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## Road and Rail Infrastructure IV

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## INITIATIVE FOR DEVELOPMENT OF SUSTAINABLE MULTIMODAL TRANSPORT AND MOBILITY NETWORK IN THE ADRIATIC-IONIAN REGION

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### Abstract

Sustainable development, infrastructure integration and competitiveness improvement efforts reflected through the EU transnational cooperation programmes have produced considerable results over the past decades. That is one of the reasons why the Members of the Adriatic Ionian Council (AIC), are convinced that the EU Strategy for the Adriatic and Ionian Region (EUSAIR) will give new impetus to the benefit of all involved. Effective investment in transport networks requires innovative approaches, linked to up-to-date research. One of expected outputs from the 2nd EUSAIR thematic pillar: Connecting the Region is to improve connectivity by creating reliable transport networks and intermodal connections with the hinterland. Multilevel and inter-sectorial working is the prerequisite to overcome not only huge infrastructure disparities in the Adriatic-Ionian (ADRION) region, but also to find solutions for recognized administrative and sectorial bottlenecks. This paper gives rationale and explores possibilities for development of Sustainable Multimodal Transport and Mobility Network in the Region in scope of the INTERREG European Territorial Cooperation ADRION programme 2014-2020 (ADRION Programme), Priority Axis 3: Connected region.

*Keywords: Sustainable mobility and multimodal transport planning*

### 1 Introduction

“The overall ADRION Programme strategy is formulated in direct response to the EU2020 strategy of smart, sustainable and inclusive growth and its further revisions. Smart growth means improving the EU’s performance in education, research/innovation and digital society. Sustainable growth means building a more competitive low-carbon economy that makes efficient, sustainable use of resources. Inclusive growth means raising Europe’s employment rate – more and better jobs, especially for women, young people and older workers, helping people of all ages to raise the employment rate.” [2] In the case of the ADRION Programme, it has also to address the political dimension of the integration of the Western Balkans to the EU. Knowing that transport is fundamentally international, EU White Paper on transport recognized challenges related to the development of transport beyond the EU borders – the external dimension as one of strategic priorities. In that light, Commission will amongst others focus on the following area of action: “Develop a cooperation framework to extend our transport and infrastructure policy to our immediate neighbours, to deliver improved infrastructure connections and closer market integration, including in the preparation of mobility continuity plans, to deliver closer market integration”. [3]

Furthermore, one of the EUSAIR indicative actions aligned with the ADRION Programme is “Developing the Western Balkans comprehensive network: Western Balkans need to prioritise investments on the defined SEETO comprehensive network (railway, inland waterways, nodes

and hubs, notably with the motorways of the sea), aimed at promoting sustainable transport in the Region, and to prepare their integration in the Trans-European Network Transport (TEN-T). This implies elaborating integrated planning for infrastructure developments and defining joint roadmaps for investments.” [1]

“Sustainable growth requires sustainable and accessible transport and energy infrastructure, a competitive economic base and a resource efficient economy”. “Integration of the South East Europe (SEE) transport system in the European remains a priority for the region over the long term. Enforcement of market rules in transport, removal of cross-border bottlenecks and transport non-physical barriers, as well as enhancing the rules and practices in the areas of transport safety, are important issues for transport facilitation. The long-term aim of the SEE 2020 Strategy is to ensure transport services that are affordable, reliable and sustainable, and at the same time building a more competitive economy, while making efficient use of resources, protecting the environment and reducing emissions.” [4]

### **Key Strategy actions in Dimension I – ‘Transport’**

- Develop and implement measures to Improving the utilization rate of transport infrastructure on the SEETO Comprehensive Network by removal of physical and non-physical bottlenecks and unnecessary technical cross border barriers,
- Develop co-modal solutions by optimization of individual transport modes and focus on energy efficient and environmentally friendly transport modes,
- Introduce measures for reducing energy consumption and costs per unit of transport service,
- Put forward measures to improve the ratio of railway and waterborne transport, foster liberalisation of railway services and open the rail transport market to competition,
- Increase the use of Intelligent Transport System in the transport sector.

(Source: South East Europe 2020 Strategy)

### **1.1 EUSAIR and INTERREG ADRION Programme**

Members of the AIC, are convinced that the EUSAIR will give new impetus for cooperation and investment to the benefit of all involved and to the peace and security of the entire area. The EU’s Strategy builds on the Adriatic-Ionian Initiative, which was launched in 2000 and involved eight countries: four EU Member States (Croatia, Greece, Italy and Slovenia) and four non-EU countries (Albania, Bosnia and Herzegovina, Montenegro and Serbia) with the aim of strengthening regional cooperation, to promoting political and economic stability thus creating a solid base for the European integration process. “The general objective of the Strategy is to promote sustainable economic and social prosperity in the Region through growth and jobs creation, and by improving its attractiveness, competitiveness and connectivity, while preserving the environment and ensuring healthy and balanced marine and coastal ecosystems. This will be achieved through cooperation between countries with much shared history and geography.” [5] The EUSAIR is built on four thematic pillars: Blue Growth; Connecting the Region; Environmental quality; and Sustainable tourism. Moreover, Strengthening R&D, Innovation and SMEs and Capacity building, including communication are two cross-cutting aspects across each pillar. The EUSAIR will mobilise and align existing EU and national funding instruments for each of the topics identified under the four pillars. In particular, the European Structural and Investment Funds (ESIF) for 2014-2020, as well as the Instrument for Pre-accession Assistance (IPA) for non-EU countries, provide significant financial resources. The macro-regional approach has already been embedded in the new Regulations for the programming period 2014-2020. The Western Balkan Investment Framework (WBIF) provides finance and technical assistance for strategic investments, particularly in infrastructure, energy efficiency and private sector development. The European Investment Bank (EIB) and

other international financial institutions can also mobilise financing and expertise in support of suitable projects.

ADRION Programme intends to strengthen cooperation by means of actions conducive to integrated territorial development linked to the Union's cohesion policy priorities. "The overall objective of the Programme is to act as a policy driver and governance innovator fostering European integration among Partner States, taking advantage from the rich natural, cultural and human resources surrounding the Adriatic and Ionian seas and enhancing economic, social and territorial cohesion in the Programme area. The ADRION Programme includes a wide transnational area with more than 70 million inhabitants, and has distinct physical, environmental, socio-economic and cultural characteristics. Hence, it addresses all three dimensions of sustainability, including social, economic and environmental aspects but also institutional elements. One of the main features characterizing the Programme's area is the imbalance in the development of infrastructures and modes of transport, both between the two banks of the Adriatic Sea and among the Partner States, due to structural weaknesses, low level of maintenance and little investments in infrastructures. As a transnational cooperation programme, its main contribution will be to exchange and transfer experiences between regions, support transnational interventions and capacity building, and ensure that results are disseminated and used beyond project partners reaching a large number of end-users. The programme will especially support the constitution of multilevel and inter-sectoral working teams and partnerships to overcome administrative and sectoral bottlenecks, with the involvement of citizens, and local/regional/national/international bodies. At territorial level, a key issue will be to reduce conflicts of land use that constitute one main aspect of sustainable development strategies (promotion of renewable energy, protection of natural and cultural heritage, reduction of carbon emissions, etc.). Among the framework conditions for the implementation of actions, stakeholders must bear in mind that projects are not aimed to answer to the needs of a limited number of partners, but to contribute to better living conditions in ADRION territories (economic activities, quality of the environment, safety, etc.), thus focusing more on activities and results. From the action and output point of view, taking into account its strategy, the ADRION Programme shall mainly support the delivery of the following outputs:

- Networking structures;
- Joint management systems and cooperation agreements;
- Strategies and action plans;
- Methodologies and tools; and
- Pilot actions.

The ADRION Programme will neither support heavy investments, development of large infrastructures nor scientific and technology research as such. Investments in small scales facilities or infrastructures might be supported in duly justified cases in the case of pilot projects and territorial experiences. The ADRION Programme shall support in particular intangible or "soft" actions which could potentially have a long term effect and contribute to the visibility to the Programme (studies and research, networking, dissemination of knowledge and data, etc.). [2]

### 1.1.1 The EUSAIR Pillar 2: Connecting the region

Fragmentation in the Adriatic and Ionian Region has resulted in infrastructure disparities – particularly between the EU-Member States and the non-EU countries. Better transport and energy connections are needed, and are pivotal for the Region's economic and social development. The 'Connecting the Region' pillar will improve transport and energy connectivity by: strengthening maritime safety and security and developing a port system; creating reliable transport networks and intermodal connections with the hinterland; establishing a well-interconnected and well-functioning internal energy market. Intermodal connections to

hinterlands must be upgraded to cope with increased maritime transport of goods. Together with inland waterways, road and rail provide important international connections within the Region. Ports of the Adriatic and Ionian seas, as well as railway lines and airports, are immediate entry points to the Region from abroad. An appropriate transport approach has to take all of these into account, while also considering environmental aspects, economic growth and social development. Cooperation is needed to reduce bottlenecks, and develop infrastructure networks and regulatory frameworks. Improving the institutional and administrative capacities of national and regional bodies responsible for transport will accelerate the process. Communication and awareness raising is crucial for active participation in the decision making process.

### 1.1.2 ADRION Programme Priority Axis 3: Connected region

“The ADRION Programme Priority Axis 3 on sustainable transport and mobility addresses directly the EUSAIR Pillar 2 on connecting the Region and indirectly Pillar 3 through the promotion of environmental friendly low carbon transport and also Pillar 4 as a prerequisite for tourism (see Figure 1). Priority Axis 3 of the EUSAIR is containing a territorial dimension per se by addressing connectivity in the context of the spatial disparities between West and East but also across the dominating Adriatic and Ionian seas in the core of the ADRION area. The Programme is focusing on multimodality, logistics and environmental friendly and low carbon transport and mobility, contributing thus to the conciliation of the different uses and needs among regions and users.” [2]

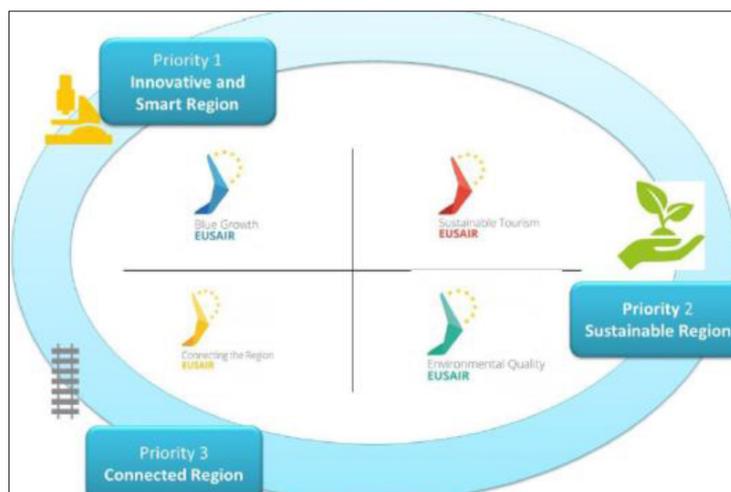


Figure 1 Links between the EUSAIR and the ADRION Programme

“For each Thematic Objective (TO), a set of specific Investment Priorities (IP) is pre-defined reflecting the challenges ADRION regions are facing. The cornerstone for the selection of the TOs and IPs are: The diagnosis and needs identified for the ADRION area; The lessons learnt from the period 2007-2013; The application of thematic concentration on a small number of priorities as stipulated in the ETC regulation; The complementarity with the EUSAIR and other EU Macro-regional strategies, regional and thematic programmes; The specificities of transnational cooperation programmes.” [2] ADRION Programme recognized as priority TO 7: Promoting sustainable transport and removing bottlenecks in key network infrastructures by: IP 7c: Developing and improving environmental-friendly (including low-noise) and low-carbon transport systems including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility and

set specific objective 3.1 as one of targets in 1<sup>st</sup> call for proposals. SO 3.1: Enhance capacity for integrated transport and mobility services and multimodality in the Adriatic-Ionian area.

## 2 The SuMMoN Project

During last two decades IPSA INSTITUTE has significantly participated in rehabilitation of Bosnia and Herzegovina infrastructure systems that were more or less damaged during the 1990s war. As the most of the projects had been financed through different EU programmes (e.g. PHARE, CARDS, IPA etc.) through all those years IPSA gained valuable experience and established itself as a reliable partner for the EU. Recently, in light of long waited progress on the countries' way towards the EU integration, IPSA has redefined its business strategy towards a stronger commitment to the EU integration process by developing a sustainable transport system based on regional cooperation and transfer of best practices. Having that in mind, IPSA's team of experts generated and refined idea presented hereinafter.

The idea to cooperate with partners through Initiative for development of Sustainable Multimodal Transport and Mobility Network in the Adriatic-Ionian Region (SuMMoN) was generated in spring 2015. Since the EUSAIR had been recognized as ideal framework for the SuMMoN project refinement, by the end of 2015 IPSA had the project proposal outlines ready for the expected ADRIION Programme 1<sup>st</sup> call for proposals. Finally, the SuMMoN project idea was validated by the ADRIION Programme Joint Secretariat and submitted in time.

### 2.1 The project objectives and the main outputs

The SuMMoN project overall objective is to overcome huge infrastructure disparities, as well as administrative and sectorial bottlenecks through multilevel and inter-sectorial cooperation for development of sustainable multimodal transport and mobility network in the ADRIION region. This objective is not only fully aligned with the SO 3.1, but also with the following ADRIION programme overall objective: "to better identify development potential and bottlenecks in specific sectors at transnational level, to support stakeholders promoting novel approaches and sharing knowledge". Establishing a quadruple helix partnership for development of sustainable multimodal transport and mobility network is not only essential to reach the said objective but also exactly what the ADRIION programme will support in order to overcome administrative and sectorial bottlenecks, with the involvement of citizens and other stakeholders.

**Table 1** Overview table on project outputs as defined in the work plan

Programme output indicators	Project main output
Ol_7c.1_1 Number of supported transnational cooperation networks in the field of environment-friendly and low-carbon transport systems	Networking Structure
Ol_7c.1_2 Number of strategies and action plans developed in the field of environment-friendly and low-carbon transport systems	Strategy and Action Plan for development of sustainable multimodal transport and mobility in the ADRIION region

Moreover, to fulfil the specific objectives listed below, the SuMMoN project partners will jointly prepare a strategic paper for development of sustainable multimodal transport and mobility in the ADRIION region accompanied with the action plan based on transfer of best practice. Close cooperation with SEETO is foreseen to stimulate cooperation of stakeholders tackling projects of regional importance and to adopt EU supported concepts. The Project outcomes will generate wide range of impacts benefiting different target groups, especially the public. Cost effective sustainable transport solutions by making the best use of existing

resources and best practices from previous EU projects, contributing to a sustainable concept of achieving set objectives with less expenses will be put in focus. The SuMMoN project specific objectives are:

- To identify/address both administrative and sectorial challenges for development of sustainable multimodal transport and mobility in the region;
- To build/strengthen capacities for the implementation of joint solutions for previously addressed challenges through the exchange of knowledge and transfer of best practice;
- To develop an integrated framework for regional cooperation defining how the good practices will be implemented in the strategy/policy papers of each participating region/country

## 2.2 Partnership

Seven organizations from five different countries of which six EU partners (two from Greece, two from Italy one from Slovenia and one from Croatia) and one non-EU partner (IPSA INSTITUTE). SMEs from Greece and Slovenia and University from Italy will contribute to defined project Work packages (WP) accordingly. Italian Public institution (Lead partner) is responsible for the project management and coordination (WP 1), Croatian Cluster is responsible for networking structure establishment (WP 2), SME from Bosnia and Herzegovina for Strategy and Action plan drafting (WP 3), while NGO from Greece will be in charge for Communication and dissemination (WP 4). The ADRION Programme foresees the involvement of associated partners, i.e. those bodies willing to be involved in a project with an observer or associated status without financially contributing to the project. Eight institutions including SEETO expressed their interest to participate in the SuMMoN project as associated partners. Obligations of the Lead partner and the Project partners for the ADRION Programme are laid down in the Subsidy Contract and in the Partnership Agreement respectively. The Subsidy Contract determines the rights and responsibilities of the Lead Partner – according to the lead partner principle – the conditions for the project implementation, requirements for reporting, financial controls, litigation etc. The Partnership Agreement transfers rights and responsibilities from the Lead Partner to the Project partners.

## 2.3 The Project approach

The SuMMoN project will stimulate regional cooperation of stakeholders in planning and development of infrastructure works and improved operation of transport systems between the countries in the Region. The project will summon institutional stakeholders, Universities, SMEs and NGOs from the region through the systematic establishment and management of communication, interaction, and coordination with a long-term aim to improve connectivity. Established networking structure will upon detailed state-of-the-art analysis build on existing knowledge and experience from previous projects (e.g. MEDA, TRACECA, GIFT, TRANSIT, SEETAC, ACROSSEE etc.) and from EU supported regional initiative – SEETO. The project will establish a system based on shared joint management of topics of mutual concern to promote the best practice transfer ensuring that results are disseminated and used beyond project partners. All participants of the established networking structure shall sign a Memorandum of Understanding for development of Sustainable Multimodal Transport and Mobility Network in the ADRION region. The inclusion of the perspective of all stakeholders by applying the quadruple helix model preceding the Strategy and Action Plan drafting will provide governments with a useful tool for adopting further transport strategies and planning resources, the transfer of knowledge between the industry and universities (with students gaining a hands-on insight into trends in low-carbon and sustainable transport) will be expedited, SMEs which are usually on the implementation side of transport strategies will be able to contribute with their knowledge and benefit from gaining a fresh perspective on familiar issues through re-

gional cooperation, and finally the public (including tourists) will benefit from an improved transport network.

A strategic document that defines precisely how the good practices (e.g. implementation of SUMP or introduction of new multimodal transport and mobility services) will be implemented in the strategy/policy papers of each participating region/country will leverage future initiatives and investments. The Steering Committee (SC) will ensure the strategy implementation not only by monitoring actions proposed in the action plan but also by updating indications on future evolutions in transports and mobility field. To ensure a stronger role, the SC will be responsible for the annual verification of the application of the Covenant of Mayors in field of mobility and drive IPA partners in joining the initiative. The project is expected to set up the principles of cooperation (multi-country and inter-sectoral) as well as the goals to be achieved and the appropriate strategy to ensure a sustainable transport network and mobility development. In addition, transferring of the EU best practice will be promoted contributing to the common needs and challenges of the ADRION region. Finally, the SuMMoN project will contribute to the following ADRION Programme result indicator: Level of capacity of organisations in the field of transport and mobility to transnationally plan and implement sustainable and multimodal transport and mobility solutions.

### 3 Conclusions

“Initiative for Development of Sustainable Multimodal Transport and Mobility Network” represents an ultimate opportunity to enhance capacity for integrated multimodal transport and mobility services in the Adriatic-Ionian area. This should be a common interest essential for achieving the general objective of the EUSAIR and it could be implemented within scope of the ADRION Programme. The challenges posed by improving the connectivity within the Region and between the Region and the rest of the EU can only be tackled through a cooperative and coordinated approach. Networking structure based on Quadruple helix partnership principle is of essence for balanced and integrated planning of environment friendly low carbon transport systems connecting the Region with the hinterland. Strategic paper accompanied with an Action Plan for development of sustainable multimodal transport and mobility in the ADRION region are needed not only to identify methodologies and tools for removal of identified sectorial and administrative bottlenecks but also to provide sustainable multimodal transport and mobility solutions based on transfer of knowledge and best practices.

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