Jugovzhodne Evrope. Ta naj bi predstavljal pomoč odločevalcem v prostoru pri sprejemanju kakovostnih, podatkovno zasnovanih odločitev. Osrednja tema projekta je bil pojem privlačnosti območij. Članek predstavlja metodologijo in rezultate projekta.

Policy-based management towards sustainable and cohesive territorial development needs a strategic priorities oriented information platform. This information platform should secure an effective decision-making process as well as an efficient coordination of sectoral policies and activities. In order to achieve and implement commonly agreed development priorities in the future, the European Union have launched several strategic initiatives, such as Europe 2020, INSPIRE, etc. These strategies ones are expected to provide appropriate responds to development needs, as well as to support the creation of relevant policies. Aiming to establish a territorial monitoring information system in SEE region, eight countries have launched the project "Territorial Attractiveness Assessment in South East Europe" within the 4th Call of SEE Transnational Cooperation Programme. Such an information system is, needed to build a region-wide information platform for an efficient decision-making and coordination of strategic actions towards smart, sustainable and inclusive growth. The pilot domain of project was territorial attractiveness. This article provides a description of project's main results.

## KLJUČNE BESEDE

# KEY WORDS

prostor, prostorski razvoj, prostorski informacijski sistem, spremljanje stanja v prostoru, privlačnost prostora, EU, jugovzhodna Evropa Space, spatial development, spatial information system, territorial monitoring system, territorial attractiveness, EU, South East Europe

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# 1 INTRODUCTION

In order to ensure equal and sustainable development opportunities throughout Europe, European Union (EU) has committed its strategic and regulating efforts as well as funding supports to remove existing structural disparities within its different areas and domains. Therefore, the main aim of the EU Regional Policy (InfoRegio, 2014) is to provide development mechanisms and solutions for European regions to retain their specificities while being able simultaneously to compete, innovate, adopt principles of smart and inclusive growth, and implement sustainable and cohesive development tools in general.

Within the EU Regional Policy special attention has been delegated to EU border areas, especially candidates and potential candidates' countries (like Serbia, FYR Macedonia, Bosnia and Herzegovina, etc.). In order to upgrade their development level, and to make them able to compete and develop in a sustainable and balanced manner, EU has launched South East Europe Transnational Cooperation Programme (SEE Programme, 2014). The aim of this article is to provide an overview of the main objectives and results produced during activities of building the technological framework for the regional monitoring information system proposed within the project "Assessing Territorial Attractiveness in South East Europe" (Attract-SEE Project – below just project) (Attract-SEE, 2014), which ran within the 4th Call of the SEE Programme (Priority: Development of transnational synergies for sustainable growth areas; Area of intervention: Promote a balanced pattern of attractive and accessible growth areas).

# 2 MONITORING OF REGIONAL DEVELOPMENT IN SOUTH EAST EUROPE

The EU Regional Policy (InfoRegio, 2014) and its goals are operationalized also through the Europe 2020 strategic objectives in general (Europe 2020, 2014) and Territorial Agenda (TA) 2020 for spatial development in particular (TA, 2014). In both documents, the importance of the territorial cohesive development dimension has been emphasized along economic and social ones. Furthermore, these strategic documents identify priorities, targets and initiatives for an inclusive, sustainable and smart growth within the EU territory to be reached till 2020, thus providing a common vision and directions for national and regional territorial development policies management and planning, both for Member and Candidate states.

However, in order to implement these common territorial directions, a set of updated, comprehensive, selective and structured data and information for each region is needed. Thus, EU has launched two other initiatives, namely Infrastructure for Spatial Information in the European Community (INSPIRE, 2014) and European Observation Network for Territorial Development and Cohesion (ESPON, 2014). Both initiatives provide a basis and preconditions for a balanced, smart, inclusive and sustainable territorial development planning, monitoring and management within EU and Europe in general.

Nevertheless, those programs have not been fully implemented either in all EU Member states or in the Candidate ones, like Serbia, FRY of Macedonia or Bosnia and Herzegovina despite increasing demand for data and information for making decisions and creating reality-adjusted development policies. Therefore, the aim of the Attract-SEE Project was to overcome those deficiencies in information and related tools at national level, and provide preconditions to build the SEE-wide monitoring information system for territorial development decision-making and policies management, coordination and implementation.

In order to define the scope of activities and results within the Attract-SEE Project, existing national practices in the domain of territorial development monitoring and related information system development in partner countries had been analyzed.

# 2.1 Territorial development monitoring practices in SEE

On one side, the study of national territorial development monitoring information systems and their current statuses in eight countries participating in the Attract-SEE Project (Austria, Croatia, Hungary, Italy, Slovenia, Serbia, FYR of Macedonia and Bosnia and Herzegovina), revealed a prevailing lack or just early development stages of these systems as well as monitoring data collections. On the other side, all project partner countries recognized a need to develop comprehensive and updated territorial development monitoring tools as well as data collection activities, where some of the partners have already legally prescribed them (URL 1).

In general, this study included a comparative analysis of several dimensions of territorial monitoring practices in each country regarding their legal, institutional, financial, technological, coordination and decision-making processes. As expected the analysis revealed not only many differences among the project partners, but also common demands to develop territorial monitoring information system and data collection activities that would support development policies, strategies management as well as decision-making processes.

In other words, the performed regional study revealed that despite mutual differences and disadvantages, significant efforts are being invested into the information system establishment for territorial development planning and management. In addition all partner countries have been implementing EU standards (like ESPON or INSPIRE) and initiatives and programs' recommendations (prescribed within Europe 2020 and TA 2020) in an uneven manner, but there exist strong awareness of benefits of cross-border and transnational cooperation as well as exchange of relevant best practices and lessons learned.

This study emphasized all necessary components for the regional territorial development monitoring information system establishment in the SEE region, whose technical components are described in this article.

# 2.2 The background of the Attract-SEE Project

Based on the previous study of partner countries' relevant practices and needs, the main aim of Attract-SEE Project was to define the framework for the establishment of territorial development monitoring information system in the SEE region, which would be consisting of national monitoring systems and would provide a common platform for informed and timely strategic decision-making and cross-border policies coordination (Neuschmid et al., 2013; URL 2). This framework is assumed not only to reflect the latest knowledge and trends in data management and information system development, but also to include relevant EU strategies and policies principles as well as different EU information-related programs' standards and recommendations.

Since the research duration period was limited to 24 months, implementation objectives were directed towards identification, definition and description of the regional framework and its components for

territorial attractiveness management as pilot development feature. Furthermore, all these components as well as the regional framework in general were presupposed to be applicable to any other feature of territorial development and relevant policy management. These common framework components needed for building an efficient, harmonized and interoperable regional territorial development monitoring system (which are in the focus of this article) include:

- Territorial attractiveness definition;
- Territorial attractiveness indicators:
- Data harmonization and interoperability model; and
- Reporting format on territorial attractiveness.

Besides above, expected results assumed also establishment of national and transnational –i.e. regional–networks of territorial development decision-makers and other stakeholders by organizing several national and international workshops. The main task of these networks was to coordinate and translate relevant EU policies to the national ones, and to monitor and evaluate their implementation, relying on emerging regional monitoring information system with indicators, in this case for territorial attractiveness (URL 3, URL 4).

#### 3 METHODOLOGY

# 3.1 Aims and methodology

In order to achieve objectives and accomplish expected results of the work, project scope and implementation have been divided and organized thematically in work packages that consisted of activities and tasks identified as necessary for each component of regional territorial development framework definition. Due to a complex nature of regional territorial development and information system implementation and establishment, various qualitative and quantitative methods were applied, including: analysis-synthesis; value-adding; comparison; generalization; categorization; statistical and graphical methods; modelling; descriptive method and others. These methods have been included in a number of linked activities listed in the next logical flow of steps:

- Step 1: Analysis and comparison of existing practice in partner countries regarding territorial development monitoring information system and policy management;
- Step 2: Establishing national stakeholder networks for decision-making and policies coordination and implementation;
- Step 3: Defining territorial attractiveness by Territorial Capitals and Assets;
- Step 4: Defining a set of territorial attractiveness indicators relevant for SEE region attractiveness description and identity preservation;
- Step 5: Determination of methodology to define indicators for territorial attractiveness;
- Step 6: Development of data and metadata harmonization and interoperability model for collecting and storing values for territorial attractiveness indicators; and
- Step 7: Identification of reporting format on territorial attractiveness appropriate for regional/national policy implementation, monitoring and evaluation.

Since the focus of this article is on presentation of the information system for regional territorial attractiveness monitoring and policy coordination in SEE, (above listed) methodological steps 3 to 7 that

are directly connected to this system components definition and creation are described more into detail in the next lines.

# 3.2 Information system for territorial attractiveness and policy management

Based on previous experiences and collected best practices, it was agreed that the national information systems for territorial attractiveness monitoring and policy management need to have minimum four common components in order to compose regional territorial attractiveness monitoring system in SEE in future. Methods and approaches applied for these four components determination included:

- Territorial attractiveness definition (Step 3)
  In order to identify territorial attractiveness definition that would support determination of main objectives and components for future territorial attractiveness development and policy management in SEE, applicable outputs and recommendations resulted from relevant and/or similar initiatives supported by EU/EC have been collected, analyzed and selected, like:
  - ESPON ATTREG Project definition and identified Territorial Capitals and Assets for territorial attractiveness development and management (ATTREG, 2012);
  - Europe 2020 Strategy with goals for smart, sustainable and inclusive growth; and
  - Territorial Agenda 2020 approach to cohesive territorial development in Europe;
- Territorial attractiveness indicators and their definition (Step 4 and 5)
  Based on the common definition of territorial attractiveness identified in previous Step 3, selection method following agreed principles of data availability, relevance and compactness has been applied (URL 5) to identify set of common territorial attractiveness indicators. In order to support indicators data reuse and future territorial and thematic expansion of information system, partner countries have analyzed ESPON indicators definition method, based on INSPIRE metadata approach, and created method for defining selected territorial attractiveness indicators. In other words, using selection method, partner countries identified set of parameters for describing every indicator by combining existing data management standards and recommendations (like, INSPIRE (INSPIRE, 2014) and Plan4all (Plan4all, 2012)) with relevant project partners' previous experiences;
- Territorial attractiveness data harmonization and interoperability model (Step 6)
  Following INSPIRE and Plan4all Project's recommendations, relevant project partners' national initiatives and experiences, as well as common territorial attractiveness definition and indicators identified in previous steps, common data harmonization and interoperability model was built. For this purpose, partner countries used Unified Modelling Language (UML) for structuring and visualizing future common database of regional information system for territorial attractiveness development monitoring and management;
- Territorial attractiveness reporting format for national and transnational level (Step 7)
  Finally, based on analysis of outputs from previous methodological steps, as well as input from Step 1 and 2 and project partners previous experiences in the fields of territorial development reporting, appropriate common format for reporting on national and regional transnational-territorial attractiveness status was created.

After implemented methodological approach, main components of common information system for monitoring territorial attractiveness and related policy coordination in SEE region were defined. These components and theirs characteristics are generally presented and assessed in the next chapter.

### **4 RESULTS AND DISCUSSION**

The main challenge in the process of defining framework component for information system for monitoring territorial attractiveness in the SEE region was the identification of solutions applicable to each partner-country's specificities, in the sense of their different territorial development vision, needs and resources capacity.

Therefore, the components of this future monitoring information system were created to support standardized and reusable outputs, on one side, and further content and thematic expansion with other territorial development features (besides attractiveness). Additionally, in technical sense, the components of future regional monitoring information system were defined to allow object-oriented character and scalability, where each component of this system would be (software) platform independent.

# 4.1 Regional information system for monitoring territorial attractiveness

Starting from previously identified needs and preconditions, the establishment of a regional information system for monitoring territorial attractiveness aimed at informed decision-making and policy coordination assumed four common components:

- Common territorial attractiveness definition (URL 6);
- Set of common territorial attractiveness indicators and their definition (URL 7, URL 8);
- Common data harmonization and interoperability model (URL 9); and
- Common format for territorial attractiveness reporting at national and transnational level (URL 10).

As part of the framework for an efficient and effective regional territorial monitoring system establishment, partner countries created and/or strengthened stakeholder networks at the beginning and throughout the project period by way of four national workshops (URL 11), creating thus ownership and commitment preconditions for its successful implementation and future sustainability. (URL 3) Finally, the aimed policy coordination process and right decision—making were facilitated further by the Policy coordination process handbook (URL 4) prepared to provide spatial planners and other stakeholders with practical instructions to create better coordination mechanisms in strategic territorial development processes.

Above listed regional information system for territorial attractiveness monitoring components are described in the next four chapters, followed by a discussion on their implementation implications.

### 4.1.1 Definition of territorial attractiveness

Territorial attractiveness within the Attract-SEE Project was defined as capacity of certain Territorial Capitals and Assets to attract and retain target groups (tourists, residents, migrants and companies/invest-

ments) by already existing or developed advantages (environmental, economic and human, anthropic, socio-cultural, and institutional), imposed by relevant policies and their goals.

Two levels of attractiveness were recognized: 1) <u>internal attractiveness</u> that assumes the capacity of retaining the reached level of development, attractiveness and population already residing on a certain territory, and 2) <u>external attractiveness</u> that assumes the capacity for internationalization, that is, attracting new development, residents and investments on a certain territory (Figure 1).

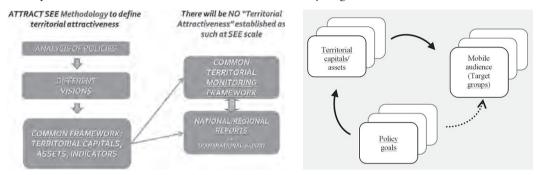


Figure 1: Territorial attractiveness concept and framework (URL 2, URL 6).

### 4.1.2 Indicators of territorial attractiveness

In order to describe territorial attractiveness as a measurable and manageable category, each selected Territorial Capital/Asset was described with one or more indicators that each partner found relevant for national and regional territorial attractiveness development. Following that approach, next set of 41 indicators was selected as needed for assessment and management of territorial attractiveness both on national and SEE region level (see also Table 1):

- Environmental Capital 10 indicators;
- Anthropic Capital 5 indicators;
- Socio-Cultural Capital 6 indicators;
- Economic/Human Capital 15 indicators; and
- Institutional Capital 5 indicators.

Selected common territorial attractiveness indicators were further elaborated and categorized by purpose (pressure, state or response) (URL 7), by targeted mobile audience (companies/investments, tourists, residents and migrants) (URL 6), and by spatial coverage (M stands for mandatory and refers to transnational core indicators, O stands for optional national indicators, while C stands for national/transnational indicators for which data should be collected, if the same exist; Table 1).

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Table 1: List of common territorial attractiveness compiled by survey of partner countries, and based on existing databases, like from different sources of Eurostat, OECD, European Commission, European Environmental Agency, United Nations, UNECO, World Bank, ESPON projects (URL 8).

No.	Territorial asset	nk, ESPON projects (URL 8).  Indicator	Purpose	Mandatory	Target group			
ENVIRONMETAL CAPITAL								
1		Greenhouse gas emission (Europe 2020 indicator)	State	M	Tourists, Residents, Migrants			
2	Environmental quality	Air pollution: PM10	State	M				
3		Air pollution: Ozone concentration	State	M				
4		Population connected to urban waste water treatment with at least secondary treatment	Response	M				
5	Territorial/ ecosystem integrity	Artificial surface by Corine Land Cover	Pressure	M	Companies/ Investments, Tourists, Residents			
6		Protected Areas for biodiversity: Habitats Directive (% of terrestrial protected areas) (Natura2000)	State	О				
7		Ecosystem services	State	O				
8	Natural resources and energy	Electricity generated from renewable sources	Response	M	Companies/ Investments, Residents			
9		Consumption of water per capita	Pressure	M				
10		Share of Renewable Energy in Final Energy Consumption by NUTS 2 regions (%) (Europe 2020 indicator)	Response	О				
		ANTHROPIC CAPITA	L					
11	Urban quality	Surface of urban green [ha or %] or m2 of urban green space per capita	State	O	Companies/ Investments, Residents, Migrants			
12		Urban/rural population (or Urban rural classification)	State	С				
13	Landscape quality	% of terrestrial area protected (total and by ecological region)	State	M	Tourists, Residents			
14	Infrastructures	Population (or households) with accessibility to high-speed broadband (1 Mbit/second up and down)	State	М	Companies/ Investments, Tourists, Residents, Migrants			
15		Accessibility by road, rail, air	State	О				
	SOCIO-CULTURAL CAPITAL							
16	Culture	Number of theatres, museums, galleries and public libraries per 10,000 inhabitants	State	M	Tourists, Residents, Migrants			
17		European cultural sites on the UNESCO World Heritage List, 2010	State	М				
18	Quality of life	Life expectancy at birth by sex (Europe 2020 indicator)	State	М	Companies/ Investments, Tourists, Residents, Migrants			
19		Gross disposable household income	State	M				
20		People at risk of poverty or social exclusion (Europe 2020 indicator) or % in risk of poverty	Pressure	М				
21		Gender imbalances	Pressure	О	-8			

No.	Territorial asset	Indicator	Purpose	Mandatory	Target group
		ECONOMIC/HUMAN CAI	PITAL		
22	Knowledge & Innovation	Population aged 25-64 with tertiary education	State	M	Companies/ Investments, Residents, Migrants
23		Numbers employed in the Research & Development out of the total labour force	State	M	
24		Research & Experimental Development expenditure as % of GDP (Europe 2020 indicator)	Response	М	
25		Patent applications submitted to the Office European Patent per million population	State	M	
26	Employment	Employment rate 20-64 years by sex [%] (regional) (Europe 2020 indicator)	State	M	Companies/ Investments, Residents, Migrants
27		Youth unemployment rate	Pressure	М	
28	Specializations /	Share of employment by sector	State	M	Companies/ Investments
29	Key sectors	Share of each sector in GDP	State	O	
30	Tourism	Number of overnight stays of tourists per capita per year	Pressure	M	Companies/ Investments, Tourists
31		Share of tourism related employment in total employment	State	M	
32	Investment Promotion	Building permits (Commercial, Industrial, Institutional, Residential) [in €]	State	M	Companies/ Investments, Migrants
33		% of GDP of foreign direct investment	Response	M	
34	Population	Population growth rate	State	M	Residents, Migrants
35		% of population in age 20-64 years	Pressure	M	
36		Ageing index	Pressure	M	
		INSTITUTIONAL CAPIT	ΓAL		
37	Governance	Administrative cases/issues that can be initiated and/or arranged online (or in other electronic format)	State	O	Companies/ Investments, Residents
38		Composition of local government expenditures	State	M	
39		Number of foreign students and/or professors	State	С	Companies/ Investments, Migrants
40	International relations	Number of Cross-border European projects	State	O	
41		Number of European cooperation projects (except cross-border)	State	O	

In order for selected common territorial attractiveness indicators data to be collected in consistent and comparable way, and to be reusable by other development initiatives in future, each indicator was described in uniform way by using parameters of identified indicator definition (Table2).

Table 2: Sheet for indicator definition (URL 9).

Parameter	Description of spatial indicator		
Name	Name of the spatial indicator		
Inspire ID	Unique identifier of the indicator; the ID is composed of (1) a namespace and (2) a unique number; the namespace is composed of the 'organization' and the acronym 'SI' (spatial indicator) Source: Inspire Generic Conceptual Model D2.5_v3.2 Identifier Management		
Asset	Asset to which the indicator belongs (environmental quality, natural resources/energy, urban quality, quality of life, etc.)		
Capital	Capital to which the asset belongs (environmental capital, anthropic capital, etc.)		
Definition	Detailed definition of the indicator		
Purpose	Description why the indicator is needed, its purpose and objectives		
Determination	Way of calculating the indicator		
Maintenance/ publishing frequency	Frequency with which changes and additions are made to the indicator value; update frequency of the indicator value.  Values: continual, daily, weekly, fortnightly, monthly, quarterly, biannually, annually, as Needed, irregular, not Planned, unknown. Source: ISO 19115(		
Data source	Recommended data source for indicator calculation; link to metadata profile: "resource title (dataset name)" and "responsible organization" (for the dataset)		
Geographic name	Area that is covered by the indicator (Name of the region, country)		
Statistical level	Spatial level of the indicator (transnational, national, NUTS 2, NUTS 3)		
Type	Indicator type, e.g. pressure, state, response/performance indicator		

# 4.1.3 Data harmonization and interoperability model

Based on previously developed indicator definition (Chapter 4.1.2) and taking into account relevant initiatives for developing EU-wide spatial data infrastructures for environmental and related policies support (INSPIRE), data model was built using the Unified Modeling Language – UML (Figure 2) for common territorial attractiveness indicators description. Created model secures indicators' data harmonization and interoperability essential for distributed information system establishment, like this regional monitoring information system would be (URL 9).

Developed object-oriented and scalable model for management of territorial attractiveness data consists of core metadata and indicators data classes and enumerations, and provides storage for five indicators' dimensions: spatial, thematic, lineage, temporal and dataset. Besides this, developed data model for monitoring territorial attractiveness was based on a couple of rules agreed among project partners, which are needed for acheiving comparability of indicator values by different dimensions (as criteria).

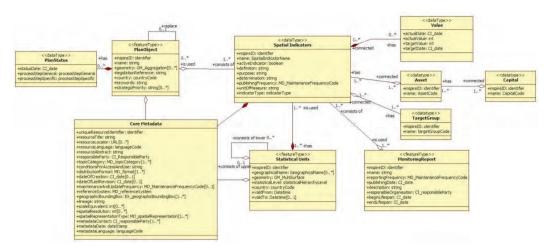


Figure 2: UML data model for database of common monitoring information system for territorial attractiveness policy coordination in the SEE region (URL 9).

# 4.1.4 Territorial attractiveness reporting format

Proposed territorial attractiveness reporting format was based on national policy management processes of partner countries, as well as their relevant stakeholders' decision-making needs. Thus, due to administrative and policy scope differences among partner countries, specific rules were applied to achieve the appropriate level of content homogeneity among eight national reports, needed for preparing the synthesis report for the territorial attractiveness status of SEE region as a whole (URL 10).

In general, the proposed format of territorial attractiveness reporting at national level includes two parts: (1) description of national policies and/or strategies relevant for territorial attractiveness management, and (2) presentation of the values and trends for selected common indicators. Graphical presentation of territorial attractiveness for monitoring was based on the existing NUTS 3 classification, or equivalent (EUROSTAT, 2014). Annual period was agreed for the indicator values calculation, and year 2013 as reference epoch. In order for development linear trends to be identified, indicators' data were collected for 5-year period (2008–2012), where and if possible (URL 12), and method of least square was applied for time series processing. Annual indicator trend was determined as a percentage of growth/decline of the indicator value per year. As an example of the national attractiveness report indicator presentation, consumption of water per capita in Slovenia is shown in Figure 3.

In addition, transnational territorial attractiveness report provides a comparative overview of common Territorial Capitals and Assets in the SEE region, identifying the relations between different cross-cutting policy priorities and different targets/audiences. Without the ambition to define any sort of ranking, it provides a general analysis of common indicators values over the SEE area for those years with available data. As an example of the transnational attractiveness report indicator presentation, the consumption of water per capita is shown in Figure 4.

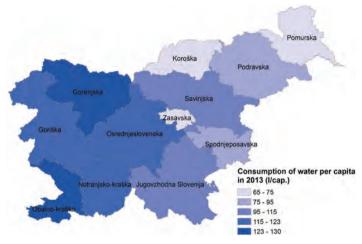


Figure 3: Daily consumption of water per capita in Slovenia in 2013 (URL 13).

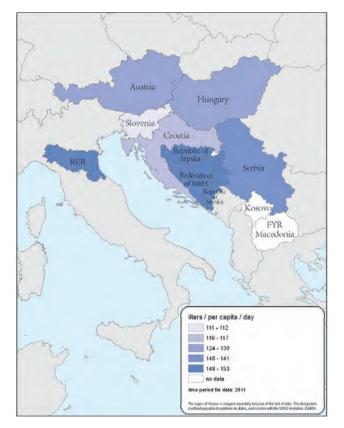


Figure 4: Consumption of water per capita in SEE in 2011 (URL 10).

# 4.2 Discussion

It is expected that the proposed monitoring information system for territorial attractiveness policies coordination in the SEE region would ensure an easy, comparable and comprehensive evaluation of both territorial attractiveness status and relevant policies' goals in future. In order to achieve this aim, this regional monitoring system would rely on continuously developing Information and communications technology (ICT) advantages, as well as current and new EU initiatives relevant for spatial data management and territorial development in general.

At national level, the monitoring of indicators' values relevant for territorial attractiveness, and consequent policy goals evaluation against them and identified target groups, would provide an informed and reliable basis for a proper decision-making and strategic action planning. In consequence, by supporting active communication within the established national stakeholders' network, proposed monitoring information system would help to discover discrepancies among national sectoral strategic goals, and thus increase the overall efficiency of shrinking public development resources within each partner country, both horizontally among different domains and vertically among administration levels.

On the SEE level, the proposed regional monitoring information system would support better communication and effective action coordination between national networks of decision-makers and policy managers in future. In other words, it is expected that the here proposed monitoring information system would provide a much easier comparison of territorial attractiveness status and identified strategic goals between countries, and thus increase the number of initiatives which cooperate and exchange good practices in domain of EU policies translation and integration in national/regional level (specially between Member and bordering/Candidate states).

Finally, the Attract-SEE Project has demonstrated the importance and value of exchanging different practices, approaches and views regarding territorial attractiveness and development in general in Europe. In addition, it is estimated by partners that project results would provide a good basis and show relevant directions for a further and faster building and improvement of modern information platforms in the SEE region in future, supported by other projects and initiatives within National spatial data infrastructures (NSDI) and other sectoral Spatial data infrastructures (SDIs) domain.

# **5 CONCLUSION**

In an increasingly dynamic and complex modern working and living environment, eight countries have recognized the need and launched the Attract-SEE Project with a specific objective to create a common territorial attractiveness monitoring information system. Being at the core of a broader territorial monitoring framework, namely ESPON, this regional monitoring information system is planned to secure an informed and timely strategic decision-making on the one side, and a better coordination of strategic goals and activities in general within SEE region, on the other.

In the short run, it is expected that developed project results and achieved goals would provide valuable insights into territorial attractiveness feature throughout the SEE region and participating countries themselves. In the long run, the same concept of territorial development monitoring should be possible

to apply also on the other territorial development features, identified as critical for cohesive, balanced and sustainable development within relevant EU policies and strategy documents. Consequently, it is expected that project would directly generate further implementation and adoption of recommendations and results in the domain of data and information management, resulting from different EU development initiatives in future. And, indirectly, especially partners from Candidate states assume that the results and benefits of the Attract-SEE project activities would stimulate new collaborations and wider engagement of local decision-makers on relevant EU directives adoption within national practice and regulations.

Since the main result of the project is just identification of a framework, that is, a definition of common components needed to establish regional territorial monitoring system establishment in the SEE, where national development policies still demand mutual coordination and adjustment to EU policies, project partners think that here developed outputs could be a good start platform for new project activities, where some results should be operationalized and become part of ICT-enabled governmental services.

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