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Indicators Based Approach to Sustainable Tourism: European Union Strategy for the Adriatic-Ionian Region Case Study

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ABSTRACT

Macro-regional Strategies serve as pivotal political tools, lacking designated funds but drawing substantial investments from national, regional, and European Structural and Investment funds. Despite their recognized significance, Macro-regional Strategies' policies lack a defined monitoring and evaluation system. Among these, the European Union Strategy for the Adriatic-Ionian Region stands out, boasting a sustainable tourism Pillar within the Adriatic-Ionian Macro-Region. Even though there are developed indicators systems for measuring sustainable indicators, these systems do not include governance indicators, multi-sectoral collaboration and effects of European Union funds and joint tourism projects, products and services. Therefore, the main aim of this paper was to developed the set of indicators suitable for monitoring and evaluation of sustainable tourism in the Adriatic-Ionian Region. The set of indicators is divided into seven groups – socio-economic, context, output, result, impact, governance and cross-pillar indicators. Data collected shows that Adriatic-Ionian Region is tourism-dependent region, describing improvement in development of sustainable tourism. The 2014-2020 financial period brought significant improvements in sustainable tourism through innovative projects, joint tourism products, and transnational networks. In the 2021-2027 period, a key goal is to develop more resilient tourism in response to the COVID-19 pandemic. The current set of indicators effectively tracks sustainable tourism development and should continue to be used, with improvements made as needed.

KEYWORDS

Macro-regional strategies, Adriatic-Ionian region, Sustainable tourism, Tourism, Indicators, Monitoring, Evaluation.

INTRODUCTION

Macro-regional strategies (MRS) are integrated frameworks endorsed by the European Council, which may be supported by the European Structural and Investment (ESI) Funds among others, to address common challenges faced by a defined geographical area relating to Member States and third countries located in the same geographical area which thereby benefit from strengthened cooperation contributing to achievement of economic, social and territorial

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cohesion. At the moment, there are four MRS in the European Union – The EU Strategy for the Baltic Sea Region [1], The EU Strategy for the Danube Region [2], The EU Strategy for the Adriatic and Ionian Region (2014) [3] and The EU Strategy for the Alpine Region [4].

According to Dubois, *et al.* [5], macro-regional strategies may be seen as a tool of European integration and increased territorial cohesion. Also, macro-regional strategies are considered as a tool of European Union governance that seeks to combine the community's territorial cooperation and cohesion policy repertoire with intergovernmental 'regional cooperation' involving European Union member and partner countries [6]. Since Macro-regional strategies are mostly political entities, there are no dedicated funds to implement their Strategies. However, there are significant funds invested in the implementation of Macro-regional strategies through national, regional and ESI funds. Even though Macro-regional strategies have been recognised as an important political tool, there is still no clear monitoring and evaluation system of MRS policies.

Adriatic-Ionian Region (AIR) is a functional area primarily defined by the Adriatic and Ionian Seas basin. Geographically, it concerns Croatia (HR), Greece (EL), Italy (IT), Slovenia (SI), Albania (AL), Bosnia and Herzegovina (BA), Montenegro (ME), Serbia (RS), North Macedonia (MK) and San Marino (SM). The integrated framework for strengthening the cooperation between nations in the Adriatic-Ionian region is provided by The EU Strategy for the Adriatic-Ionian Region (EUSAIR) and an accompanying Action plan [7]. The EUSAIR is founded on four thematic priorities/pillars representing key challenges as well as key opportunities in the region and it is the only MRS that has a Pillar related to sustainable tourism.

Sustainable tourism is defined by the UN Environment Program and UN World Tourism Organization as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" [8]. Due to globalization, tourism has become more available to many people, thus, tourism industry has become one of the greatest industries in the world [9]. However, to ensure the tourism destinations are preserved from degradation, there is a need to ensure sustainability principles and properly plan tourism [10].

Latest trends in sustainable tourism development show that sustainable tourism has become a paradigm. Tourism operators, local communities and travelers themselves are shifting towards more sustainable ways of traveling. Tourism operators are offering eco-friendly services, hotel and resorts adopt energy-saving measures, waste reduction and eco-certifications, while tour operators' itineraries mostly highlight low-impact activities like cycling. Local communities and governments collaborate to preserve the natural and cultural heritage of the destination, while tourists increase their demand for eco-certified destinations, seek for more meaningful, nature-based travel experiences and prioritize environmental and cultural respect [11].

Tourism was greatly affected by the COVID-19 pandemic, especially in early 2020 during lockdowns [12]. Even after the COVID-19 pandemic, the effects are still here. The tourists now choose less overpopulated destinations and focus on nature-based travel and smart tourism [13], therefore, the tourism is becoming more sustainable due to increasing tourism in less popular destinations and decreasing it in the largest cities [14].

The EUSAIR Pillar 4 – Sustainable tourism aims at diversification of the macro-region's tourism products and services along with tackling seasonality of inland, coastal and maritime tourism demand; and improving the quality and innovation of tourism offer and enhancing the sustainable and responsible tourism capacities of the tourism actors across the macro-region. To achieve these objectives, the EUSAIR Pillar 4 focuses on diversifying tourism offer and sustainable and responsible tourism management [3].

To monitor and evaluate the development of sustainable tourism there is a need for the development of set of indicators, which are necessary to plan long-term policy, since it is impossible to make good public decisions for today without a vision of the future [15].

According to UN [16], sustainable tourism indicators simplify, clarify and aggregate information for policymakers, which enable evidence-informed decisions and more effective actions. Therefore, sustainable tourism indicators are an integral part of tourism planning and management [17].

The most used set of indicators for measuring the sustainable tourism is the European Tourism Indicators System (ETIS), a system of indicators suitable for all tourist destinations, encouraging them to adopt a more intelligent approach to tourism planning [18]. The EITS consists of 43 core indicators related to monitoring of destination management, economic value, social and cultural impact and environmental impact of tourism activities in the destination [18]. The analysis of the European Tourism Indicator System showed that it can be successfully used in order to achieve the goal of improving tourist destinations [19], but it also brings changes in policies that make destinations more competitive [20].

Furthermore, the implementation of standard indicator system is necessary to increase the tourism sustainability. However, the ETIS system toolkit faces several constraints, such as insufficient knowledge and lack of data [21]. Moreover, according to Gasparini and Mariotti [22], the ETIS toolkit should have adopted more indicators, along with the targets.

Apart from the ETIS toolkit, there is no unified system for measuring the development of sustainable tourism. The main problem because there is still lack of unified system for the development of sustainable tourism is the problem of funding, but also the lack of methodological guidance and technical skills [23]. Furthermore, it is characterised by a lack of data, therefore, the indicator systems often include indicators that can be measured rather than those that need to be measured [24] [25] [26] [27].

Moreover, research conducted by Rasoolimanesh, *et al.* [17] shows that sustainable tourism indicators in general focus on economic growth, social inclusion and environmental protection, but tend to overlook the governance dimension. Regarding the indicators availability, the previous research have shown that economic data are regularly updated and easily accessible [28], while there is a lack of data for environmental and socio-cultural indicators [21].

Several attempts have been made to develop a set of indicators for monitoring the sustainable development. For example, Lozano-Oyola, *et al.* [29] developed the system of 85 indicators for monitoring the cultural tourism. Indicators have been divided into three groups – social dimension, economic dimension and environmental dimension. The indicator system has been developed for the following purposes – the formulation of general action plans at a regional level, the definition of short-term strategies for destinations and the establishment of destination benchmarking practices. Furthermore, Agyeiwaah, McKercher, and Suntikul [30] developed the set of indicators for monitoring sustainable tourism that consists of seven indicator themes – job creation, business viability, quality of life, water quality, waste management, energy conservation and maintenance of community integrity.

Since sustainable tourism development is one of the strategic goals of the EUSAIR, there is a need to monitor its implementation. The literature overview has shown that several indicator systems for monitoring the sustainable tourism have already been developed. However, these systems do not include all relevant indicators, such as governance indicators. Also, these systems, including ETIS, include large number of indicators that are hard to monitor at the yearly basis. Therefore, the aim of this paper is to develop a set of indicators with a smaller number of indicators, but efficiently describing the sustainable tourism. The hypothesis of this paper is that the developed set of indicators is suitable for monitoring the sustainable tourism in the AIR.

METHODS

To define and evaluate the sustainable tourism development indicators, this research employed a comprehensive, multi-phase methodology. Various methods were used to ensure a

thorough assessment of the key factors influencing sustainable tourism in the Adriatic-Ionian Region.

In the initial phase, an extensive desk research process was carried out. This involved a detailed review of all relevant strategic documents, including an in-depth analysis of Macro-regional strategies. A particular emphasis was placed on the EUSAIR (EU Strategy for the Adriatic and Ionian Region) Action Plan, with a specific focus on Pillar 4 – Sustainable Tourism. The purpose of this phase was to gain an understanding of existing frameworks, policies, and strategic goals related to sustainable tourism development in the region.

The findings from the desk research were systematically synthesized using the SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis method. This approach helped to identify key challenges and opportunities for tourism development. The insights derived from the SWOT analysis, combined with the overarching objectives of EUSAIR Pillar 4, served as the foundation for the development of a comprehensive set of indicators. These indicators were designed to facilitate the monitoring and evaluation of sustainable tourism trends and progress within the Adriatic-Ionian Region.

The development of the indicators was carefully tailored to align with the specific needs, potential, strengths, and opportunities of the region's tourism sector. Once the preliminary set of indicators was established, they were subjected to further validation through stakeholder consultations. This was conducted via the focus group method during the Thematic Steering Group (TSG4) meeting in 2020. The involvement of stakeholders, including policymakers, tourism experts, and industry representatives, ensured that the indicators were not only relevant but also practical for assessing sustainable tourism in the region.

Following the validation process, an assessment of data availability was conducted to determine whether the necessary statistical information could be sourced for each indicator. Once the data sources were identified, a detailed statistical analysis was carried out, involving data collection and evaluation to assess trends and performance over time.

The final step of the research involved a comprehensive synthesis of the findings, integrating insights from the desk research, SWOT analysis, stakeholder consultations, and statistical evaluation. The proposed set of indicators, which encapsulates the defining characteristics of sustainable tourism in the Adriatic-Ionian Region, was analyzed for the period from 2017 to 2022. This analysis provided a clearer understanding of the region's progress towards sustainable tourism development and offered valuable guidance for future strategic planning and policy implementation.

RESULTS

The result of the research is the developed set of 27 indicators divided into seven groups – socio-economic indicators, context indicators, output indicators, result indicators, impact indicators, governance indicators and cross-pillar indicators. **Table 1** shows the list of indicators and their availability in respected countries.

Socio-economic indicators in the EUSAIR area are population, employment rate, unemployment rate, youth unemployment rate, people at risk of poverty and Human Development Index in social context and GDP per capita in economic context. Socio-economic indicators are available at the national level in most of the AIR countries, except for San Marino. Data for population, people at risk of poverty and GDP per capita are not available in Bosnia and Herzegovina, while data related to indicator people at risk of poverty are partially available in Montenegro, North Macedonia, Albania and Serbia.

Table 1. List of indicators and their availability in respected countries

	EL	HR	IT	SI	BA	ME	MK	AL	RS	SM
Socio-economic indicators										
Population										
Employment rate										
Unemployment rate										
Youth unemployment rate										
People at risk of poverty										
Human Development Index										
GDP per capita										
Context indicators										
Tourism direct contribution to the GDP										
Jobs in tourism industries										
Number of UNESCO World Heritage Sites										
Output indicators										
Interregional investments in tourism related projects										
Supported transnational cooperation networks										
Innovation										
Result indicators										
Number of arrivals										
Number of bed places in hotels and similar accommodation establishments										
Number of nights spent at hotels and similar accommodation establishments										
Total spending of overnight tourists										
Spending of same-day visitors										
Occupancy rate in commercial accommodation										
Intensity of greenhouse gas (CO2) emissions into the air from tourism										
Environmental sustainability										
Impact indicators										
Number of strategies and action plans developed in the field of natural and cultural heritage										
Joint tourism products developed and promoted										
Governance indicators										
Attendance of TSG4 meetings										
Project ideas generated by the TSG										
Cross-pillar indicators										
Innovation effects										
Transnational networks										

Legend:

Available	Partially available	Not available

Source: authors' collaboration

Between 2017 and 2021, all EUSAIR countries — except Slovenia — saw a decline in population. However, GDP per capita grew across the region, likely influenced more by population decline than increased economic activity due to COVID-19.

In the labour market, some indicators showed improvement until 2020 or 2021. The AIR countries heavily rely on tourism and catering for employment, resulting in decreased employment rates and increased unemployment and youth unemployment rates during the pandemic's impact.

The indicator for people at risk of poverty and social exclusion remained mostly stable in the AIR countries. Albania had the highest rate at 46.2% in 2020, while Slovenia had the lowest at 14.3% in 2020 and 13.2% in 2021. Human Development Index increased across all EUSAIR countries, with Slovenia ranking highest and North Macedonia lowest. The values of the socio-economic indicators in the AIR are presented in **Table 2**.

Table 2. Socio-economic indicators in the AIR

Indicator	Unit	Country	2017	2018	2019	2020	2021
Population on 1 January	Number	Greece	10,768,193	10,741,165	10,724,599	10,718,565	10,678,632
		Italy	60,589,445	60,483,973	59,816,673	59,641,488	59,236,213
		Slovenia	2,065,895	2,066,880	2,080,908	2,095,861	2,108,977
		Croatia	4,154,213	4,105,493	4,076,246	4,058,165	4,036,355
		Montenegro	622,387	622,359	622,182	621,873	620,739
		Albania	2,876,591	2,870,324	2,862,427	2,845,955	2,829,741
		Serbia	7,040,272	7,001,444	6,963,764	6,926,705	6,871,547
		Bosnia and Herzegovina	-	-	-	-	-
		North Macedonia	2,073,702	2,075,301	2,077,132	2,076,255	2,068,808
		San Marino	-	34,453	-	-	-
GDP per capita	EUR / inhabitant	Greece	16,450	16,730	17,100	15,460	17,010
		Italy	28,940	29,580	30,080	27,940	30,150
		Slovenia	20,820	22,140	23,230	22,360	24,770
		Croatia	12,100	12,890	13,680	12,460	15,020
		Montenegro	6,910	7,490	7,960	6,740	8,000
		Albania	4,020	4,480	4,820	4,680	5,490
		Serbia	5,590	6,140	6,620	6,790	7,800
		Bosnia and Herzegovina	-	-	-	-	-
		North Macedonia	4,840	5,170	-	-	-
		San Marino	-	-	-	-	-
Global competitiveness index	Score	Greece	61.8	62.1	62.58	-	-
		Italy	70.46	70.77	71.53	-	-
		Slovenia	68.48	69.62	70.2	-	-
		Croatia	60.13	60.11	61.94	-	-
		Montenegro	58.21	59.62	60.82	-	-
		Albania	57.29	58.1	57.61	-	-
		Serbia	59.2	60.88	60.85	-	-
		Bosnia and Herzegovina	53.82	54.16	54.73	-	-
		North Macedonia	54.23	56.62	57.33	-	-
		San Marino	-	-	-	-	-
Employment rate	%	Greece	40.9	41.9	43	42.7	43
		Italy	44.2	44.6	44.9	44.1	43.7

Indicator	Unit	Country	2017	2018	2019	2020	2021
		Slovenia	54.6	55.8	55.5	54.9	55.4
		Croatia	45.8	46.9	47.7	47.2	47.5
		Montenegro	45.9	47.5	48.7	43.8	44.6
		Albania	50.2	52	53.4	50.1	51.6
		Serbia	46.7	47.6	49	49.1	47.8
		Bosnia and Herzegovina	33.6	34.2	35.2	36.1	35.6
		North Macedonia	42.8	43.7	45.9	43.4	44.3
		San Marino	-	-	-	-	-
Unemployment rate	%	Greece	21.5	19.3	17.3	16.3	14.8
		Italy	11.2	10.6	9.9	9.2	9.8
		Slovenia	6.6	5.1	4.4	5	4.4
		Croatia	11.2	8.4	6.6	7.5	8.7
		Montenegro	16.1	15.2	15.1	17.9	18.5
		Albania	13.6	12.3	11.5	13.3	11.8
		Serbia	13.5	12.7	10.4	9	11.8
		Bosnia and Herzegovina	20.5	18.4	15.7	15.3	15.2
		North Macedonia	22.4	20.7	17.3	17.2	16.2
		San Marino	-	-	-	-	-
Youth unemployment rate	%	Greece	43.5	39.8	35.2	34.9	36.9
		Italy	34.8	32.3	29.2	29.5	30.9
		Slovenia	11.2	8.8	8.2	14.3	13.9
		Croatia	27.4	23.8	16.7	21.2	23.6
		Montenegro	31.9	29.7	25.4	36.4	31.6
		Albania	31.3	28.2	27	30.3	27.8
		Serbia	31.3	29.2	26.9	26	30.4
		Bosnia and Herzegovina	45.6	38.8	33.4	36.2	32.9
		North Macedonia	46.7	45.4	35.5	36.9	34.1
		San Marino	-	-	-	-	-
People at risk of poverty or social exclusion	%	Greece	32.2	30.3	29.0	27.4	28.3
		Italy	25.9	25.7	24.6	24.9	20.9
		Slovenia	16.6	15.4	13.7	14.3	13.2
		Croatia	23.7	22.1	20.8	20.5	20.9
		Montenegro	42.2	41.2	36.6	37.8	-
		Albania	58.5	53.9	50.8	46.2	-
		Serbia	39.5	34.0	31.1	29.8	-
		Bosnia and Herzegovina	-	-	-	-	-
		North Macedonia	37.0	35.3	34.2	32.6	-

Indicator	Unit	Country	2017	2018	2019	2020	2021
		San Marino	-	-	-	-	-
Human Development Index	Score	Greece	0.879	0.881	0.888	0.886	0.887
		Italy	0.886	0.890	0.892	0.889	0.895
		Slovenia	0.907	0.912	0.917	0.913	0.914
		Croatia	0.845	0.848	0.851	0.855	0.858
		Montenegro	0.822	0.826	0.829	0.826	0.832
		Albania	0.790	0.792	0.795	0.794	0.796
		Serbia	0.798	0.803	0.806	0.804	0.802
		Bosnia and Herzegovina	0.774	0.777	0.780	0.781	0.78
		North Macedonia	0.767	0.770	0.774	0.774	0.77
		San Marino	-	0.86	0.862	0.845	0.853

Context indicators are indicators developed by European and Macro-regional Territorial Monitoring Tool (MRS.ESPON) that measure how Pillars contribute to achieving European Cohesion Policy objectives. EUSAIR Pillar 4 contributes to objective A more social Europe, by supporting good labour market conditions through sustainable tourism. Within the EUSAIR Pillar 4, there are two goals – diversifying tourism offer and sustainable tourism management [31], which are monitored using three indicators, tourism direct contribution to the GDP, Jobs in tourism industries and Number of UNESCO World Heritage Sites. Data to context indicators is available in all countries, except San Marino, where only data for UNESCO World Heritage Sites is available.

The Tourism direct contribution to the GDP reveals that Greece, Croatia, Albania, and Montenegro—key tourism-focused countries in EUSAIR—contribute around 25% to the GDP through tourism. In contrast, Serbia, Bosnia and Herzegovina, and North Macedonia have contributions below 10%. However, in 2020, due to COVID-19, there was a significant drop in tourism's GDP impact, with Albania leading at 10.6%, followed by Croatia at 10.2%, and Serbia at the lowest with 2.8%. In 2021, all AIR countries experienced an upturn in tourism's GDP share, notably Montenegro at 25%, Albania at 17.4%, and Croatia at 16.1%, while Serbia and North Macedonia remained lower at 3.6% and 5.6%, respectively.

Regarding jobs in tourism industries in 2019, Greece, Croatia, and Albania had the most tourism-related employment, while Serbia and North Macedonia had the least. However, in 2020, there was a decline in tourism employment across EUSAIR except for Montenegro and Serbia. By 2021, there was an increase in tourism jobs in all countries except Italy. Montenegro led with 26.4% of employment in tourism, followed by Albania at 20.0% and Greece at 19.9%, with Serbia having the smallest share at 5.4%.

In the AIR, there were 104 UNESCO World Heritage sites in 2018. By 2019, one site in Italy was added, and by 2021, six new sites were added, totalling 111 UNESCO World Heritage sites in the Adriatic-Ionian Region [32]. The context indicators in the AIR are presented in **Table 3**.

Output indicators measure what is directly produced/supplied through the implementation of the co-financed projects [31]. The group of output indicators includes interregional investments in tourism related projects, supported transnational cooperation networks, and innovation. Output indicators not available at national, but only at the macro-regional level. This group of indicators is related to projects related to sustainable tourism implemented in the AIR countries. The total of 313 projects related to sustainable tourism have been analysed.

Table 3. Context indicators in the AIR

Indicator	**Unit**	**Country**	**2018**	**2019**	**2020**	**2021**
Tourism direct contribution to GDP	%	Greece	20.21	20.13	8.7	14.9
		Italy	13.07	13.11	7.0	9.1
		Slovenia	12.25	12.25	6.7	7.7
		Croatia	25.15	25.75	10.2	16.1
		Montenegro	25.10	25.10	8.8	25.5
		Albania	26.34	26.27	10.6	17.4
		Serbia	6.70	6.80	2.8	3.6
		Bosnia and Herzegovina	9.85	10.05	3.5	6.6
		North Macedonia	6.82	6.95	3.3	5.6
		San Marino	-	-	-	-
Jobs in tourism industries	%	Greece	25.39	25.30	19.8	19.9
		Italy	14.81	14.73	13.8	11.6
		Slovenia	12.71	12.74	10.6	10.9
		Croatia	23.41	23.78	19.0	19.7
		Montenegro	20.02	19.74	27.3	26.4
		Albania	24.30	24.30	17.5	20.0
		Serbia	4.74	4.75	5.0	5.4
		Bosnia and Herzegovina	11.45	11.72	8.4	8.7
		North Macedonia	6.23	6.36	5.7	6.4
		San Marino	-	-	-	-
Number of UNESCO World heritage sites	Number	Greece	18	18	18	18
		Italy	54	55	55	58
		Slovenia	4	4	4	5
		Croatia	10	10	10	10
		Montenegro	4	4	4	4
		Albania	4	4	4	4
		Serbia	5	5	5	5
		Bosnia and Herzegovina	3	3	3	4
		North Macedonia	1	1	1	2
		San Marino	1	1	1	1

In the previous funding period (2014-2020), approximately EUR 689.85 million was invested in sustainable tourism projects across various funds including National and Regional Operational Programmes, ADRION Programme, Cross-border Cooperation Programmes, Interreg Mediterranean, LIFE, and HORIZON. This supported 313 projects, out of which 88 introduced innovations in areas like cultural and thematic tourism and sustainable tourism promotion within the EUSAIR region. Additionally, 18 networks focusing on tourism, natural, and cultural heritage were established to facilitate information exchange and resource sharing within the EUSAIR. The output indicators in the AIR are presented in **Table 4**.

Table 4. Output indicators in the AIR

Indicator	**Unit**	**Country**	**2020**
Interregional investments in tourism related projects	EUR	National and Regional OPs	EUR 461,98 million
		ADRION Programme	EUR 18,66 million
		Cross-border Cooperation Programmes	EUR 132,16 million
		Interreg Mediterranean	EUR 56,75 million
		LIFE Programme	EUR 4,86 million
		HORIZON Programme	EUR 15,44 million
Supported transnational cooperation networks	Number	EUSAIR	18
Projects introducing innovations	Number	National and Regional OPs	6
		ADRION Programme	16
		Cross-border Cooperation Programmes	58
		Interreg Mediterranean	6
		LIFE Programme	0
		HORIZON Programme	2

Result indicators capture the expected effects on participants or entities brought about by a project **[31]**. Chosen indicators are relevant to the EUSAIR Pillar 4 “Sustainable tourism” because they do not measure only the number of tourists, but also the effect of tourism to the destination’s economy as a whole, as well as the effect to the population of the destination and the entrepreneurs in the destination. These indicators are: number of arrivals, number of bed places in hotels and similar accommodation establishments, number of nights spent at hotels and similar accommodation establishments, total spending of overnight tourists, spending of same-day visitors, occupancy rate in commercial accommodation, intensity of greenhouse gas (CO_2) emissions into the air from tourism and environmental sustainability.

Data for the indicator number of arrivals is available in all countries except San Marino, number of bed places in hotels is available in Greece, Croatia, Italy and North Macedonia, partially available in Slovenia, Montenegro and Serbia and not available in Bosnia and Herzegovina, Albania and San Marino. Data for number of nights spent at the hotels is available in all countries except Bosnia and Herzegovina and San Marino, as well as the occupancy rate in hotels, while total spending of overnight tourists is not available only for San Marino. On the other hand, spending of same-day visitors is only partially available in Croatia, Italy, Slovenia, Albania and Serbia and it is not available in the rest of the region. Environmental sustainability data is available for all countries, except San Marino, while intensity of greenhouse gas emissions from tourism is not available.

In 2020, the COVID-19 pandemic led to a significant decline in tourist arrivals across EUSAIR countries, notably in Montenegro, North Macedonia, and Bosnia and Herzegovina, with reductions around 84-86%. Accommodation places, nights spent, and spending by

overnight tourists also dropped. Recovery started in 2021, with some countries reaching 80-99% of 2019 levels in accommodation and nights spent.

Total spending by overnight tourists declined in 2020 but showed signs of recovery in 2021, reaching pre-pandemic levels by 2022, notably in Greece and Slovenia. Same-day visitor spending plummeted in 2020 and, despite a slight recovery in 2021, remained below 2019 levels.

The average occupancy rate in commercial accommodations dropped across all countries in 2020, with Croatia experiencing the largest decline at 60.9%. However, a recovery began in 2021, with occupancy rates nearly returning to 2019 levels by 2022.

The greenhouse gas emission indicator for tourism gauges its carbon footprint, encompassing flights, boat rides, and various activities. While not widely utilized in databases, it's estimated that tourism contributes around 8% to global carbon emissions.

The Travel and Tourism Competitiveness Index assesses factors conducive to developing the travel industry within countries. In 2021, Slovenia led the EUSAIR countries in the Environmental Sustainability Pillar with a score of 4.8 and rank 12, followed by Croatia at 4.5 and rank 25. Bosnia and Herzegovina scored lowest at 3.5, placing 105th. The result indicators in the AIR are presented in **Table 5**.

Table 5. Result indicators in the AIR

Indicator	Unit	Country	2018	2019	2020	2021
Number of arrivals	Thousands	Greece	33,072	34,005	7,406	15,246
		Italy	93,228	95,399	38,419	40,186
		Slovenia	4,425	4,702	1,216	1,832
		Croatia	57,668	60,021	21,608	34,123
		Montenegro	2,077	2,510	351	-
		Albania	5,927	6,406	2,658	5,689
		Serbia	1,711	1,847	446	-
		Bosnia and Herzegovina	1,053	1,198	197	502
		North Macedonia	707	758	118	294
		San Marino	1,874	1,904	1,015	1,354
Number of bed places in hotels and similar accommodation establishments	Thousands	Greece	809.6	841.1	626.0	675.0
		Italy	2,260.9	2,260.5	2,229.3	2,232.7
		Slovenia	-	62.7	-	58.4
		Croatia	169.1	171.0	153.3	165.1
		Montenegro	36.2	-	-	-
		Albania	-	-	-	-
		Serbia	53.3	-	-	52.8
		Bosnia and Herzegovina	-	-	-	-
		North Macedonia	23.1	23.9	24.2	24.4
		San Marino	-	-	-	-
Number of nights spent at hotels and similar accommodation establishments	Millions	Greece	109.5	109.2	30.4	55.9
		Italy	279.5	280.9	121.1	166.1
		Slovenia	8.3	8.3	4.2	5.2
		Croatia	25.3	25.9	7.0	15.7
		Montenegro	3.7	4.2	0.8	-
		Albania	2.7	3.0	1.5	3.0
		Serbia	6.1	6.6	3.6	5.2
		Bosnia and Herzegovina	-	-	-	-

Indicator	Unit	Country	2018	2019	2020	2021
		North Macedonia	1.9	2.0	0.7	1.1
		San Marino	-	-	-	-
Relative contribution of tourism to the destination's economy	%	Greece	20.21	20.13	8.7	14.9
		Italy	13.07	13.11	7.0	9.1
		Slovenia	12.25	12.25	6.7	7.7
		Croatia	25.15	25.75	10.2	16.1
		Montenegro	25.10	25.10	8.8	25.5
		Albania	26.34	26.27	10.6	17.4
		Serbia	6.70	6.80	2.8	3.6
		Bosnia and Herzegovina	9.85	10.05	3.5	6.6
		North Macedonia	6.82	6.95	3.3	5.6
		San Marino	-	-	-	-
Total spending of overnight tourists	Million EUR	Greece	22,025.88	23,463.06	6,316.86	13,939.32
		Italy	52,634.04	52,948.2	20,723.34	26,426.16
		Slovenia	3,445.05	3,420.16	1,489.91	2,072.64
		Croatia	11,570.88	12,210.42	5,739.54	11,093.42
		Montenegro	1,248.48	1,301.52	183.6	920.04
		Albania	2,352.12	2,507.16	1,267.86	2,529.6
		Serbia	1,979.82	2,040	1,458.6	2,215.44
		Bosnia and Herzegovina	1,169.94	1,249.5	451.86	1,023.06
		North Macedonia	394.74	409.02	258.06	394.74
		San Marino	-	-	-	-
Spending of same day visitors	Thousand EUR	Greece	-	-	-	-
		Italy	66,444.04	77,636.22	-	-
		Slovenia	148,303.10	171,592.79	39,916.3	-
		Croatia	85,123.60	109,610.7	12,502.7	-
		Montenegro	-	-	-	-
		Albania	14,841.97	31,249.40	18,802.9	-
		Serbia	20,048.93	-	-	-
		Bosnia and Herzegovina	-	-	-	-
		North Macedonia	-	-	-	-
		San Marino	-	-	-	-
Occupancy rate in commercial accommodation	%	Greece	41.5	39.8	22.8	30.3
		Italy	48.6	46.6	25.4	33.2
		Slovenia	32.3	43.9	26.0	30.0
		Croatia	51.8	51.3	20.1	34.1
		Montenegro	37.1	40.2	16.0	33.1
		Albania	16.9	21.4	8.1	15.2
		Serbia	35.4	37.7	20.8	28.4
		Bosnia and Herzegovina	-	-	-	-
		North Macedonia	25.8	26.8	14.3	17.8
		San Marino	-	-	-	-
Direct tourism employment as a percentage of total	%	Greece	25.39	25.30	19.8	19.9
		Italy	14.81	14.73	13.8	11.6
		Slovenia	12.71	12.74	10.6	10.9

Indicator	Unit	Country	2018	2019	2020	2021
employment in the destination		Croatia	23.41	23.78	19.0	19.7
		Montenegro	20.02	19.74	27.3	26.4
		Albania	24.30	24.30	17.5	20.0
		Serbia	4.74	4.75	5.0	5.4
		Bosnia and Herzegovina	11.45	11.72	8.4	8.7
		North Macedonia	6.23	6.36	5.7	6.4
		San Marino	-	-	-	-
Travel & Tourism Development Index – Environmental Sustainability	Index	Greece	-	4.3	-	4.4
		Italy	-	4.3	-	4.3
		Slovenia	-	5.7	-	4.8
		Croatia	-	4.5	-	4.5
		Montenegro	-	4.0	-	4.0
		Albania	-	4.3	-	4.4
		Serbia	-	3.7	-	3.8
		Bosnia and Herzegovina	-	3.4	-	3.5
		North Macedonia	-	3.6	-	3.7
		San Marino	-	-	-	-

Impact indicators are linked to the higher level of strategy objects, capturing the effect of the co-financed interventions [31]. Two impact indicators are developed, reflecting the impacts on sustainable tourism in the Adriatic-Ionian Region – number of strategies and action plans developed in the field of natural and cultural heritage and tourism and joint tourism products developed and promoted.

The indicator related to Strategies and Action Plans in the field of natural and cultural heritage and tourism is not available, while data related to indicator joint tourism products developed and promoted is available at the macro-regional level and its values are related to the EUSAIR sustainable tourism projects – out of 165 international projects that have been analysed, 76 of them develop and/or promote joint tourism products. The impact indicators are presented in **Table 6**.

Table 6. Impact indicators in the AIR

Indicator	Unit	Country	2020
Strategies and action plans developed in the field of natural and cultural heritage and tourism	Number	EUSAIR	-
Projects that develop and/or promote joint tourism products	Number	ADRION Programme	10
		Cross-border Cooperation Programmes	60
		Interreg Mediterranean	3
		LIFE Programme	0
		HORIZON Programme	3

Governance of the implementation of the EUSAIR Pillar 4 Sustainable tourism is a role of the Thematic Steering Group 4 (TSG4). Indicators that monitor the governance include attendance of TSG4 meetings and number of project ideas generated by the TSG. Attendance

of TSG4 meetings is available at the national level, while project ideas generated by the TSG is available only at the macro-regional level. The indicator Attendance of TSG4 meetings counts the countries participating in each TSG meeting. Since March 2015, the total of 22 TSG4 meetings have been organised, with mostly all of the countries participating, especially during the COVID-19 pandemic when meetings were held online.

The indicator Number of projects ideas generated by the TSGs counts all project ideas generated by the TSG4, including project ideas or projects evaluated by the TSG4 either submitted by the TSG4 members or submitted by other stakeholders. According to the Evaluation of the European Union Strategy for the Adriatic and Ionian Region (EUSAIR) [33], the total of 6 project ideas have been generated by TSG4. The governance indicators are presented in **Table 7**.

Table 7. Governance indicators in the AIR

Meeting	**Date**	**Place**	**Participants**	**Project ideas generated**
1st Meeting	12/13 March,2105	Tirana, Albania	7 out of 8 countries participated	0
2nd Meeting	29/30 June,2015	Zagreb, Croatia	7 out of 8 countries participated	0
3rd Meeting	November, 2015	Zagreb, Croatia	All 8 countries participated	0
4th Meeting	April, 2016	Ljubljana, Slovenia	7 out of 8 countries participated	0
5th Meeting	17/18 November, 2016	Tirana, Albania	5 out of 8 countries participated	0
6th Meeting	26 April, 2017	Zagreb, Croatia	7 out of 8 countries participated	0
7th Meeting	21 November, 2017	Palermo, Italy	6 out of 8 countries participated	0
8th Meeting	19/20 April, 2018	Zagreb, Croatia	6 out of 8 countries participated	0
9th Meeting	13/14 November, 2018	Mali Lošinj, Croatia	7 out of 8 countries participated	0
10th Meeting	4/5 April, 2019	Podgorica, Montenegro	7 out of 8 countries participated	1
11th Meeting	20/21 November, 2019	Bari, Italy	6 out of 8 countries participated	0
12th Meeting	9 June, 2020	Online	All 9 countries participated	0
13th Meeting	6 October, 2020	Online	All 9 countries participated	0
14th Meeting	16 February, 2021	Online	All 9 countries participated	4
15th Meeting	20 April 2021	Online	All 9 countries participated	1
16th Meeting	5 October 2021	Online	All 9 countries participated	0
17th Meeting	5 May 2022	Online	All 10 countries participated	4
18th Meeting	18 October 2022	Thessaloniki, Greece	All 10 countries participated	0

Finally, cross-pillar indicators are those which measure the total effect of the EUSAIR implementation as a consequence of cooperation between Pillars [31]. Suggested cross-pillar

indicators are innovation effects and transnational networks. Innovation effects data are available for all countries except Albania and San Marino while transnational networks data is not available.

The indicator Innovation effect assesses the relative strengths and weaknesses of national innovation systems and helps countries identify areas they need to address. The analysis of the innovation effects of EUSAIR countries for 2021 shows that only Italy and Slovenia have an index higher than 100, and together with Greece, they are part of the group called moderate innovators. Other AIR countries, newest EU member country – Croatia, and candidates and neighbouring countries – Serbia, Montenegro, North Macedonia and Bosnia and Herzegovina are emerging innovators.

The indicator Supported transnational cooperation measures the number of networks at the all 4 pillars of the EUSAIR – blue growth, connecting the region, environmental quality and sustainable tourism. Since data on transnational networks in other Pillars are not available, the total number of transnational networks cannot be presented. The cross-pillar indicators are presented in the **Table 8**.

Table 8. Cross-pillar indicators in the AIR

Indicator	**Unit**	**Country**	**2018**	**2019**	**2020**	**2021**
Innovation effects	Index	Greece	67.57	78.55	80.63	88.49
		Italy	87.44	94.03	97.75	108.08
		Slovenia	100.01	98.08	93.81	100.49
		Croatia	62.02	64.65	68.31	78.22
		Montenegro	53.14	54.91	50.86	53.74
		Albania	-	-	-	-
		Serbia	57.83	63.93	67.01	74.52
		Bosnia and Herzegovina	44.97	43.16	38.72	38.97
		North Macedonia	44.56	40.74	44.58	47.10
		San Marino	-	-	-	-
Supported transnational cooperation networks	Number	EUSAIR	-	-	-	-

DISCUSSION

Since the Adriatic-Ionian Region is one of the most developed touristic regions in Europe, where economic development and local population standard of living is tourism-dependent, there has been a need for developing a set of indicators for monitoring and evaluation of the development of sustainable tourism in the Region. Developed set of indicators includes socio-economic, context, output, result, impact, governance and cross-pillar indicators.

The availability of indicators for monitoring sustainable tourism has shown that social and economic indicators are mostly available for all of the AIR countries, which is compliant with the results of research conducted by Bošković, Vujičić and Ristić [28]. Furthermore, indicators related to cultural and environmental data are mostly not available, as concluded by Modica *et al.* [21].

Socio-economic indicators are crucial for monitoring and evaluation of the development of sustainable tourism since tourism sector can play an important role as a driving force of socio-economic development and its economic impact is felt widely in other production

sectors, contributing in each case toward achieving the aims of accelerated development [34]. Since tourism affects the life of local residents, both socially and economically, there is a need to include socio-economic indicators in the set of indicators for monitoring and evaluation of the development of sustainable tourism.

The results show that socio-economic indicators are mostly available for all of the countries of the EUSAIR and that eight indicators that measure economic conditions and social context of the AIR have been greatly influenced by COVID-19 pandemic, which affected employment, unemployment, youth unemployment and GDP per capita. Also, the region is characterized by decrease in population. Finally, indicators People at risk of poverty and Human Development Index showed the heterogeneity of the region, which is also confirmed by other indicators.

Data for socio-economic indicators have shown that the Adriatic-Ionian Region was economically rising until the COVID-19 pandemic. Although the population was declining, all of the other indicators were showing improvement – GDP per capita and employment rate were rising, unemployment rate and youth unemployment rate were decreasing. However, the COVID-19 pandemic greatly affected the economy of the region, and it showed that the Adriatic-Ionian Region is very tourism-dependent, since greatest decline in GDP per capita and increase in unemployment rates were in AIR countries that have largest share of tourism in GDP.

The analysis of the context indicators also confirmed that the largest impact of COVID-19 pandemic was in most tourism-oriented countries – Greece, Albania and Montenegro, since share of tourism in GDP has had greatest decline in these countries, and tourism related employment also decreased in all countries, except Montenegro. However, it is important to keep in mind that national governments implemented measures for saving workplaces and, therefore, the employment and unemployment rates must be considered together with other indicators, not only by themselves.

Since context indicators are monitoring the achievement of objectives of Pillar 4, the data are available at the MRS.ESPON monitoring tool and it shows that, due to the huge tourism direct contribution to the GDP, AIR is tourism-dependent region, which is highly affected by pandemics, wars and other unpredictable events.

These two groups of indicators – socio-economic and context indicators have shown that the AIR is not only tourism-oriented, but also tourism-dependent economies. In the EU Strategy for the Adriatic-Ionian Region it has been recognised, and therefore, the Pillar related to Sustainable tourism aims to diversify the tourism in order to use the comparative advantages of the tourism, such as its contribution to the economic development, but avoid tourism-dependence, massive tourism and tourism effects on the environment.

The analysis of data related to proposed output indicators has shown that financed projects supported the development of sustainable tourism in the AIR, since significant funds have been invested and innovative and cooperative projects implemented. Even dough data is not available at the national level, it has shown that the need for the development of more sustainable and innovative forms of tourism is recognised not only by the EUSAIR and Interreg ADRION Programme, but also by other EU funding programmes in the AIR and at the EU level. Moreover, out of 313 projects implemented in the AIR related to sustainable tourism, 148 projects, with total budget of EUR 461.98 million have been implemented under National and Regional Operational Programmes in the EUSAIR countries. Thus, it can be concluded that the need for the development of sustainable tourism is also recognised at national and regional level in the AIR.

The result indicators measure the effect of tourism to the destination's economy and social well-being. The data related to result indicators showed that in the AIR, the number of tourist arrivals, nights spent and bed places in hotels and similar accommodation establishments per number of inhabitants is much larger when compared to the EU 27 average, which shows that there is still no sustainable tourism in the AIR. Also, the occupancy rate in the EUSAIR countries is larger than in other EU countries. On the other hand, spending of overnight tourists

and same-day visitors is much smaller in AIR than in the other EU countries, except in Italy, Croatia and Greece where spending of tourists is at the EU level.

When taken into account that the AIR has a larger number of tourists than the rest of the EU, but their expenditure is average or lower than in the rest of the EU, it can be concluded that the EUSAIR countries are mostly relying on massive tourism. This has been recognised in the EUSAIR and its Action plan and these results show that there really is a need for diversification of the tourist offer in the AIR and better tourism management.

On the other hand, the indicator related to environmental sustainability shows that massive tourism has still not affected the environmental sustainability of the EUSAIR countries, but there is a need to act before it happens. Therefore, the achievement of the EUSAIR Pillar 4 objectives is important to ensure that the AIR countries remain environmentally sustainable, but to still have benefits from tourism.

Since impact indicators data is available only for Joint tourism products developed and/or implemented, this group of indicators only partially captures the effect of these interventions. The indicator Joint tourism products developed and promoted refers to diversified tourism offer and it measures the number of the products developed and/or implemented and promoted, such as thematic routes, joint promotion events and materials, etc., in order to strengthen and diversify the tourism offer through cross-border approaches and to enable better management and sustainable use of cultural and natural heritage. Data shows that out of 165 international projects implemented in the AIR related to sustainable tourism that have been analysed, 76 of them develop and/or promote joint tourism products. Thus, it can be concluded that it was recognised that international cooperation is one of the ways of diversifying tourist offer and developing more sustainable and innovative tourism in the Region.

On the other hand, the indicator Strategies and action plans developed in the field of natural and cultural heritage and tourism is significant because it shows the importance of the natural and cultural heritage and tourism at the regional and national levels in the EUSAIR region and EUSAIR countries. The indicator also shows the dedication of the government and authorities to the environmental protection, heritage protection and sustainability. However, the data is not available because there is no official data on the number of strategic documents at the national level.

Governance indicators are important since they measure the efficiency of Thematic Steering Group, TSG4, whose role is the implementation of the EUSAIR Pillar 4. Two indicators have been developed for monitoring the TSG4 activities – attendance of meetings and project ideas generated by TSG4. Since the EUSAIR was developed in 2014, the total of 22 TSG4 meetings have been organised. However, only during the COVID-19 pandemic, while meetings were held online, all of the countries attended meetings.

In the previous financial period, the TSG4 generated 6 project ideas, which is the largest number among the EUSAIR Pillars, since Pillar 1 – Blue growth and Pillar 3 – Environmental quality generated each 3 project ideas, while Pillar 2 – Connecting the Region generated two Masterplans **[33]**. Since one of the main tasks of TSGs is development of new project ideas, it can be concluded that TSG4 has taken its role seriously and that the EUSAIR Pillar 4 is appropriately governed.

Finally, since tourism is one of the main drivers of economy in the AIR, it is important to measure not only tourism data, but also to encourage the cross-pillar cooperation. Therefore, two cross-pillar indicators have been developed to monitor the cooperation – innovation effects and transnational networks. The indicator Innovation effect shows that Adriatic-Ionian Region is not innovative, since only three countries – Italy, Slovenia and Greece are listed as moderate innovators, while other five countries are emerging innovators. Since innovations are quite important for the sustainable development, there is a need to encourage innovations in the Region.

The indicator Supported transnational cooperation networks counts supported transnational cooperation networks. The aim of the networks is to exchange information, knowledge and

resources. The difference between the indicator as a Sustainable tourism output indicator and as a cross-pillar indicator is that as a cross-pillar indicator, it measures the number of networks at the all 4 pillars of the EUSAIR – blue growth, connecting the region, environmental quality and sustainable tourism. Even though this indicator is not measured, it is important to include it in monitoring of the EUSAIR, because transnational cooperation affects not only development of sustainable tourism, but sustainable development as a whole.

As already mentioned, there are several indicator systems for monitoring the sustainable tourism. The most common system is ETIS toolkit provided by European Union that consists of 43 core indicators related to monitoring of destination management, economic value, social and cultural impact and environmental impact. Also, Lozano-Oyola, et al. [29] developed the system of 85 indicators, divided into three groups – social dimension, economic dimension and environmental dimension, while Agyeiwaah, McKercher, and Suntikul developed the set of indicators for monitoring sustainable tourism that consists of seven indicator themes – job creation, business viability, quality of life, water quality, waste management, energy conservation and maintenance of community integrity.

On the other hand, the indicators set presented in this paper consists of only 27 indicators, making it easier to monitor and collect the data. Furthermore, the novelty introduced by the developed set of indicators in including the monitoring indicators into the dataset. The results of the monitoring of governance indicators showed that these indicators are important since they measure the level of collaboration and joint projects ideas for development of sustainable tourism. Moreover, developed indicators set include cross-pillar indicators because sustainability of tourism cannot be achieved unless all stakeholders are included. Finally, apart from previous indicators developed for monitoring the sustainable tourism, the indicator set developed for AIR includes the analysis of projects related to sustainable tourism, cross-border cooperation and relevant strategic documents.

Even though the developed indicators set is facing the same problem related to lack of data as previous indicator systems, during the development of indicators set, it was important not to include only indicators that are available, but those that provide the complete monitoring of sustainable tourism development in the AIR. Furthermore, it is important to mention that the proposed set of indicators is relatively new, so it needs to be ensured that these indicators are continued to be monitored.

CONCLUSION

The period of the corona crisis and the current security challenges in the EUSAIR region inspired the authors to intensively reflect on the future development of this very sensitive region, which largely bases its development on tourism. Contemporary global trends point to the necessity of developing sustainable tourism that enables local development while preserving natural and cultural heritage. In the EUSAIR region, a number of initiatives have been launched for the past ten years to achieve sustainable development, and it is one of the four key development pillars, along with blue growth, connecting the region and environmental quality.

This region is the only one that has settled development goals for sustainable tourism as a key development pillar considering the area's resource sensitivity and significance for future development. In period 2014-2020, considerable financial resources, EUR 689,5 million were invested and a number of joint initiatives and projects were launched to establish and implement sustainable tourism.

The challenge in front of the decision makers was how to monitor the impacts of the implemented measures and how to evaluate the achieved results. Therefore, through the project "Monitoring and Evaluation of the European Strategy of Adriatic-Ionian Region (EUSAIR) Pillar 4 ‘Sustainable Tourism’", an initiative was launched to create a system of indicators that will be able to measure and evaluate key steps forward in the sustainable tourism, and test their

usability for guiding and making policy decisions in the future, related to the development of EUSAIR. Therefore, 27 indicators were prepared and proposed divided into seven groups, and they were collected and evaluated over the past 5 years.

The key findings of the conducted research are that the Adriatic-Ionian Region is one of the most developed touristic regions in the EU and the most tourist-dependant region. Therefore, there is a need for its Macro-regional Strategy to have Pillar related to sustainable tourism to diversify the tourist offer in the Region and improve tourism management.

However, the previous financial period and projects implemented from 2014 to 2020 brought significant improvement in terms of sustainability of tourism in the region since significant number of innovative projects have been implemented, joint tourism products developed and promoted, and transnational networks developed.

Significant efforts have been made to develop the set of indicators for monitoring and evaluation of the sustainable tourism in the EUSAIR and it is an important step forward for monitoring and evaluation of the EUSAIR in the future. In the current financial period 2021-2027, one of the goals of the EUSAIR Pillar 4 is the development of more resilient tourism, developed as a consequence of COVID-19 pandemic, which showed the downsides of tourism in the AIR.

It can be concluded that the developed set of indicators describes well the development of sustainable tourism in the AIR and it is suitable. Also, it presents the basis for monitoring the development of more resilient and sustainable tourism in the current financial period and should be continued to be monitored. If necessary, the set of indicators should be improved and further developed.

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NOMENCLATURE

Abbreviations

AIR	Adriatic-Ionian Region
AL	Albania
BA	Bosnia and Herzegovina
EL	Greece
ESI	European Structural and Investment
EU	European Union
EUSAIR	European Union Strategy for the Adriatic-Ionian Region
GDP	Gross Domestic Product
HR	Croatia
IT	Italy
ME	Montenegro
MK	North Macedonia
MRS	Macroregional Strategy
MRS.ESPON	Macro-regional Territorial Monitoring

	Tool
RS	Serbia
SI	Slovenia
SM	San Marino
TSG	Thematic Steering Group
UNESCO	United Nations Educational, Scientific and Cultural Organization

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