

Intermodality Promotion and Rail Renaissance in Adriatic - Ionian Region

Adriatic-Ionian Programme INTERREG V-B
Transnational 2014-2020



Handbook

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FOREWORD

Lagging behind Central & Northern Europe in terms of growth and economic development, ADRIAN's countries should stimulate the take up of innovative strategies and smart solutions so as to reach sustainability goals. Improving Region's accessibility as indicated in EUSAIR strategy can be a decisive drive towards this objective. What is mainly missing, as proven by the failure past stories, is the capacity of key players & different decision making levels (local, national, transnational) to establish strong cooperation schemes able to enable the desired growth in a territory consisting of countries presenting great differentiations. Based on the principles of smart specialization, that is built on regional strengths, competitive advantages and cooperation, and following a well-defined forward-looking agenda towards passengers' intermodality promotion and rail revitalization, transportation negative effects can be handled and environmental performance in the Region can be improved. ADRIAN should invest on passengers' intermodality to revitalize itself; the unrelenting strong competition from the road sector should be balanced by the respective promotion of combined sea - rail alternatives. Building on the knowledge of previous projects, especially in RAIL4SEE, while drawing inspiration from ongoing innovative initiatives (e.g. North Adriatic Ports Association), Inter-Connect project seeks new solutions tailored to ADRIAN's specificities for the promotion of intermodal transport and guides the respective actors on how to turn connectivity plans into reality. Hubs clustering, identification of current and future trip generating poles, user surveys for mobility needs and expectations understanding, mapping of drivers, cooperation schemes establishment, soft mobility measures (e.g. integrated ticketing, harmonized timetables & procedures) funding opportunities examination, roadmap formulation constitute Inter-Connect approach.

INFORMATION

Call

ADRION - FIRST CALL FOR PROPOSALS

Project Acronym

Inter-Connect

Project Number

338

Programme Priority

3) Connected Region

Specific objective

Enhance capacity for integrated transport and mobility services and multimodality in the Adriatic-Ionian area

Start - End Date

2018-01-01 - 2020-12-31

Total budget

EUR 1,604,192.38

EU contribution:

ERDF budget

EUR 1,141,135.51

IPAll budget

EUR 222,428.00

PARTNERS



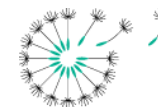
Municipality of Igoumenitsa
 (Greece)
 Lead Partner



CERTH
 Centre for Research
 and Technology Hellas
 (Greece)



CEI
 CENTRAL EUROPEAN INITIATIVE
 Central European Initiative
 Executive Secretariat
 (Italy)



RRA LUR
 Regional Development
 Agency of the
 Ljubljana Urban Region
 (Slovenia)



ITL
 ISTITUTO SUI TRASPORTI
 e LA LOGISTICA
 Institute for Transport
 and Logistics Foundation
 (Italy)



Regione Emilia-Romagna
 Emilia-Romagna Region
 General Directorate
 for Territorial and
 Environmental Safeguard
 (Italy)



HŽPP
 HZ Passenger Transport Ltd.
 (Croatia)



PORT OF BAR
 Port of Bar Holding
 company
 (Montenegro)



REPUBLIKA E SHQIPËRIE
 MINISTRIA E INFRASTRUKTURËS
 DHE ENERGJISË
 Ministry of Infrastructure
 and Energy
 (Albania)



CHAMBER OF
 COMMERCE AND
 INDUSTRY OF SERBIA
 Chamber of Commerce
 and Industry of Serbia
 Chamber of Commerce
 and Industry of Belgrade
 (Serbia)

INTERMODAL PASSENGER TRANSPORT CHALLENGES & KEY CONSIDERATIONS

- Identification of key players in mobility planning and the creation of a cooperation where experience and knowledge exchange will take place.
- Development of a common understanding of area's needs, challenges, opportunities and threats and the reaching of an agreement among stakeholders for the direction towards which mobility planning should focus.
- Formulation of a strategic framework for enhancing intermodality in the area and the respective authorities training on how to implement and finance measures able to add on ADRION.

HANDBOOK STRUCTURE

The handbook is comprised of four parts:

- ***Policies supporting, intermodality and rail use*** - Summarizes regional/national and EU strategic and policy documents supporting both rail use and interventions towards passengers' intermodal transport. Aim was to summarize the guidelines of the main political/strategic documents in intermodal and rail promotion.
- ***Best practices on intermodal promotion and rail reform*** - Concentrated on experiences, good practice analysis inside the partnership that have invested in intramodality and rail revitalization.
- ***The pilot cases of Inter-Connect towards intermodality and sustainability*** - Examined the potential for promoting intermodality in 8 regional cases, Igoumenitsa (GR), Region Emilia Romagna (IT), FVG (IT), Ljubljana (SL), Zagreb (CR) , Bar (ME), Durazzo (AL) and Belgrade (RS), with the aim of extracting valuable information able to be used also in other sectors and to be generalized in order to improve the connectivity of ADRION.
- ***Inter-Connect Roadmap*** - aimed to give input to future policies, generalizing and translating project's results into recommendations for future public and private actions for intermodal and rail transport promotion.

TARGET AUDIENCE

Decision-makers

Policy and investment decision - makers in local governments or transport authorities, transport executives, transport regulators, and transport operators should enter the toolkit at the planning phase. This may lead them to consider a number of different aspects that they seek to improve and the interventions that are relevant for that purpose.

Regional/Municipal Authorities

Developing efficient transport systems in urban areas has become an increasingly complex task with both congested cities and greater urban sprawl. Public regional/municipal authorities have an essential role in providing the planning, the funding, and the regulatory framework. The toolkit can act as a simplified synopsis for authorities that need to gain a good understanding of relevant issues in a quick look.

Technical task managers

Technical managers charged with the procurement, installation, and operationalization of specified intermodality measures should enter the toolkit at the implementation phase. They are likely to be working with external consultants and contractors with far greater detailed knowledge of the subject, and hence they need their own independent resource better to inform themselves. To that end, they would also avail of the relevant best practices and case studies.

TOOLKIT LAYOUT

The toolkit website (<https://interconnect.imet.gr/>) consists of six main sections, with interactive linkages amongst each of these:

Intermodality

- National Strategies
- Regional Strategies
- Local Strategies
- European Strategies Intermodality Good Practices

Pilot Sites

- Greece (Igoumenitsa)
- Italy (Region Emilia-Romagna & Friuli-Venezia-Giulia Region)
- Slovenia (Ljubljana - coastal Slovenia)
- Croatia (Zagreb - coastal Croatia)
- Montenegro (Port of Bar)
- Albania (Durrës)
- Serbia (Belgrade)

Measures/Roadmap

- High-level cooperation/agreements
- Stakeholders' engagement & actions/initiative synergies
- Awareness raising for sustainable mobility & crowd-learning
- Sustainable tourism promotional campaigns & initiatives
- ICT/Apps
- Advanced service provision at local level
- Advanced service provision at transnational level
- Hard "rail" measures – infrastructure

Cooperation

- Tourism
- Local, Regional and National Authorities
- Ports & maritime
- Railways
- Airports
- Local & Regional PT operators
- Academia & transport experts
- other mobility related

Capacity Building

- Policies supporting, intermodality and rail use
- Best practices on intermodal promotion and rail reform
- The pilot cases towards intermodality and sustainability
- Inter-Connect Roadmap for the future

Financial

- A guide to EU funding
- Guidance for beneficiaries of European Structural and Investment Funds and related EU Instruments
- Building Bridges between people - European Territorial Cooperation
- Guide to EU Funding 2014-2020 - European Parliamentary Research Service
- White Paper on the Future of Europe - Reflection and scenarios for the EU27 by 2025
- Funding and Financing Options for Sustainable Urban Mobility - European Platform on Sustainable Urban Mobility Plans

THE NEED FOR INTERMODALITY PROMOTION AND RAIL RENAISSANCE IN ADRIATIC - IONIAN REGION

Hinterland connectivity and intermodal solutions facilitating land connections, as identified in EUSAIR, are issues of common strong interest for all ADRION Region, however, different, and fragmental planning cultures are met across it. Common territorial challenges in passenger's transportation are linked to poorly managed urban development (especially in coastal areas), low level of transnational connectivity, low level of low carbon systems penetration, low level of intermodality etc.

What ADRION needs to achieve is a common understanding of inherent barriers impeding mobility boost and therefore economic growth, since transport is assumed to be a principle component of development. Furthermore, competent Authorities and stakeholders in the area need to find ways; to increase efficiency and reduce environmental impact of transport systems, notably by providing alternative, sustainable and environmentally friendly, combined solutions to improve public transport competitive profile to facilitate the creation of synergies among transport operators to create more and better integrated rail services at local and transnational level to reduce the declining modal share of railways to support port - hinterland connections by rail. Passenger transportation is by definition a concept that goes beyond strict local/regional borders. Cities / Regions in ADRION area although facing the common challenge of

developing a sustainable intermodal background, they also present particularities. Inter-Connect project aimed to identify new solutions tailored to ADRION's specificities for the promotion of intermodal transport and guided the respective actors on how to turn connectivity plans into reality.

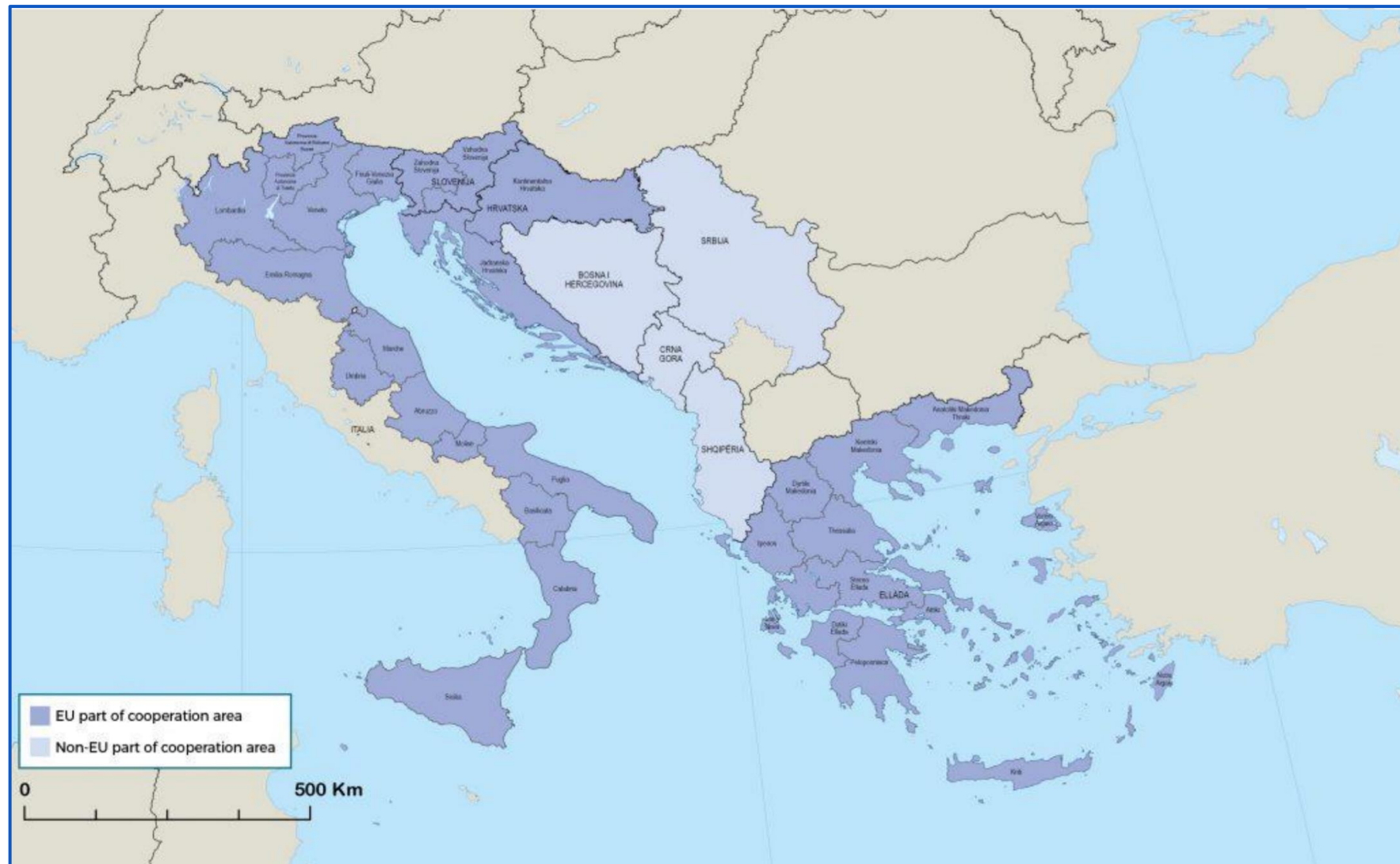


Figure 1: ADRIAN area of cooperation

POLICIES SUPPORTING, INTERMODALITY AND RAIL USE

INTRODUCTION

The report titled “Policies supporting, intermodality and rail use” (**Inter-Connect Del. T1.1**) aimed to become a useful tool that can reveal the real needs of the Inter-Connect partners in order to be transformed in powerful links of a strong rail network in ADRION area that serve passengers in the most efficient way. The following conclusions can show partners what are currently used Strategies have, in order to proceed with national ones. EU policy and existing strategies in the main transport corridor needs to be considered as enabling factors for achieving synergies in each partner region as well as focus on connections improvement by rail as already planned in each Country. In addition, governance schemes and financing of services, Public Transport Partnerships as well as future investment should be in focus of each partner region while considering conversations with own Governments and conducting pilot actions. Considering the fact that each national law or regulation of each involved partner covers only partly EU strategy/Directive/Regulation, EU legislations needs to be implemented as well as integrated within all EU Member States.

MAIN OBJECTIVES

- Summarize regional/national and EU strategic and policy documents supporting both rail use and interventions towards passengers’ intermodal transport.
- Summarize the guidelines of the main political/strategic documents in intermodal and rail promotion.

THREE LEVEL APPROACH RATIONAL: REGIONAL, NATIONAL, TRANSNATIONAL.

Apart from the main part in each of the three levels that covers passengers’ intermodal transport policies, a special section was dedicated to rail promotion for inland transportation.



International and EU level:

TEN-T
 URBAN MOBILITY ACTION PLAN
 WHITE PAPER
 SEE 2020 STRATEGY
 SEECF
 EUSALP
 EUSDR
 EUSAIR
 FOUR RAILWAY PACKAGES
 BLUE GROWTH

National Level

1. The Regional Operational Program of Epirus 2014-2020
2. Operational Program "Transport Infrastructure, Environment and Sustainable Development"
3. Connettere l'Italia
4. Piano straordinario mobilità turistica 2017-2022
5. Transport Development Strategy of the Republic of Croatia 2017-2030
6. Master plan of HŽ Putnički prijevoz d.o.o. – Strategic programme for the period 2015-2030
7. Resolution on the National Program for the Development of Transport in the Republic of Slovenia until 2030
8. Transport Development Strategy of Montenegro
9. Railway Development Strategy for the period 2017-2027
10. Strategy of Railway, Road, Inland Waterway, Air and Intermodal transport development in the Republic of Serbia
11. General Master Plan for Transport in Serbia
12. National Strategy for Development and Integration 2015-2020 (NSDI-II) - Albania
13. The Sectorial Strategy of Transport & Action Plan 2016 – 2020
14. First Five-Year Review of the Albanian National Transport Plan (ANTP)

Regional Level:

1. Regional Integrated Transport Plan (PRIT 2025)
2. Regional law 15/2009
3. "Mi Nuovo elettrico" is Emilia-Romagna regional electro mobility program
4. Energy plan Emilia-Romagna
5. FVG regional strategic plan 2014-2018
6. FVG Public Transport Regional Plan (2013)
7. Regional Development Program of the Ljubljana Urban Region in the 2014–2020 period
8. Regional Development Strategy of Montenegro 2014 - 2020

Local level:

1. Master Plan of the Port of Igoumenitsa 2016-2019
2. Igoumenitsa's SUMP - Sustainable Mobility Plan of Igoumenitsa
3. Sustainable mobility plan for Municipality of Ljubljana
4. Smartplan – Belgrade Transport Master Plan

Figure 2: Overview of Policies/Strategies Examined

OUTCOME

A review of the existing framework provides the basis of the project results regarding current strategies and policies, therefore contributing to the documentation of the project's results in relation to strategies, action plans and other projects. It can also serve as a general framework for the formulation of the strategic recommendations of the project and the policy documents contributing to regional and EU strategies. Main activities and data gathered could be incorporated in the Action Plans of the macro-regional strategy of each partner, and more specific recommendations and/or more detailed and sound proposals could be recommended (if eligible) to the National Action Plans and Sectoral or Regional Operational Programmes of each country for ensuring financial support for their implementation.

The countries of Adriatic-Ionian Region should stimulate the take up of innovative strategies and the application of smart solutions to come closer to the sustainability vision as posed by Europe's 2020 targets. Improving Region's "accessibility", a broader term for referring to transport services, as indicated in EUSAIR strategy can be a decisive drive towards achieving this objective. What is mainly missing in the area, as proven by the failure past stories, is the capacity of key players and different decision making levels to establish strong cooperation schemes able to enable the desired growth in a territory consisting of countries presenting great differentiations (in socioeconomic terms). Based on the principles of smart specialization, that is built on regional strengths, competitive advantages

and cooperation, and following a well-defined forward-looking agenda towards intermodality promotion, transportation negative side effects can be handled and environmental performance in Adriatic-Ionian Region can be improved.

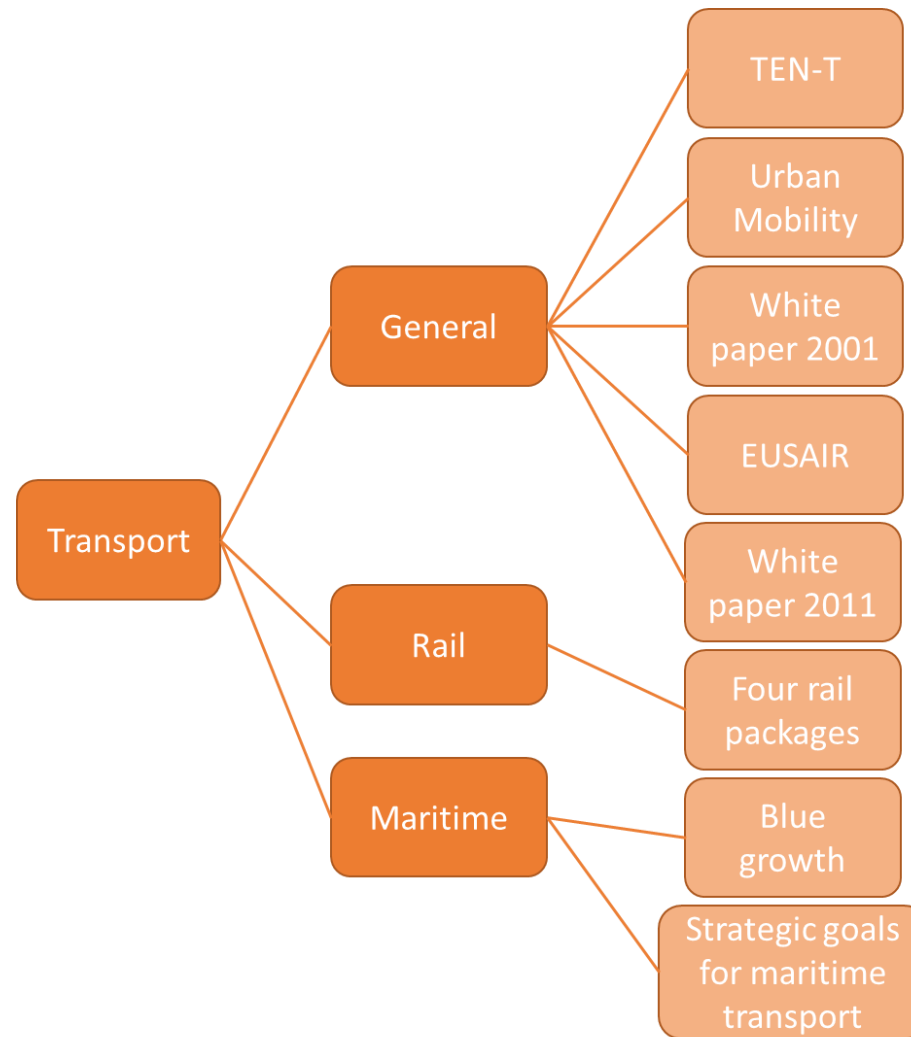


Figure 3: Transport-oriented documents examined

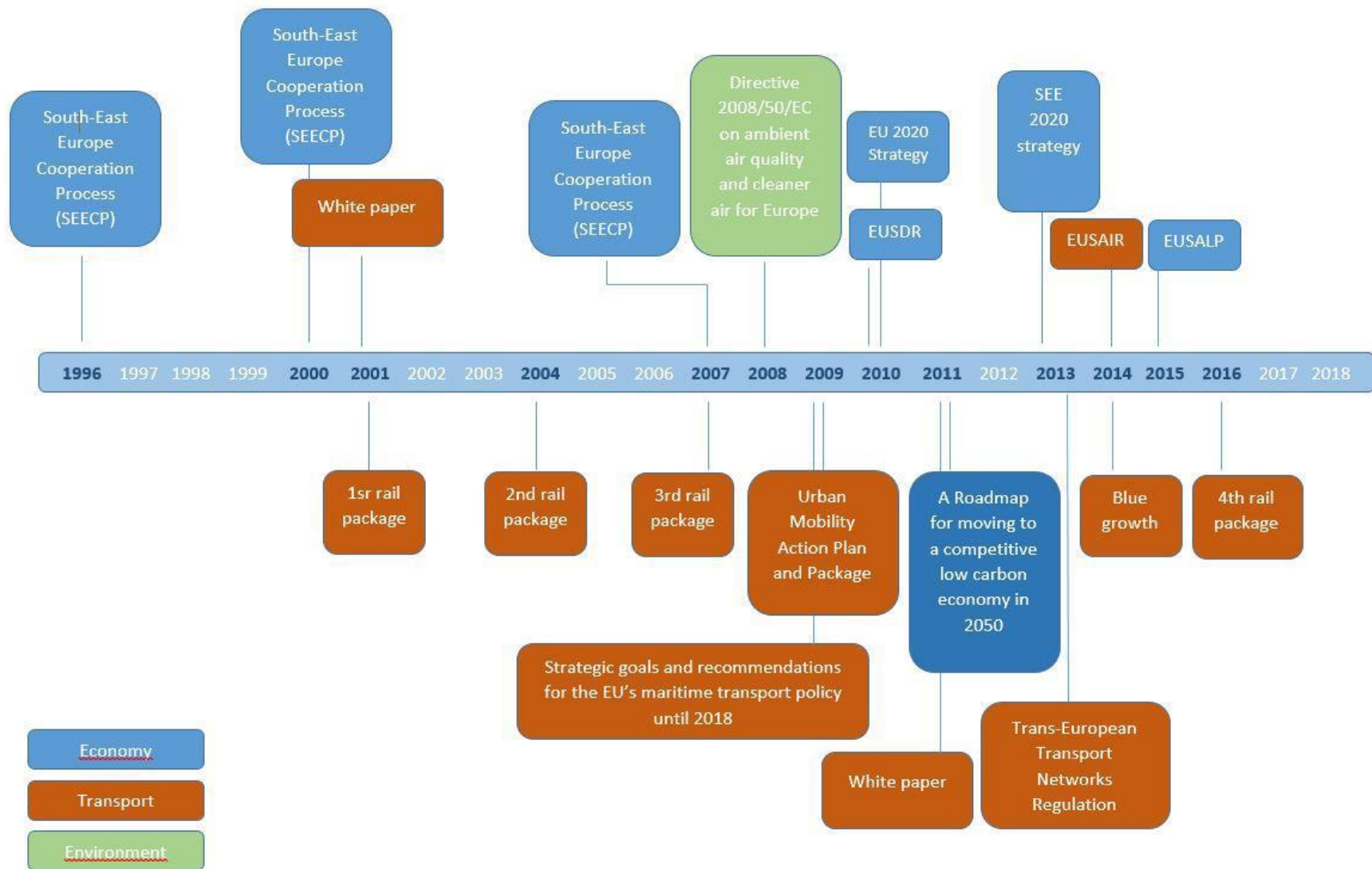


Figure 4: Overview of Policies/Strategies examined in Chronological order

BEST PRACTICES ON INTERMODAL PROMOTION AND RAIL REFORM

INTRODUCTION

Especially when dealing with transport of tourists, transport is considered as a very complex activity that is comprised and depends on policy-making, incorporating multiple levels of government and multiple transport operator responsible for different transport modes including land, sea and air transport. Considering transport in a whole organization chain there is also an increasing trend of public-private partnerships and governance arrangements associated with transport infrastructure provision and service delivery. In addition, there are a range of new business models which enable the provision of innovative and more personalized transport services which are more and more popular by modern tourists.

Inter-Connect project aimed to promote intermodal passenger's transportation and revitalize rail use in ADRION by supporting policymakers through tangible proposals for the alleviation of existing inefficiencies in the development of intermodal door-to-door transport. The report on best practices on intermodal promotion and rail reform (**Inter-Connect Del. T1.2.1**) concentrated on gathering experience through good practice analysis inside the partnership that have invested in intramodality and rail revitalization. Main result of this particular aspect of the project was to present and benchmark the effective interventions from the international

experience that support seamless intermodal passengers transport and promotion of rail use within the project area.

STRUCTURE OF MEASURES

Best practices were divided in *three* major groups:

1. Hard measures
2. Soft measures
3. Governance

Hard measures included:

- New services,
- Rolling stock renewal,
- Infrastructure,
- Cross border interoperability.

Soft measures included:

- Intermodality (rail - bus, rail - car, rail - bicycle, rail port, rail - airport),
- Integrated spatial - mobility planning,
- Integrated ticketing,

- ICT,
- Timetable harmonization,
- Rail promotion initiatives,
- Sustainability campaigns and awareness raising actions in the field of sustainable mobility,
- Public engagement and participatory activities (e.g. game-based learning on sustainable mobility).

Best practices under **governance** mainly included contracts, agreements, schemes:

- Public private partnership (PPP) for implementation of projects on sustainable mobility (e.g. implementation of PPP within e-mobility rental schemes),
- Innovative business models (e.g. innovative ticketing systems “pay as you go”, implementation of MaaS concept - Mobility as a System),
- Improvements in governance schemes (e.g. improving the speed and efficiency of governmental policy and projects to implement mobility projects),
- Cooperation scheme (e.g. implementation of Sustainable urban mobility plans, cooperative information platforms),
- Integrated authorities (integration of transport authorities that help to improve sustainable solutions in cities or regions),
- Transnational authorities,

- Transnational agreements,
- Public and stakeholder's involvement.

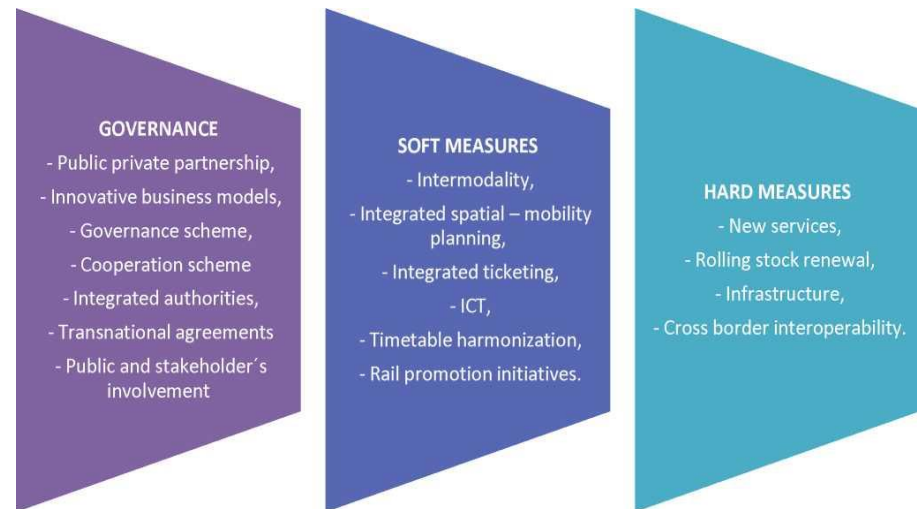


Figure 5: Identified groups of measures in the area of Sustainable Mobility

Each partner was invited to identify three good practices from their area/country supporting rail and sea based intermodal passengers transport solutions. Outputs could be either of a previous or ongoing project or a planned intervention keeping in mind the importance of the soft measures and the innovative ways of overcoming the challenges in practice.

OUTCOMES

Results showed substantial rail promotion activities among all Partners as well as intermodality rail - bus, and quite sufficient implementation of intermodality rail - bicycle along with integrated ticketing. Some cross-border cooperation was visible but still not adequately. Greater effort is clearly needed in implementing innovative business models in passengers transport and especially on private public partnership as from the latest there is no good practice known or mentioned.

Good practices mostly include:

- rail promotion initiatives,
- governance schemes and,
- intermodality rail – bus.

Majority (4 of 7) presented also good practices with elements of:

- cross border cooperation,
- integrated ticketing,
- integrated authorities,
- intermodality rail – car,
- intermodality rail – bicycle,
- new services and,
- changing travel behaviour.

Few good practices with elements of:

- transnational agreements,
- intermodality rail – port,
- timetable harmonization,
- cross border interoperability,
- ICT and,
- public and stakeholders' involvement.

Lack of good practices in:

- implementing innovative business models,
- private public partnership,
- intermodality (rail - demand responsive transport),
- integrated spatial - mobility planning (transit oriented) development.

LESSONS LEARNED

The main aim of the activity on good practices presentation was to identify the main challenges, barriers and factors of success that comprise a good transport practice in the ADRION region. Learning from experiences gained and recommendations given, we can expect to implement better case studies and make pilot actions in the Inter-Connect region even more successful.

What we can learn from the good examples from Italy, Slovenia, Croatia, Serbia, Albania, Montenegro and Greece is that providing seamless transport between cities or across borders requires coordinated responses

to technical, institutional and financial issues from a variety of stakeholders. From the examples and lessons learned, it can be seen that many of the underlying difficulties in meeting the associated infrastructure and other implementation challenges in the field of seamless transport can be attributed to governance and coordination issues that can influence infrastructure planning, policy, regulation, financing, procurement and management.

Presented good practices also indicated the importance of effectiveness of information exchange, learning, communication, and co-ordination across policy sectors. Including different policy sectors in implementation of actions (be it on regional, national, or transnational level) determines how transport interests are balanced in tourism policies and how effective implemented measures will be. Also, it is of great importance for effective management of transport and tourism synergies that can improve visitor's mobility to and within destinations, enhance visitor satisfaction and additionally help to secure the economic viability of local transport systems and services servicing both residents and tourists.

There are many bright examples (Italy, Slovenia, Croatia and Serbia) that combination of effective transport policies (e.g. integrated multimodal transport systems) and successful promotion of intermodal hubs and gateways (at the national and trans-national level) can not only help attract, manage or direct visitor flows, but can also facilitate a shift to more eco-friendly transport options. Sustainably oriented pilot implementations in

Inter-Connect project can help to consolidate a destination's reputation as sustainable and tourist's friendly region.

Additionally, from the examples of Greece-Bulgaria and Serbia-FYR Macedonia it can be clearly seen that border regions are sometimes recognized as functional regions that can only exploit the potential for transport flows and economic growth and if there is sufficient connectivity between the two sides of the border. However, there is a lack of information on fundamentals such as cross-border flows of workers, trade and tourism, cross-border use of public services or technological border clusters. Only a few cross-border regions have succeeded in building cross-border observation systems and this is a thing to be improved in the whole ADRIAN area.

From the good examples we can clearly conclude that the provision of adequate rail and maritime services are fundamental requirements to facilitate the mobility of tourist within and among countries in the ADRIAN region. In order for tourism to deliver on its potential as an engine for economic growth, it is dependent on multimodal transport systems that offer convenience, capacity, reliability, and connectivity to suit specific destination types from maritime area to hinterland. Public transport hubs in cities and regions are designed for different purposes and scale but all play an important role in increasing access to regions and beyond.

THE PILOT CASES OF INTER-CONNECT TOWARDS INTERMODALITY AND SUSTAINABILITY

INTRODUCTION

The EU regional strategy for the Adriatic and Ionian Region (called "EUSAIR") approved by the European Council in 2014, illustrates the needs and potential of a smart, sustainable and inclusive growth of the Region and provides a general framework with relative action plans to address challenges and opportunities, through cooperation between EU countries. The implementation program promotes an innovative concept of territorial development, with the main objective of promoting the economic and social growth of the area.

The EUSAIR Strategy has as its main objective the promotion of the socio-economic prosperity of the Region through economic-productive growth, the creation of jobs, the improvement of the attractiveness, competitiveness and connectivity, while preserving the environment and ensuring the health of marine and coastal ecosystems. The development of efficient transport systems in urban areas has today become increasingly complex due to city congestion and urban expansion. Consequently, the role of public authorities is of fundamental importance for territorial planning, for the financing of programs, and to guarantee an exhaustive regulatory framework.

The Inter-Connect objectives are directly linked to the EUSAIR strategy. In fact the Inter-Connect project pursued the promotion of sustainable transport in the ADRION area developing different solutions aimed to promote transport integration among partner states (Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, Serbia, Slovenia), taking advantage of the rich natural, cultural and human beings that surround the Adriatic and Ionian seas, and reinforce the economic, social and territorial cohesion of the area.

The ADRION area has significant infrastructural deficits related to accessibility with public transport solutions. In particular rail network, especially in Western Balkans (Albania, Bosnia and Herzegovina, Greece, Montenegro and Serbia) need urgent improvements in order to remove all existing bottlenecks and inefficiencies.

In relation to maritime connections, these often are not adequately linked with the inland public transport networks. It is important to improve land-sea connectivity, by developing forms of intermodal transport between ports and cities. This is important also in terms of increasing the competitiveness of the inland economy.

The Inter-Connect project aimed to promote intermodal passenger transport and to revitalize the use of rail transport in ADRION, through different soft measures capable of reducing the current inefficiencies and problems. In particular, the Inter-Connect project examined the potential for promoting intermodality in 8 regional cases (Figure 6), Igoumenitsa (GR),

Region Emilia Romagna (IT), FVG (IT), Ljubljana (SL), Zagreb (CR), Bar (ME), Durres (AL) and Belgrade (RS), with the aim of extracting valuable information (effective measures, cooperation schemes necessary to support the implementation of interventions, potential transferability, financing schemes for the realization of actions) able to be used also in other sectors and to be generalized in order to improve the connectivity of ADRION.



Figure 6: Inter-Connect pilot cases

The Inter-Connect project promoted rail and maritime intermodality working on three different project dimensions: soft measures (measures

working on increasing the efficiency of existing services and infrastructures without big investments), major measures (measures where relevant public investments on infrastructures are required) and administrative/governance measures (Figure 5).

Each partner had developed ideas and projects concerning their area or country, capable of supporting and encouraging the railway use and intermodal passenger transport solutions, with attention to intermodal solutions able to revitalize coast-inland connections. To this end, the Inter-Connect project followed a “bottom-up” approach to verify that the interested entities place their weaving towards cooperation aimed to overcoming legal, infrastructural and operational barriers, and to provide better intermodal solutions for maritime and rail passengers. The potential interventions to promote intermodality in the 8 Inter-Connect case studies were examined from the regional / local point of view, in order to identify strengths/weaknesses, cooperation and funding schemes and all the valuable information for the development and implementation of the project itself, also evaluating the transferability potential in another ADRION areas with similar characteristics.

The Inter-Connect case studies’ specific objectives were:

- Increase efficiency and reduce the environmental impacts of transport systems, by providing alternative, sustainable, and environmentally friendly solutions,
- Improvement of the competitive profile of public transport,

- Facilitate the creation of synergies between transport operators,
- Creation of increasingly integrated rail services at local and transnational level,
- Increase the number of passengers (tourists and commuters) using railway and sustainable transport solutions,
- Support port-rail connections.

DEFINITION OF A COMMON EVALUATION METHODOLOGY

In order to collect the relevant information in a common way among all the different project's partners, a *common evaluation methodology* was defined. The aim was to extract valuable information (effective measures, necessary cooperation schemes to support interventions implementation, transferability potentials, funding schemes for actions' realization) able to be used in other areas and to be generalized in ADRION area.

The assessment methodology focused on four key dimensions:

- Stakeholders engagement sustainability,
- Institutional and political sustainability,
- Financial sustainability,
- Technical sustainability.

In relation to stakeholder's engagement sustainability, the objective was to identify the most relevant case study stakeholders and their specific

contributions and role in reaching the project's main objectives. In fact it was important to understand their potential roles and contributions in the case study definition and implementation, their interests and objectives, useful to define the local action plans, paving the way to the replication of the Inter-Connect case studies in the ADRION area. Stakeholder involvement was generally considered a good practice, not only to have a good technical outcome of project activities but also to guarantee the durability of the project results and effectiveness of actions.

The result of this mapping activity aimed to support the identification of possible conflicts and coalitions between stakeholders, and how these may affect the action plan definition process in terms of geographical coverage, policy integration and resource availability. The engagement level was assessed using the categories summarized and described in the table below.

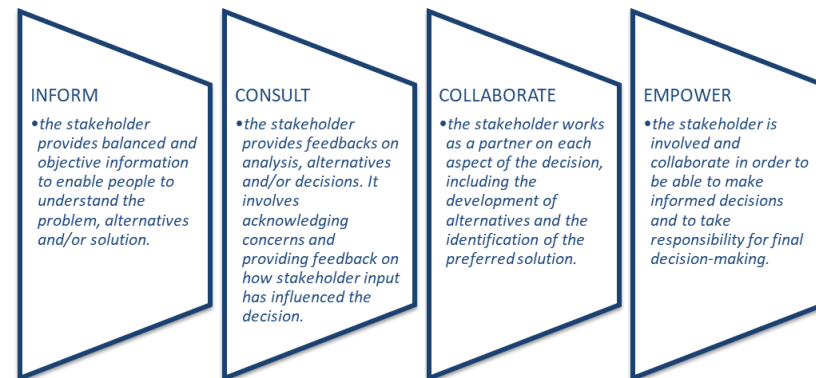


Figure 7: Engagement level scheme

After stakeholder’s identification phase, the relationships between these were considered. This analysis was based on a list of different criteria or attributes which are relevant for the respective case, e.g. interest, power, influence on each other, coalitions, etc. This way it was possible to find out what the objectives of each stakeholder are, what their hidden agendas are, and whether they regard themselves as “winners” or “losers” if a given issue was implemented.

The objective of a systematic analysis of actor relationships was to get a clear picture of conflicts of interest or potential coalitions and to be able to better determine clusters of stakeholders who may exhibit different levels of interest, capacities and interest in the issue in question. For example, this was done by developing an “Influence-Interest Matrix”, which grouped stakeholders by their level of influence/ importance as summarized in the table below.

Influence-Interest Matrix		
	Low Influence	High Influence
Low stake	least Priority Stakeholder Group	useful for decision and opinion formulation, brokering
High stake	important stakeholder group perhaps in needs of empowerment	most critical stakeholder group

Source: UN-Habitat: Tools to Support Participatory Urban Decision Making, Nairobi, 2001, p. 24. available from: www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1122

Figure 8: Influence-interest matrix. Source: UN-Habit

The evaluation phase related to institutional and political sustainability was a general part aimed to collect general information on the main policies and

governance schemes supporting the development of the different case studies.

The financial sustainability evaluation phase intended to collect quantitative and qualitative information on financial sustainability of each Inter-Connect case studies. The aim of the financial sustainability analysis carried out was to evaluate if the Inter-Connect case studies were supported by a strong and replicable business model.

The technical sustainability evaluation phase intended to analyze the key technical and technological aspects of the Inter-Connect case studies in order to understand the enabling technologies supporting the planning and/or the implementation and the management of the Inter-Connect case studies. A specific focus was dedicated to evaluating the practical solution supporting the intermodality promotion. A specific focus was also dedicated to the latest ICT developments offering new opportunities to enable a leap forward in the way collective and individual mobility services are organized and offered. This part intended to analyze the enabling technologies allowing the Inter-Connect case studies development and the way these technologies supported the case studies development.

The Igoumenitsa case study, Greece

DESCRIPTION OF THE CURRENT STATUS

Due to the positioning of Igoumenitsa in western Greece (Figure 9), the lack of an airport capable of serving flights to/from the cities of the ADRIAN area, and the lack of connections with the main Greek railway network, road transport is still the most effective transport solution, even if road transport infrastructures needs of consistent improvements. Public transport within the city has poor features and therefore the need to support bus lines is essential.



Figure 9: The (Greek part of) catchment area of Igoumenitsa in Inter-Connect project

Igoumenitsa is not currently served by the railway, although for years there have been plans for the development of the Egnatia railway axis. Therefore, the only public transport mode able to satisfy local and cross border

passenger's needs, although with relatively low performances, are intercity buses. In addition, the low level of adoption of new technologies and the absence of integrated public transport services (in terms of ticketing, information, harmonization of timetables) further hinder the growth and development of the area.

IGOUMENITSA'S INTER-CONNECT CASE EXAMINATION PLAN

The main critical issues for Igoumenitsa, and therefore for the project, were:

- Acting as an area of tourist attraction and not only serve as a transit point for international tourists (mainly coming from Italian ports). This transformation needed can be based on promotion of existing attractive sites, points of interest, the promotion of natural areas and an improvement of public transport services connecting them (accompanied by an offer of integrated tour packages, etc.).
- Attracting domestic tourist flows creating new synergies with the Municipality of Ioannina (associated partner of Igoumenitsa), as the main center of tourist attraction in Epirus, and take joint actions to mutually support tourism growth in the area, a better connection with the hub of Thessaloniki as the main railway gate of northern Greece for international and national rail connections.

Based on these challenges, the case of Igoumenitsa in the Inter-Connect project concerned:

- Analysis of flows within the river basin,
- Understanding the growth opportunities of the city (both in terms of daily city performance and to attract tourists from and outside Greece),
- Identification of the latent public transport demand,
- Examination of cooperation programs between intercity bus service providers, the city of Igoumenitsa, the port of Igoumenitsa, the associations and companies (mobility and tourism) of the city and its catchment area.

Finally, the Greek case also examined the opportunities and challenges related to the transnational connectivity of Igoumenitsa with the ADRION coastal areas (not only Italian) but also with Croatian, Slovenian, and Albanian destinations through new maritime services.

The Emilia-Romagna Region case study, Italy

DESCRIPTION OF THE CURRENT STATUS

The Emilia-Romagna Region (Figure 10) with the support of ITL (Institute for Transport and Logistics) aims to improve rail passenger transport in the Bologna and Romagna areas in order to improve the accessibility of coastal areas (Romagna - provinces of Ravenna, Forlì -Cesena and Rimini) with the regional main transport hub (Bologna).

Total population over **4,3 millions**
 Surface **22.124 Km²**
9 Provinces
348 Municipalities
40% of total population lives in **13 main cities**
Bologna is the capital city



Figure 10: Emilia-Romagna overview (2016)

EMILIA-ROMAGNA REGION'S INTER-CONNECT CASE EXAMINATION PLAN

Considering the focus of Inter-Connect project, the case study of the Emilia-Romagna Region considered the following aspects:

- Improve passenger rail transport, mainly with soft actions and with attention to coast-to-internal connections,
- Tackle the seasonality of passengers flows in the Emilia-Romagna coastal area (Riviera Romagnola),
- Define better public transport solutions both for summer period (tourists) and winter period (commuter) trying to get better rail transport for both types of users,
- Improve the quality of public transport offer for tourists through the promotion on new services of integrated ticketing.

Passenger rail transport can be improved with a series of different actions in various regional areas. Inter-Connect focused on a subset of the Emilia-Romagna regional network (Figure 11). The analysis was conducted thanks to two different case studies (A and B).

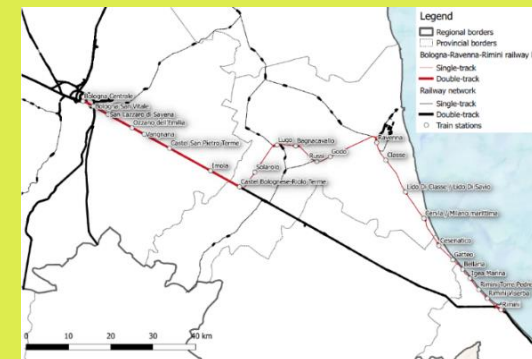


Figure 11: Bologna-Ravenna-Rimini railway line



Case study A main objective was to fasten the rail connection among Bologna, Ravenna, and Rimini without big infrastructure investments. In fact, the travel time from Bologna to Ravenna and Rimini in the past 10 years have not improved. Among the main destinations from Bologna, Ravenna is the closest in terms of travel distance, but the furthest in terms of travel time. Moreover, connection with other cities reduced travel time whereas Ravenna only partially did (4 services per days are faster than in 2008 and 16 are longer than 2008).

Case study B main objective was to test a solution of bus and train ticketing integration in Romagna area. In fact, given the tourist vocation of this area, in recent year local authorities have communicated the need to improve public transport for tourists as a key measure to reduce negative externalities (e.g. congestion, environmental impact, road safety, etc.). This pilot was possible thanks to the collaboration of the local public transport operator (the Inter-Connect associated partner Start Romagna), the local transit agency of the Romagna area (eastern Emilia-Romagna) which includes the provinces of Ravenna, Rimini and Forli-Cesena and Trenitalia, the national rail company.

The Ljubljana metropolitan area case study, Slovenia

DESCRIPTION OF THE CURRENT STATUS

Slovenia is connected through maritime services with the Italian ports of Trieste and Venice, while it is connected to Europe through Greece and Albania, with long travel times. As for the train service beyond Trieste (

Figure 12), it is possible to connect with Split (Croatia) and Belgrade (Serbia) with reduced times. The best alternative to sustainable means only road transport, as air transport, due to high costs, is not an efficient means of transport.

Figure 12: The public railway infrastructure network in the Republic of Slovenia

The state of public railway infrastructure in Slovenia is mainly characterized by:

- Insufficient investments devoted to the development of the public railway infrastructures in the last 15 years,
- The public railway infrastructure network is less competitive compared to neighboring countries in the north and west borders,
- Insufficient investments in railway vehicles (renewal and purchase of new vehicles),
- The motorization of Slovenians has reached very high levels, reducing the attractiveness of public transport solutions,
- The vignette system promotes car transport mode,

- Problems in developing efficient integrated public passenger transport system (slow implementation of transport policy).

LJUBLJANA'S INTER-CONNECT CASE EXAMINATION PLAN

The action plan for the Inter-Connect project started with defining the bottlenecks of the rail network and design solutions to improve rail passenger transport and better links between the various forms of transport in Slovenia. It focused on improvements to international connections. With better accessibility with neighboring countries, the case study identified solutions allowing to improve the intermodal trips in the whole Ljubljana metropolitan area. Furthermore, it considered the planned interventions, carried out the critical evaluation and proposed urgent actions to make rail passenger transport competitive again.

The examination plan addressed the problem at two levels:

- Technical solutions for upgrading the railway network,
- Improvements to the institutional and managerial environment.

The Friuli-Venezia-Giulia Region case study, Italy

DESCRIPTION OF THE CURRENT STATUS

The Friuli-Venezia-Giulia Region case studies developed by CEI and focused on the Trieste area have been implemented with the involvement of the Autonomous Region of Friuli-Venezia-Giulia (Associated Partner) and other local stakeholders including Public transport operators. The case studies focus was on improving multimodal public transport in the region, with particular attention to maritime services and their intermodal connections with the Trieste railway/public transport. This priority was developed also in others EU project as EA SEA-WAY project, co-financed by the CBC IPA-Adriatic program, through which it has implemented new maritime services between Trieste, Piran (Slovenia), Rovinj (Croatia) and Pula (Croatia).

The routes between Trieste and Istria are of particular importance, as in addition to having a tourist value, they strengthen cross-border relations between Italy, Slovenia and Croatia. The maritime connections are considered an important opportunity for territorial promotion.

FRIULI-VENEZIA-GIULIA REGION'S INTER-CONNECT CASE EXAMINATION PLAN

The objective of the Friuli-Venezia-Giulia case study in Inter-Connect project was to support further improvements in intermodal connections and accessibility that pivot on the existing connections of maritime services in

Trieste. Following the analysis carried out and the feedback received from the interested parties, it was possible to elaborate a dual case study for the Trieste area.

The first one (sub-case) focused on improving urban public transport connections with the maritime passenger terminal, mainly with regards to passengers visiting Trieste (thus allowing better accessibility to the main tourist sites).

The second one (sub-case B) faced another priority of the Friuli-Venezia-Giulia Region related to the better understanding of the potential (and existing demand) of a new maritime public transport link from Trieste (Muggia) to Koper (Slovenia), also considering the important cross-border commuter flows and the lack of an efficient cross-border public transport links between these two cities (Figure 13).

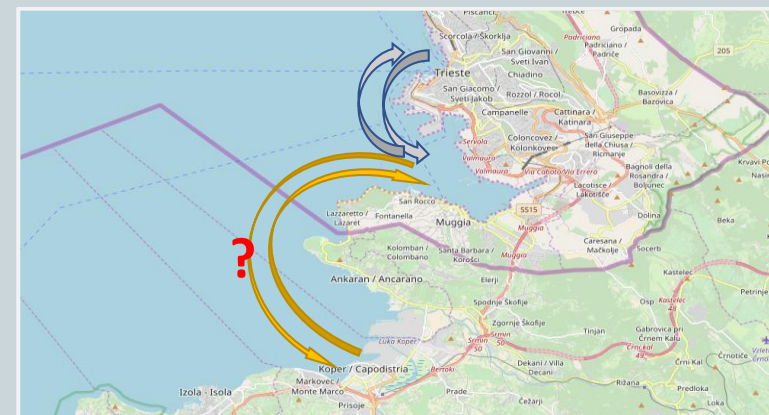


Figure 13: The existing PT maritime service Trieste-Muggia and the potential extension Muggia – Koper

Furthermore, it should be emphasized that this could be seen as an additional connection within a wider range of maritime connections including, together with seasonal services mainly related to tourism purposes, also the current Trieste-Muggia service (operated throughout the year). Furthermore, it is to develop an integrated approach to cross-border mobility by promoting the development of sustainable multimodal solutions (rail / bus / waterway transport / bicycle sharing). This approach can be effectively implemented by capitalizing on previous projects/initiatives but also by acting in synergy with those in progress, as also including sustainable urban mobility plans (SUMPs) developed or implemented in the main centers of the cross-border area.

The Zagreb metropolitan area case study, Croatia

DESCRIPTION OF THE CURRENT STATUS

Most of the tourist travels involving maritime transports in south-east Europe include road transport solutions (main buses) for Italian ports and therefore ships for Greece. This leads to the situation where individual passengers and/or groups of tourists from Croatia travel by bus for hours to the port of Venice, Trieste, Ancona and to Greece ports.

There are railway lines connecting Croatia to Greece, but due to the long distance, travel times (Zagreb or Ljubljana - Athens has about 2-6 changes and 43 hours, Sarajevo - Athens is about 3 changes and 65.5 hours) nowadays the railway is not a reliable and efficient solution. This concerns in particular tourists, who do not want to waste too much time traveling during their holidays.

ZAGREB'S INTER-CONNECT CASE EXAMINATION PLAN

The main purpose of this action plan was to create the basis for its own independent, reliable and automatic system to provide information on timetables, train punctuality and operational changes during journeys (delays, unforeseen events and the like) in stations, on new trains and through others communications channels.

In the Inter-Connect project, the Croatian case study included a feasibility study covering the entire ADRION area, focusing on improving connections between the Croatian ports and existing transnational trains (Slovenia,

Bosnia, and Herzegovina) with transnational Croatia-Greece shipping lines. The intention was to explore the possibility of facilitating faster and cheaper trips for tourists by connecting ADRION countries with innovative train and maritime services. The case study aimed to find a way to shorten the journey by land, encouraging the use of greener transport and also reduce the journey thanks the maritime services. As a result, travel time and expenses should decrease as well as the environmental impact. The Croatian case study therefore explored the possibility of this "railway + sea route" solution considering passengers' preferences and travel requirements.

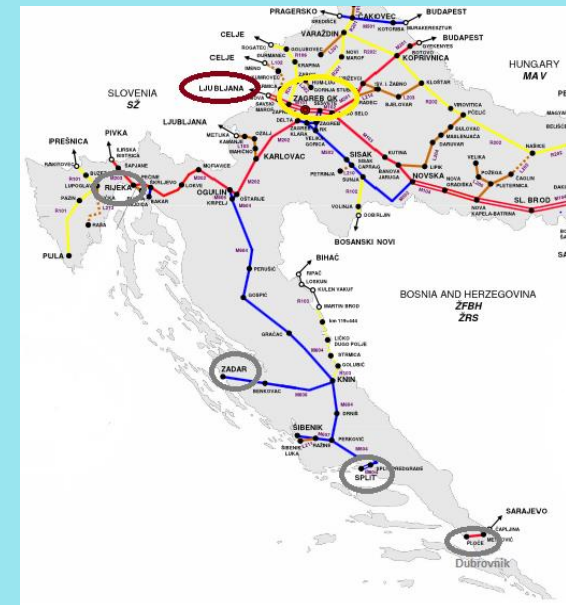


Figure 14: Strategic map of the Region of Croatia

The Port of Bar case study, Montenegro

DESCRIPTION OF THE CURRENT STATUS

Montenegro's maritime connectivity is limited to the Bar-Bari (Italy) connection. The port of Bar is the main port of Montenegro. The passenger terminal in the port of Bar is located in the northernmost part of the port. Although it is officially classified as a passenger terminal, it is actually a ferry terminal or a Ro-Pax terminal. Furthermore, the port of Bar is the final station of the Belgrade-Bar railway. Montenegro is connected only to Serbia (Bar-Belgrade) thanks to a journey lasting 10 hours.

At present, the Bar-Belgrade railway does not meet the modern rail transport requirements in terms of speed and reliability. This situation has led to efforts to initiate the restoration of the railway infrastructure.

The road infrastructure, mainly in coastal areas, in summer are congested by tourist flows. Montenegro's road network is generally obsolete and inadequate for fast and efficient road transport. The two main transport axes are East-West (Ulcinj - Herceg-Novi - Croatia, along the Adriatic coast) and North-South, (Serbia - Bijelo Polje - Bar). The connections with the hinterland are of great importance for the ports, but in the case of the port of Bar this is even more true. Being in a sparsely populated region, the port's capacity strongly depends on its connections with the hinterland. Indeed, the current low quality of connections in the hinterland of the Port of Bar is one of the main reasons for the underutilization of the infrastructures and the port facilities. This means that improvements in rail and road

connections with the hinterland have a strong impact on the future development of the port.



Figure 15: Railway network in Montenegro

PORT OF BAR INTER-CONNECT CASE EXAMINATION PLAN

The Port of Bar case study in the Inter-Connect project covered:

- Identification of intermodal maritime and public transport solutions in the Port of Bar area,
- Analysis of passenger flows within the area,
- Identification of passenger needs and requests,
- Examination of intermodal passenger transport, maritime-bus-rail link to Bar,
- Improvement of the role of seaports in the local and regional public transport system and general promotion of reliable alternatives to road transport.



The Durres and Tirana case study, Albania

DESCRIPTION OF THE CURRENT STATUS

Albania has good maritime connections to the rest of the ADRION area thanks to the port of Durres (Durres), connected directly to Piran (Slovenia), Spalato (Croatia), and Italy (Bari). With regard to the railway connection, there are connections only with the city of Belgrade (Serbia), while a freight transport link with Montenegro is planned. Consequently, the most widely used means of transport are cars and the airplane.

DURRES INTER-CONNECT CASE EXAMINATION PLAN

The Albanian case study in Inter-Connect project refers to a study on the development and implementation of technological solutions aimed to improve intermodal transport thanks to an improvement of real-time information provision for travellers, the harmonization and integration of the time schedules of all the public transport solutions. The objective of this case study was to improve intermodal transport between rail and maritime solutions in the Tirana and Durres regions.

The Albanian Ministry of Infrastructure and Energy, Inter-Connect project's partner, intended to promote intermodal solutions using various information channels including the website of the Ministry of Transport, Albanian tourism fairs and sites of Albanian tourism. This integrated digital time information will allow foreigners and/or Albanians returning from their

journeys to have the necessary information in real time so that they can plan and coordinate their movements more effectively and efficiently.

The area considered would be the area from Durres to Tirana, including the area of the Rina's international airport. The study focused more on the area around Durres ferry terminal and Durres central train station. In fact, the ferry terminal at the port of Durres is very close (and within walking distance) from the central train station of Durres.

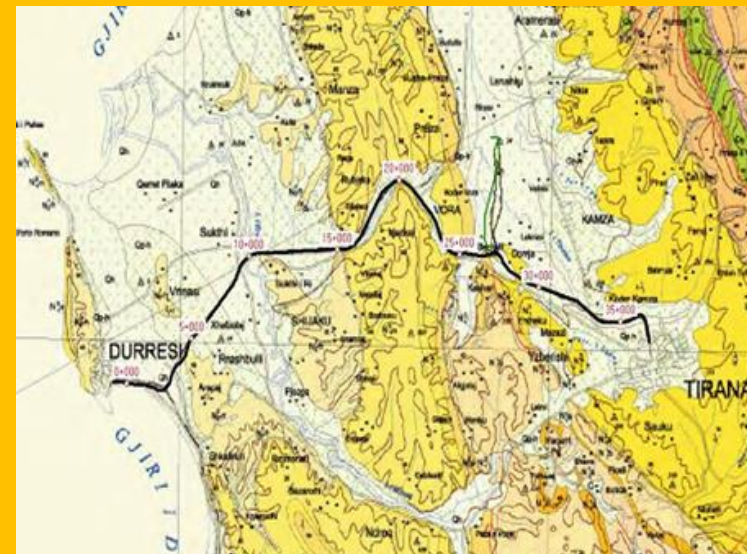


Figure 16: Map of area of Durres-Tirana-link to internal airport

The Belgrade case study, Serbia

DESCRIPTION OF THE CURRENT STATUS

Serbia has a weak rail network due to several infrastructures' delays. For this reason, a major renewal of railway tracks is currently underway. The rail link between Belgrade and Ljubljana (Slovenia), and consequently also the one with Piran (Slovenia) and Trieste, can be considered of good quality, thanks to its recent realization. On the contrary, the duration of the trips to the other cities of the ADRION area compromise the choice despite the low costs. Serbia, being at the center of Eastern Europe, has no access to the sea, and consequently has no direct maritime connections with the rest of the area, consequently the air and road routes are the main transport solutions. The vast majority of all passenger movements are carried out by private car with a small part of rail transport. In the transnational context, Belgrade is located in pan-European corridor 10, on the right bank of the Danube (corridor 7).

In terms of transnational road connectivity, through the 3 corridors mentioned and their branches, Belgrade is well connected with Zagreb-Croatia in the west, Budapest-Hungary in the north and Thessaloniki-Greece in the south. Furthermore, existing connections with improvement needs are the port of Bar-Montenegro to the south and connections to the east, to Sofia-Bulgaria and to the north-east with Romania (Figure 17).



Figure 17: Indicative extension of TET-T

When it comes to rail connections, most of the tracks need investments to be improved. The most important are the connections from Zagreb-Croatia and Budapest-Hungary to Belgrade and further from Belgrade to Thessaloniki-Greece and Bar-Montenegro. In terms of Belgrade's transnational connectivity, it is important to remember that Nikola "Nikola Tesla" airport is the busiest airport in the area with over 5 million passengers per year, but without rail connections to the Belgrade city center.

However, the main case that was explored was the potential of transnational, regional and national passenger movements in terms of

intermodal solutions and railway rehabilitation, as well as changes in passenger behaviors and habits in light of the latest construction projects in the city center and transfer of central and bus stations to new locations.

BELGRADE'S INTER-CONNECT CASE EXAMINATION PLAN

The examination of the influence of critical issues for Belgrade was developed in three directions:

- Effects of the circulation of central bus and rail stations, potential advantages in terms of intermodality as well as possible problems (for example connections with the southern and eastern parts of the city, changes in the regime and intercity bus timetables, new necessary connections, rail connections etc.),
- Possibility of railway connection to Belgrade airport "Nikola Tesla",
- Examination of new and activation of existing positions for the "Park and Ride" system in Belgrade.

The examination plan in general consisted of:

- Analysis of the current situation in terms of passengers demands, flows, interconnection opportunities,
- Coordination existing transport strategies and plans and others sectorial policies, plans and strategies,

- Analysis of three different levels: Local travellers (city of Belgrade level), national travellers (intercity and Belgrade river basin) and transnational travellers (Adriatic area).

The case study attempted to develop guidelines and proposals for the further development of the Belgrade transport system thanks to three sub-cases of intervention mentioned above, highlighting the new opportunities for intermodal and railway development, aiming at the same time to highlight possible problems and prepare recommendations to avoid possible negative effects of development.

This case study refers to a feasibility study with a detailed research of the flows and the projections of the future relations between transport demand and supply. Moreover one objective was to collect existing materials and data, projects and plans in one place, analyze them and create recommendations or highlight any existing and future weaknesses, with the aim of facilitating work on the realization of assets and future infrastructures and organizational projects of the Belgrade transport system.

Another objective was to provide an overview of the effects of future development, with the aim of allowing the public and private sector to be ready for the changes, in particular rail and bus operators, as well as the city's public transport system. Finally, another objective was to reduce carbon emissions to 90.2% compared to 1990 level. Better connectivity between the new railway station and the public transport system will have a positive impact on carbon emissions in Belgrade.

CONCLUSIONS

The Inter-Connect project pursued the promotion of integrated sustainable transport and the reduction of bottlenecks in public transport infrastructures, all by increasing the capacity of existing transport services and promoting integrated and connected solutions across the Adriatic and Ionian Sea.

The results obtained within the Inter-Connect project showed that the common objectives pursued, both at national and regional levels, concern the following aspects:

- Promotion of more attractive public transport services capable of involving an increasing number of users (both commuters and tourists),
- Creation of hub to hub connections between railways, ports, and bus stations,
- Creation of integrated fares systems and ticketing for tourists to facilitate the intermodal solutions both for passengers and tourists,
- Soft and technological solutions aimed to improve the railway network without major investments,
- Improvement of the real-time information and timetable integration.

The achievement of these objectives to promote rail and maritime intermodality within the ADRIATIC-IONIAN regions is possible only if the financial,

political, and institutional sustainability of projects are guaranteed. There are different solutions in order to build solid and durable projects as evidenced in the single Inter-Connect case studies.

The analysis of the Inter-Connect case studies showed that one of the fundamental prerequisites for the success of an intermodal transport strategy is the level of integration with existing national, regional, and local policies. This integration must be achieved through strategic plans that aim to improve accessibility to all the territories, considering not only the transport dimensions but also the role of transport in sustaining local economies and people equity (in particular in relation to elderly people).

One of the most important political support for the promotion of sustainable transport solutions, as evidence in the case studies analysed, are the Sustainable Urban Mobility Plans (SUMP) whose main objective is to satisfy the varied demand for mobility of people and businesses in urban and peri-urban areas to improve the quality of life in cities. The added value of SUMP is related to the possibility to integrate the others existing planning tools (not only related to transport), to allow a better participatory process in the policy making processes and to better monitor and evaluate the implemented measures. When the required action operates at wider geographical scales (regional or national), as evidenced in the Slovenian case, it is necessary to go beyond the SUMP and planning a wide participatory process involving actively national, regional, and local organizations. But this is not only the case of Slovenian case study. In all the Inter-Connect pilot cases it has been found that the creation of an

intermodal public transport strongly depends on the collaboration between several interested stakeholders (both public and private) in order to offer new efficient and attractive services for users. Without these wide collaboration networks, it is impossible to promote reliable and attractive train and ship services for tourists and local population. For this reason one of the main output of the Inter-Connect project is related to the definition of Memorandum of Understanding among local partners aimed to activate collaborations and operational schemes between local, regional and national operators in order to extend the transport network and improve intermodal solutions.

Good collaborations require an efficient and clear governance scheme. A good governance scheme allows to share the political and technical responsibilities among the different stakeholders and allows for the sharing of a common action plan. An example is the case of Emilia-Romagna case study, where the governance scheme adopted see a clear competences sharing among regional authorities, national rail operator and the local bus operators in order to create a common integrated ticket valid for all the public transport services operating at regional level. In this case there is not a technological innovation, but a governance innovation related to a written agreement among different public transport operators in operating a common service with a single ticket.

From a financial point of view, all case studies were mainly based on public investments deriving from different EU, national and regional sources. The financial analysis of the case studies revealed that, without public funds

available, the actions envisaged by the Inter-Connect project are difficult to achieve since many of these involve relevant investments not always available.

As can be seen in the Greek and Montenegrin cases, the financing needs of investments for sustainable mobility exceed the available resources. But as evidenced in the case studies where bigger investments are required, when a solid and precise business model is developed, with an accurate evaluation of the potential revenues, can help in overcoming these financing problems. Others case studies, for example the Emilia-Romagna integrated ticket case, showed that low-cost soft solutions could be activated pending bigger infrastructural investments.

The measures analysed in the Inter-Connect project focused on interventions both relating to infrastructure improvements and soft improvements more related to operational and organizational aspects. The Inter-Connect case studies shown as isolated interventions on the infrastructure not always have a great impact on increase of passengers (both tourists and local population) if they are not accompanied by synergies with the user needs and others relevant planning and political processes. As evidenced in Croatian and Friuli-Venezia-Giulia case studies, a strategical approach is required to reach ambitious targets.

MAIN LESSONS LEARNT

All the case studies analyzed in the Inter-Connect project showed that private car is still the first transport solution both for tourists and the major part of commuters (mainly for the commuters living outside the main cities in the rural areas).

Each case study developed different soft solutions aimed to increase the attractiveness of the public transport by increasing the travel comfort, reducing the travel time, improve the main interchange hubs, improving the public transport offer and quality and so on. Different solutions for the same problem: increase the number of people using public transport in order to reduce the negative externalities related to the usage of cars.

The main problems tackled by the Inter-Connect case studies were:

- Perceived low level of public transport services (in terms of service quality, network coverage, reliability),
- Lack of reliable, real time and integrated information for final users on the different transport solutions (e.g. integrated tickets and timetables, etc.),
- Seasonal problems related to the increase of public transport demand during specific periods. During these peak periods it is possible to register conflicts among tourists and commuters' transport needs,
- Low connectivity between different intermodal hubs (bus-train nodes and port hubs with the rest of the urban area),

- Long time required to implement the required investments aimed to improve the public transport infrastructures (more efficient train lines infrastructures, etc.),
- Low level of participation of the main stakeholders (private companies) in the definition and implementation of new sustainable public transport solutions.

The Inter-Connect case studies assessment shown as urban/local problems and weaknesses in public transport provision as a relevant impact on a national and transnational level. For example, port hubs not adequately linked with the main public transport hubs (train stations, international bus stations, etc.) reduced the possibility to offer integrated and more sustainable travel solutions at cross-boarders level. For this reason, it is fundamental to work on these political and technical aspects at local/urban level in order to promote better accessibility and sustainable connections at ADRION level.

The key soft solutions founded in the Inter-connect project in order to improve intermodality and sustainable public transport were:

- Better planning of interchanges among local/urban public transport hubs,
- Timetables integrations,
- Real time information systems,
- Better information systems for final users (dedicated app, etc.),

- A comprehensive public transport system integrated also with cycling and walking networks,
- Integrated ticketing and e-ticketing,
- On-demand public transport solutions.

As shown in the Croatian, Montenegrin and Slovenian case studies for example, real-time information, accessible to everyone (also in foreign languages), easy to understand and collected in a single place (e.g. websites regularly updated, dedicated app, etc.). The information to be provided to final users have to be not only related to timetable or real time data, but also to the ticketing and fare systems. Often it is not easy for a tourist to understand the different fare system and rules operating in the different countries.

In relation to this topic, it is important to simplify the public transport fares systems and provide in an easy way all the relevant information to final users. This is a first step for a public transport better promotion. The second step is related to define and implement integrated ticketing system using a Mobility as a Service (Maas) approach. The Emilia-Romagna Region case study is a valid example that shows the importance of integrated ticketing to promote public transport (train and bus) making public transport more attractive and easier to use for tourists.

When considering the ADRION region, it is evident as problems related to intermodality are not only related to inland transports but also to maritime connections. As evidenced in almost all the Inter-Connect case studies, it is

essential to improve the integration among inland and sea transport services. This requires working on strengthening the connections at regional and urban level, focusing on creating new links and/or improve existing ones among port hub and main train and bus stations. All these interchange hubs have to be improved in order to guarantee high service and quality standards.

At the infrastructural level, the improvement of existing infrastructures (mainly train infrastructures) is a key aspect for the promotion of better connections and in order to have more tourists and commuters using public transport. As evidence from the Serbian, Emilia-Romagna and Albanian case studies, when big investment in infrastructures are not available in the short term, it is possible to start working on soft solutions able to improve the existing services and provide them in a more efficient way.

Finally, it is necessary also to work more on cross border public transport connections, both by train and ships. As evidenced from the Trieste and Croatian case studies it is possible to plan new cross boarder services. These services in ADRION areas are very weak, with often irrelevant demand that does not justify such measures.

INTER-CONNECT ROADMAP

INTRODUCTION

The 'Intermodal Strategy for ADRION – Roadmap' (**Inter-Connect Del. 3.1.1.**) comes as an extension of the case studies key generalized messages, the review of relevant policies and best practices, the current and future connectivity prospects at regional and transnational level and partnerships' experience gained over Inter-Connect project.

The ROADMAP, a kind of strategy for ADRION, aims to give input to future policies, generalizing and translating project's results into recommendations for future public and private actions for intermodal and rail transport promotion. Furthermore, it aims to provide the roadmap as a useful guide for authorities and other interested parties. Organizations' capacity building is enhanced through the Inter-Connect activity "Intermodal Transport Capacity Building Toolkit" which serves Inter-Connect's principle objective of training authorities on intermodal transport and rail promotion actions.

The analysis of the current situation, the feedback from stakeholders' plans and passengers' needs along with the identification of future trends and opportunities formulate the roadmap for ADRION's intermodal/rail development. The roadmap - a prioritization of interventions - is estimated to be a useful tool in the hands of authorities in order to prepare an efficient and realistic agenda. Among the proposed interventions of the roadmap are integrated solutions (e.g. information), new cooperation schemes, services'

optimization, new services, harmonized procedure / management structures and funding enablers' mobilization.

The selection procedure for the measures mining to form the Inter-Connect Roadmap on enhancing intermodality in ADRION Region, is based on a three-step approach; (i) desktop research (in the framework of previous Inter-Connect activities but also accompanied by further research), (ii) internal consultation and (iii) stakeholders' wisdom mixture were activated (Figure 18).

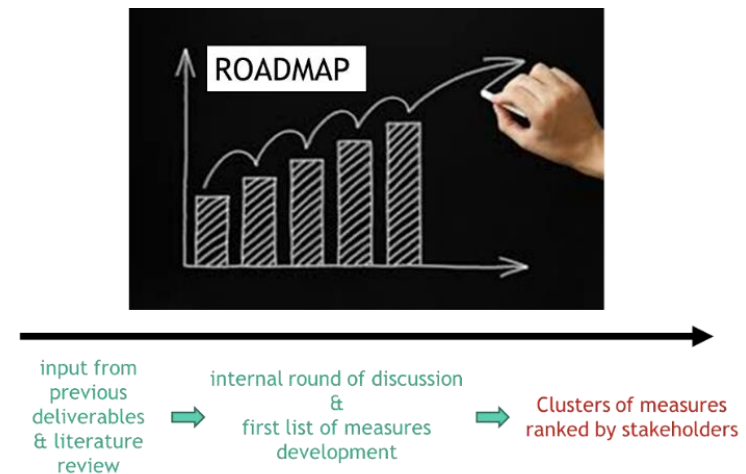


Figure 18: Roadmap formulation approach

FROM LOCAL TO TRANSNATIONAL CONNECTIVITY; MEASURES IDENTIFICATION

The Inter-Connect project pursued the promotion of integrated sustainable transport and the reduction of bottlenecks in public transport infrastructures, all by increasing the capacity of existing transport services and promoting integrated and connected solutions across the Adriatic and Ionian Sea. The measures analysed in the Inter-Connect project focused on interventions both relating to infrastructure improvements and soft improvements more related to operational and organizational aspects.

It should be mentioned here that overlaps could be identified since there is no chance for a measure to exist as stand-alone solution; i.e. ICT is a technological issue that however cannot apply at large and integrated scale if agreements among different stakeholders are not in place – a platform offering integrated information for Public Transport modes asks for stable cooperation among the providers, awareness raising campaigns without the existence of car alternatives is meaningful etc. For this reason, measures were clustered based on the principle axis rather on the accompanying, necessary however, measures.

High level cooperation / agreements

Top – down well scheduled agendas are sometimes the basis for triggering also the necessary participatory bottom – up approach. EU central policy for transport as well as for cohesion are on the right path; EU Commission closely working with Member States for drawing up Partnership Agreements and Operational Programmes that entail investment priorities based on real identified development needs in order to support cohesion¹.

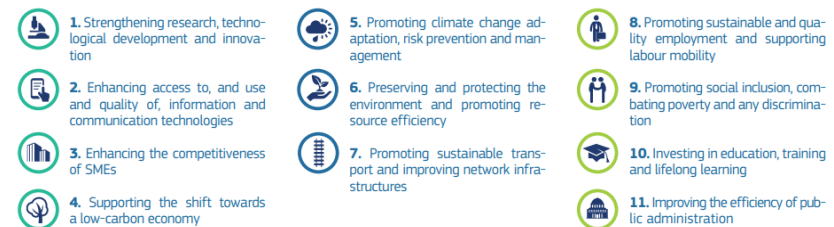


Figure 19: The 11 thematic objectives of Cohesion Policy 2014-2020¹

Celebrating more than 30 years of life, transport policy is a cornerstone of EU policy. Opening-up of transport markets and the completion of the Trans-European Transport Network while investing on resource efficiency and on the transition to a low carbon economy is offering an opportunity for sustainable transport. The latest strategy for ‘A European Strategy for Low-Emission Mobility’ (COM(2016)0501), that proposes measures to accelerate the decarbonization of European transport, sets the foundations

¹ https://ec.europa.eu/regional_policy/sources/docgener/informat/basic/basic_2014_en.pdf

and poses the goal of reaching a zero emissions, as established in the 2011 White Paper on the future of transport, with a view to adequately contributing to achieving the COP 21 Paris Agreement goals².

Regarding the application of EU laws, regulations and decisions become binding automatically throughout the EU on the date they enter into force and directives must be incorporated by EU countries into their national legislation. The incorporation and the right implementation of the EU law is upon Member States. Just to mention here that in 2015, the policy areas with the highest score of infringements by Member States were environment (20%), transport (18%), financial services (13%), internal market (9%) and migration (8%)³.

Reflecting on the above regarding the implementation of EU policy and the cooperation among Member States, high level agreements and political continuity for achieving high connectivity at national level that is strictly linked with transnational level seem to be necessary for ADRION:

- National level decisions: intermodal terminals categorization, definition of national terminals' transnational role and identification of potential clusters/alliances,

- Transferring programme development of 'best practices of intermodal solutions' at national and regional level – make the matching of terminals / cases and adopt best practices,
- Assuring / allocating dedicated budget per year with a long-term time plan - allocation of various re-sources (funds) to enable competent authorities to subsidize cross-border services during the start-up phases,
- Develop an integrated approach of transport policy (to achieve sustainable transport—integration horizontally among sectors, institutions, and modes, and vertically among levels of jurisdiction and authorities.),
- Encourage territorial integration—aligning goals and responsibilities of neighboring cities and towns, and countries—can also help create effective governance frameworks and policies (e.g. MoU signed- among ADRION Countries),
- Fostering the integration of Intermodality policies for passenger travel,
- Legislative actions to promote joint operation of an international service (contracts among national PSO's) - Since passenger transport is non profitable, it cannot survive without financial

² <https://www.europarl.europa.eu/factsheets/en/sheet/123/common-transport-policy-overview>

³ <https://www.statewatch.org/news/2017/nov/ep-study-implementation-eu-law.pdf>

- support from States. Public Service Obligations in transnational transport services should be further examined,
- Elaboration of a multilevel protocol at regional, national level and transnational level to promote maritime-rail intermodality.



Figure 20: EUSAIR Pillars

Stakeholders' engagement & actions/ initiatives synergies

The EU Strategy for the Adriatic and Ionian Region (EUSAIR), the macro-regional strategy adopted by the European Commission and endorsed by the European Council in 2014 that is connected to Interreg ADRION programme, was jointly developed by the Commission and the Adriatic-Ionian Region countries and stakeholders, which agreed to work together on the areas of common interest for the benefit of each country and the whole region. One of the 4 core pillars of the strategy refers to transport; Connected Region – however transport is also embedded in the other 3 pillars⁴ (Figure 20).

Strong cooperation among Member States and key stakeholders for the promotion of sustainable transport can act as leverage for keeping financial support also alive; example is the work behind the launching of the POSITION PAPER ‘Supporting the transport Policy Objective for the European Territorial Cooperation Programming Period 2021-2027’ that aims to highlight the strategic nature of transport priority and to introduce and suggest some further advices on how to properly address such priority within the upcoming programming period, 2021-2027⁵.

As obvious from the above, building on connectivity is born on good neighborhood and cooperation. Sub measures in this category can be:

- High level of stakeholders’ engagement (guaranteeing cooperation),
- Public Private Partnerships (i.e. for improving intermodal hubs),

⁴ <https://www.adriatic-ionian.eu/about-eusair/>

⁵ <https://sites.google.com/view/transport4cohesion>

- Establishing a regular communication, information and initiatives exchange and coordination of joint projects within the intermodal PT sector,
- EUSAIR – TEN-T: from macro-regional strategies to development; Strengthening North-South and East-West relations by means of the identification of multi-modal corridors alongside the TEN-T network including, in particular, maritime connections between the coasts of the Adriatic and Ionian Seas and intermodal connections between the seaports and the hinterland of the region,
- Establish a firm communication to the relevant stakeholders through regional organisations / Transport Community active role – monitoring and continuity/stability in area’s plans and projects,
- Synergies among cross-border and territorial development projects for implementing pilot projects and guarantee continuity of financing for a long period.

Awareness raising for sustainable mobility & crowd-learning

Sustainable urban mobility era can only be reached if innovative approaches that strongly engage citizens in the decision making and implementation phases apply. The term “innovative” here refers to the adoption of ICT based channels able to motivate citizens in being part of the transition era.

⁶ <https://www.transport-community.org/wp-content/uploads/2019/11/transport-community-2019-wb-summit-connectivity-panel.pdf>

ICT based tools for encouraging citizens’ involvement in the sustainable planning procedure refer to, free of time and location constraints, technology-mediated forms of citizens’ participation; no need for physical attendance at conventional stakeholders events where citizens are usually represented by just few members taking the role of simple observers.

Awareness raising and citizens’ & stakeholders’ engagement is a crucial issue when trying to promote sustainability. Without the active support of the end users and beneficiaries (i.e. citizens, tourists, and key actors in sustainable mobility) sustainability plans will remain plans without any practical value. On the contrary, the feeling of ownership from the end users is necessary for the plans to be widely accepted and viable. Awareness raising is also linked to policy crowdsourcing and participatory planning approaches. Crowdsourcing supports idea-generation, and a production model that leverages the dispersed knowledge of groups and individuals to produce heterogeneous resources while resulting in interventions that are well accepted and respected⁶.

Tailoring the awareness raising to tourism boost in ADRIAN, the 4A of commitment that should be built among tourists is important to consider⁷; tourists that trust the ADRIAN cities and citizens and not only have the

⁷ <https://www.polisnetwork.eu/document/resources-covid-19-mobility/>

willingness to revisit the cities but also to transfer this experience to other tourists for multiplying the effects.

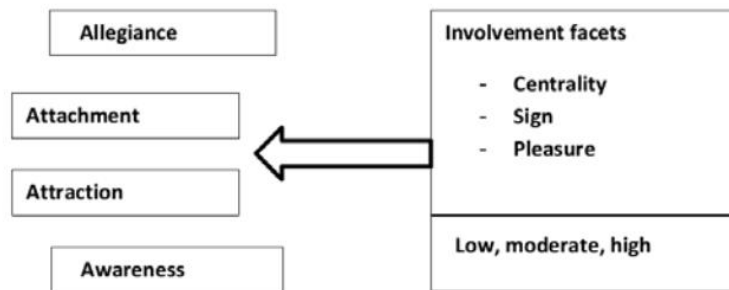


Figure 21: The psychological continuum model⁸

Therefore, awareness raising – participatory planning and crowd-learning is a principal building block for sustainability and connectivity – subareas are:

- Providing motivation for ADRIAN citizens to travel inside ADRIAN with rail and maritime modes,
- Investment on travelers’ behaviour change – towards eco-tourist profile development,
- Participatory planning via injecting the knowledge of the crowds.

⁸ Funk, D. (2008). Consumer Behaviour in Sport and Events: Marketing Action (1 ed.). Oxford: Elsevier

Sustainable tourism promotional campaigns & initiatives

Increasing off-season (all year tourism) and out of city-known travelling in order to spread tourist flows as well as limit the externalities of demand seasonality seem to be very significant for the future of the ADRIAN region – sustainable mobility (connectivity) and sustainable tourism are two interrelated sectors to be jointly treated. Furthermore, ADRIAN cities can mutually support tourism growth.

As mentioned in the Roadmap for the Adriatic-Ionian Region Heritage protection, cultural tourism and transnational cooperation through the Cultural Routes, generalized ideas for the future are:

- Joint brand building,
- Awards,
- Common ADRIAN portal⁹.

Special services can also mutually support tourism boost as well as sustainable transport:

- Combined Services – this type of transport executed via two at least different means of transport, but through a single contract. (e.g. TRAINOTAXI service in Greece),

⁹ <https://www.adriatic-ionian.eu/wp-content/uploads/2019/01/Roadmap.pdf>

- Thematic trains and event trains (e.g. TRENOSKI in Greece, field trips in Croatia, BALATON MIX in Hungary),
- Provision of discounts with the purchase of public transport tickets,
- Trains that can carry cars, bikes (e.g. the case of night trains in Athens – Thessaloniki route, Nextbike in Croatia, Slovenia),
- Combined tickets for mutual promotion of public transport means¹⁰.

Summarizing the 4th identified cluster of intervention referring to Sustainable Tourism promotion includes:

- Campaigns for promotion of new types of tourism – finding ways to reduce seasonality (e.g. winter visit places campaigns), sport tourism, religious tourism, eco-tourism etc.,
- Joint promotional campaigns among ADRIAN countries for increasing flows (trips within ADRIAN Region),
- Special services e.g. old rail trip in SEE, connected to marine life via ferry experience.

¹⁰ Rail4See SEE Interreg project 2007-2013, Del. Action 6.4: Harmonization platforms

ICT / Apps

ADRIAN region is an area undergoing radical changes the last years; its cities, although fragile from the recurrent effects of economic crisis, are timidly moving on a recovery path and are trying to catch up with the rest European hubs. The development of a powerful Public Transport Network in European cities is just upon the road to future sustainability and is strictly connected with soft investments, unburdened from the need for large funds that sound as utopia in the austerity backdrop being experienced in Europe. Investing in technological solutions that could lead in advanced services provision to travellers, could steer a secure and successful recovery path.

ICT (information and communications technology) systems are one of the aspects adopted by the operators in order both to facilitate their daily operation and increase their market share. Based on the experience, it is generally considered that traveler information has the potential to reduce travel times and improve their reliability and that advanced traveler information systems (ATIS) are among the most cost-effective investments to be done by a transport provider¹¹.

¹¹ «Increasing the attractiveness of public transport by investing in soft ICT based measures: Going from words to actions under an austerity backdrop

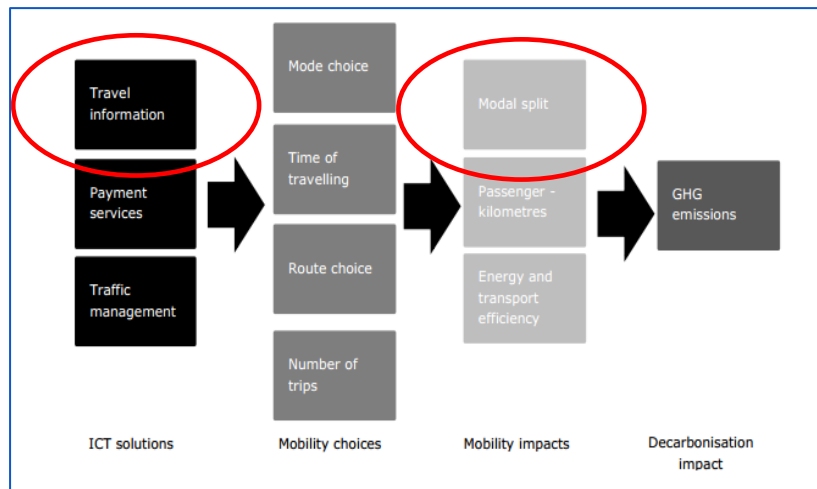


Figure 22: ICT solutions and impacts ¹²

Real time reliable information provision to passengers can support the increase of cars occupancy rate and by engaging drivers and passengers in road monitoring, can shift them to Public Transport (perceived waiting time is reduced), can therefore reduce congestion and bring relevant social, economic and environmental benefits.

ICT interventions for Inter-Connect project include (not exhaustively) the following:

- Thessaloniki's case, Greece», Morfoulaki, M., Myrovali, G., Kotoula, K., Research in Transportation Economics, 51, pp. 40-48, 2015

- Digital tools exploitation for making ADRION cities more accessible, sustainable, and attractive (e.g. integrated APPs presenting the city, museums, areas of interest, public transport itineraries),
- ICT exploitation at terminals,
- Transnational intermodal journey planners,
- Early warning services and information services for travellers.

Advanced (harmonized, integrated, of high quality) services provision at local level

Just as for the whole Europe where urban areas are the building blocks of each core (transport and of course overall) system, ADRION cities consist the main nodes of ADRION region. At a smaller level, ADRION cities should be led by example by recognizing their importance and upgrading and modernizing internal connectivity (city-level and city-to-region) on the basis of sustainability. This cluster of measures is composed of different soft based measures as well as Public Transport/mass transport and sustainable transport services provision:

- Harmonization of PT timetables within cities and related catchment areas (linking also Points of Interest),

¹² Grinsven A.H., Schrotten A., Essen H.P. (2012), Towards optimal passenger transport: the role of ICT solutions in promoting co-modality, Bijdrage aan het Colloquium Vervoersplanologisch Speurwerk 22 en 23 november 2012, Amsterdam

- New services / enhanced PT services connecting intermodal nodes (e.g. ports/airports) with cities,
- Innovative forms of mobility inside ADRIAN cities – e-bikes, shared bikes, micro-mobility etc.,
- Early warning and information services for travellers,
- Regional railway for speedy regional connections,
- Tramway/light rail to move high numbers of passengers within conurbations,
- Area services to feed rail-bound services,
- Online tickets purchase,
- Upgraded services and plans for PT support in case of ‘shock variations’ – sustainable and resilience recovery plans.

Advanced (harmonized, integrated, of high quality) services provision at transnational level

Widening the viewing angle, transnational services should also be provided (and upgraded) in order to complement Region’s connectivity.

Critical mass among ADRIAN countries seems to be considerable low (according to **Inter-Connect Del. 1.3.1**) however national agreements and joint campaigns as presented in the previous clusters of measures could mutually support demand generation. ADRIAN countries and cities extroversion should be strongly supported by getting involved in transnational networks and forums so as to build a really engaged community of tourists coming also from outside ADRIAN.

Significant for the transnational travel experience is the limitation of the perceived trip duration including the transfer and waiting times that are the most discouraging aspects for all other than private car alternatives. Having access in the information the traveler needs before and, on the trip, the passenger gains time savings; information before the trip can decrease waiting time while on route information can help to reduce the perceived waiting time.

Another aspect of the transnational connectivity of ADRIAN would be the development of port clusters and airport clusters strongly connected to the hinterlands that can further join forces for mutual support intra-ADRIAN tourism. Ports – Airports connectivity is also a good example for promoting cruise tourism – INTER-PASS Intermodal Passengers Connectivity between Ports and Airports, ADRIAN 1st call 2014-2020 project, is resulting in an Integrated Strategic Plan for better connections of ports and airports in Adriatic-Ionian Region.

Retrieving experience also from other Interreg Programmes, transnational connectivity can be also supported via the activation of PSOs/PSCs; Rail4See project has implemented an in-depth analysis of the PSO opportunities (Regulation (EC) No 1370/2007 Public Service Obligations). The regulation, in force since December 3rd of 2009, applies to publicly obligated passenger transport services, in particular rail services. A great number of local, regional, and urban passenger rail services could not be operated without public funding. Also, for some long-distance services operating costs cannot be covered by ticket revenues, esp. when ticket price level or demand are

low and here is where PSO comes. More recently, CONNECT2CE project has focused also on PSO, examining Cost-border PSO financial model between Slovenia and Croatia and developing a public service obligation (PSO)/a transport service contract for cross-border bus traffic between Austria and Hungary (AT-HU).

Also, this cluster of measures refer to a combination of solutions to support transnational connectivity:

- New transnational services / enhanced transnational services connecting ADRION hubs – PSO implementation,
- Integrated tickets for ‘transnational’ mode (for the transnational trip e.g. rail, ferry) and local PT modes (last mile), combined services,
- Cooperation among rail & maritime sector and air transport providers (e.g. Bologna as an airport node connected via rail with the rest Italian cities and Slovenia),
- Cruise cities alliances which would also promote sustainable mobility in port towns,
- Early warning services,
- Online tickets purchase,
- Coordinated and fully communicated actions to support rail and maritime connectivity arising also as opportunity through crisis.

Hard 'rail' measures – infrastructures

The Trans-European Transport Network (TEN-T) policy supports and symbolizes connectivity and accessibility for all regions of the Union. The completion of the core Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports, and railroad terminals has met many challenges (e.g. liberalization, standardization, technological innovation) and is still under completion. Apart from the physical infrastructure principal dimension TEN-T policy supports also the injection of innovation and digitalization to all modes of transport for reaching the joint goals of improved use of capacity, reduced environmental footprint and increased resource efficiency as well as enhanced safety levels¹³.

Benefiting from financial mechanisms like CEF is significant. The Connecting Europe Facility (CEF) is the EU funding instrument for strategic investment in transport, energy, and digital infrastructure. In the transport sector, CEF is dedicated to the implementation of the TEN-T and aims at supporting investments in cross-border connections, missing links as well as promoting sustainability and digitalization. During the period 2014-2019, CEF Transport has awarded EUR 23.3 billion in grants to co-finance projects of common interest, out of which EUR 11.3 billion was transferred from the Cohesion Fund. Open priorities as for 2021-2027 are:

¹³ https://ec.europa.eu/transport/themes/infrastructure/ten-t_en

- Advance work on the European transport network, while helping the EU transition towards connected, sustainable, inclusive, safe, and secure mobility,
- Decarbonize transport e.g. by creating a European network of charging infrastructure for alternative fuels and prioritizing environmentally friendly transport modes,
- Invest in transport projects offering high added value in cohesion countries, through a dedicated budget,
- In the context of the Action Plan on Military Mobility: adapt sections of the transport network for civilian-military dual-use (for instance technical requirements on dimensions and capacity), using a dedicated budget¹⁴.

While mentioning therefore ‘hard’ measures we refer to:

- Interoperability issues for rail transport (– or technical compatibility - of infrastructure, rolling stock, signaling and other subsystems of the rail system, as well as less complex procedures for the authorization of rolling stock across the European Union's rail network),
- Infrastructure projects for rail - completion and interconnection of the national/cross border network,

- Connecting peripheral ADRIAN areas with the TEN-T core network (present and future network, referring to the extension in the western Balkans),
- Infrastructure projects for terminals – facilities, connectivity port – hinterland or rail main stations – hinterland,
- Facilitation of border crossing in rail transport.

MEASURES’ RANKING PER INTER-CONNECT CASE

Among the selected measures, each of them had to be analysed from a local perspective. There are certain specifics of each country and the region regarding measures’ feasibility, activities already on-going, priority and overlapping or dependency (predecessors) and different level of development of infrastructure, organizational issues, and equipment. Another issue visible in terms of ADRIAN Region composed from EU member states and non-EU countries is the level of harmonization and interoperability achieved, where some countries already have in place all or many of the necessary preconditions (legal, infrastructural etc.) and where a system upgrade is only needed and on the other hand, countries without or at low level of infrastructure quality, missing legal framework and other basic requirements.

¹⁴ https://ec.europa.eu/transport/themes/infrastructure/cef_en

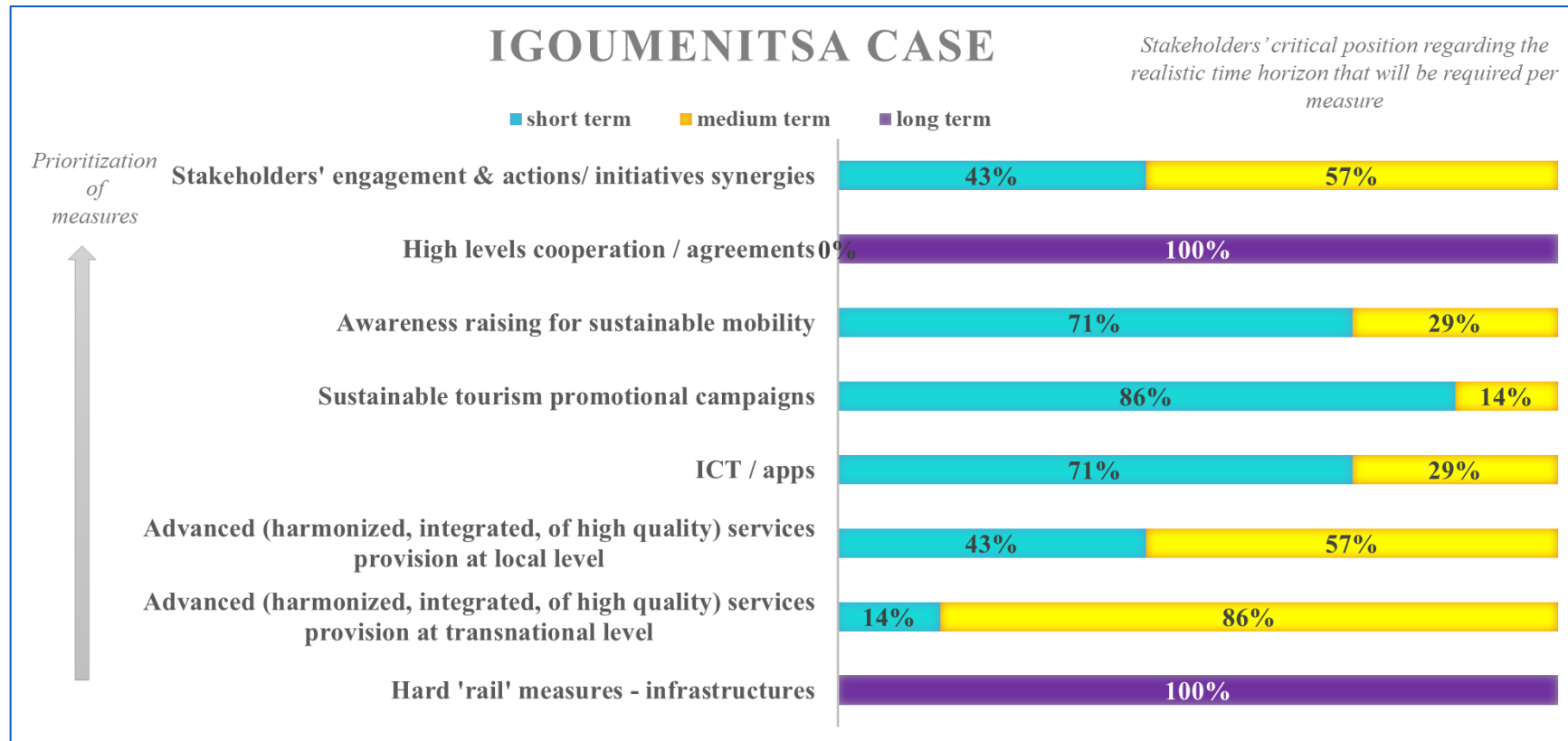


Figure 23: The case of Igoumenitsa, GR

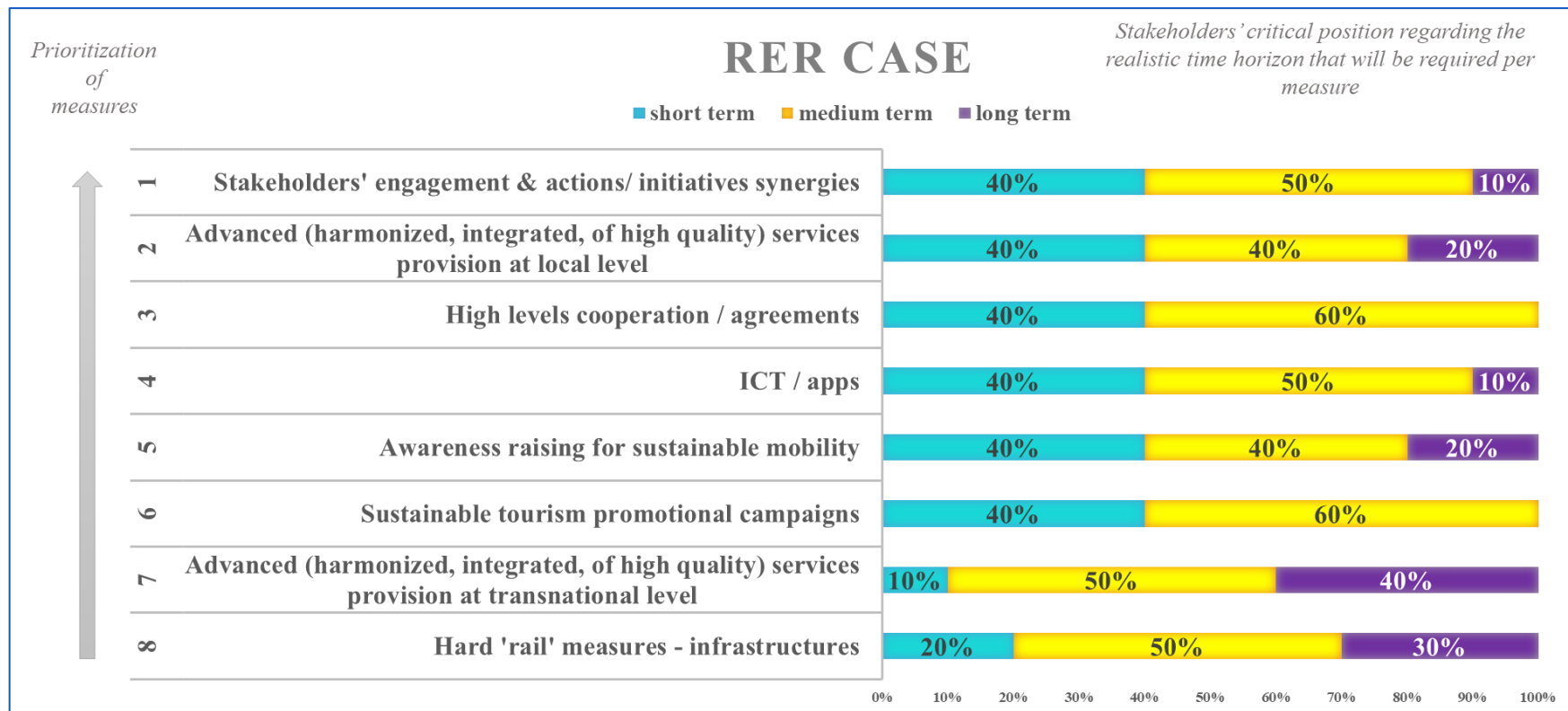


Figure 24: The case of Bologna and Region Emilia Romagna, IT

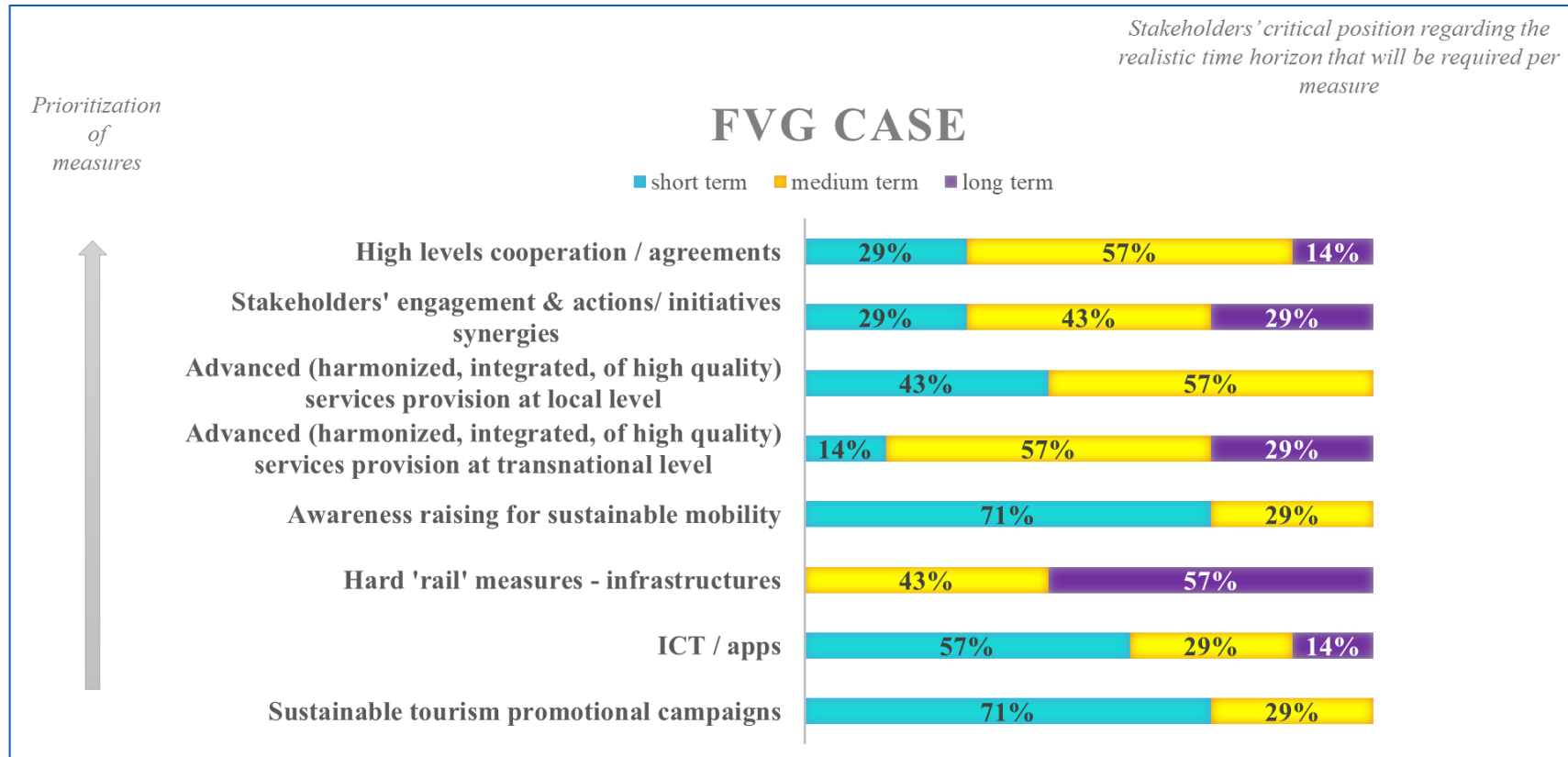


Figure 25: The case of Trieste and Friuli-Venezia Giulia, IT

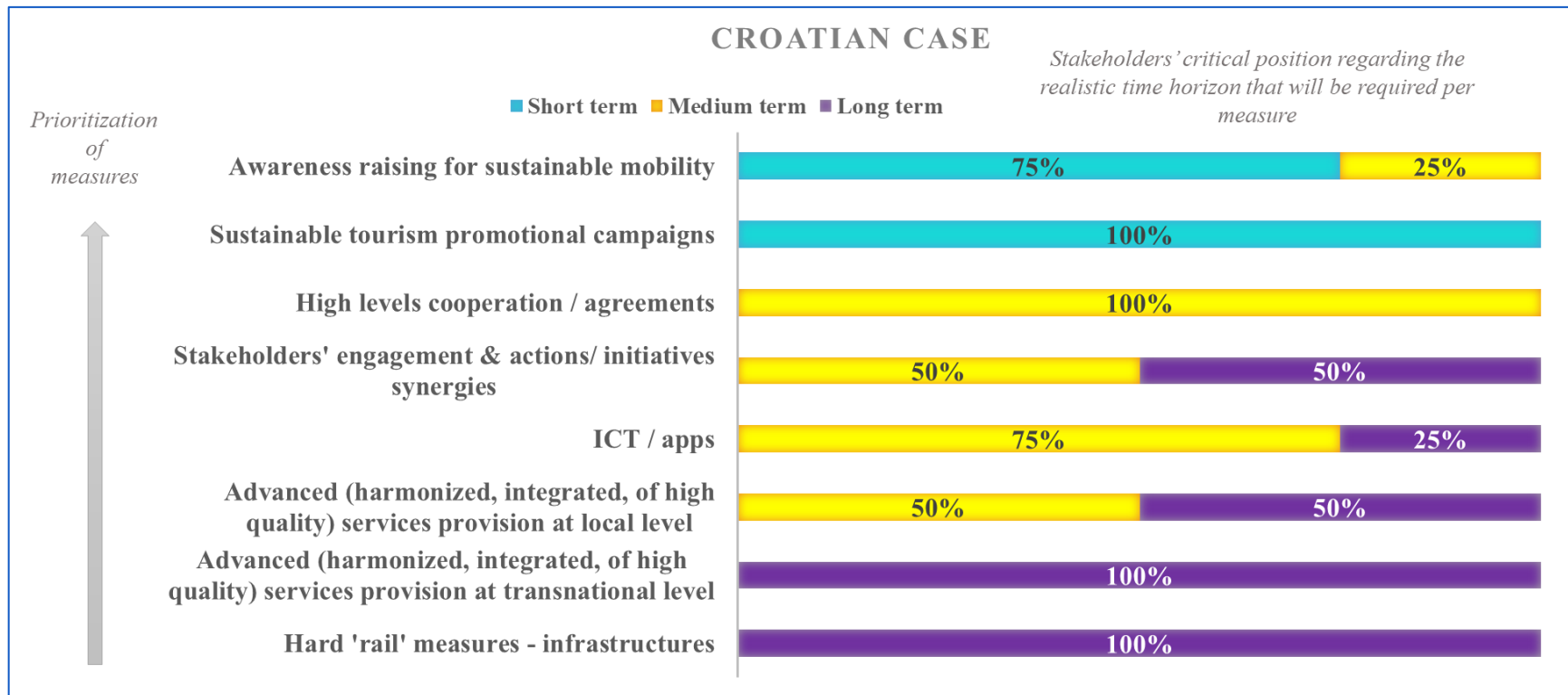


Figure 26: The case of Zagreb, HR

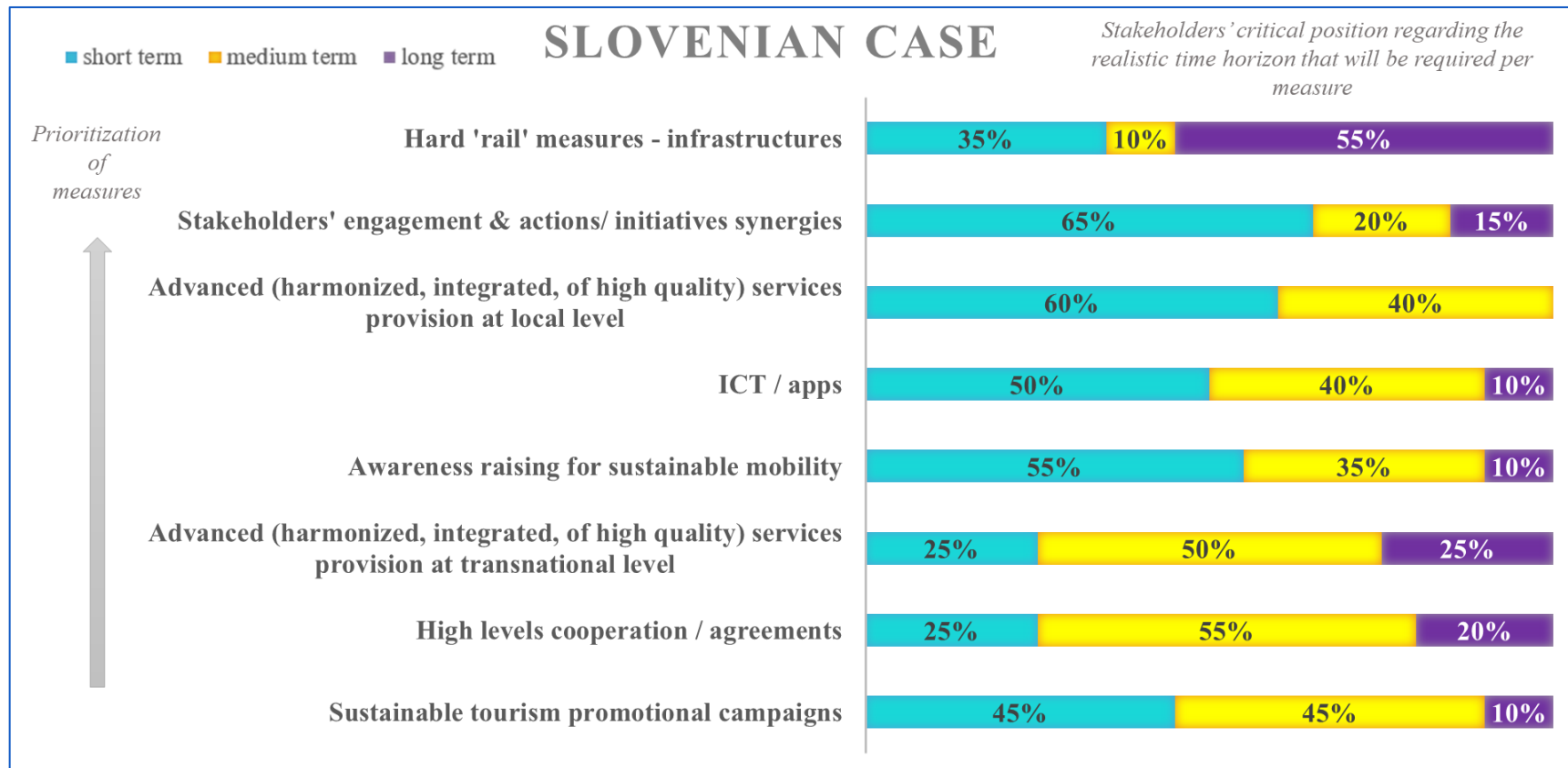


Figure 27: The case of Ljubljana, SI

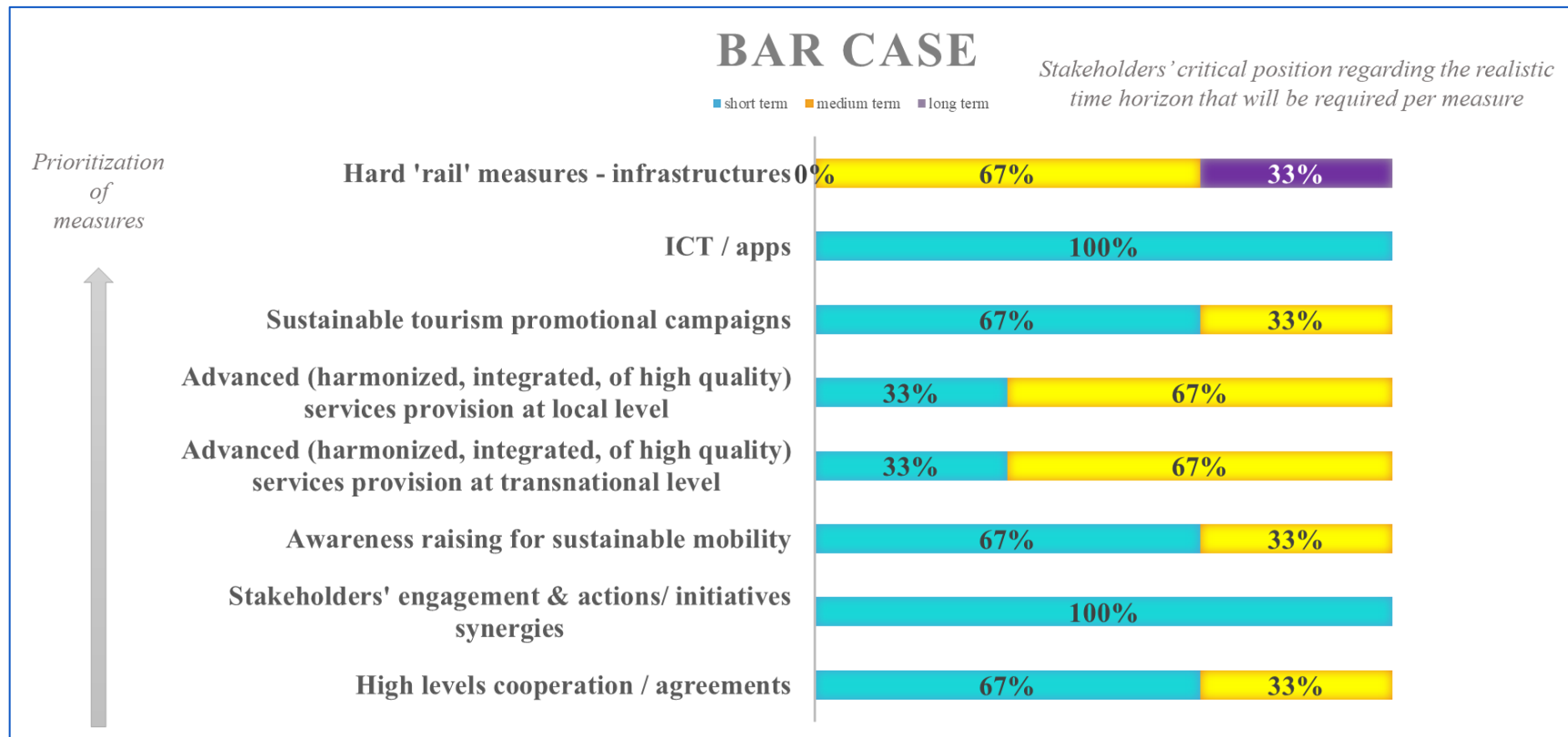


Figure 28: The case of Bar, ME

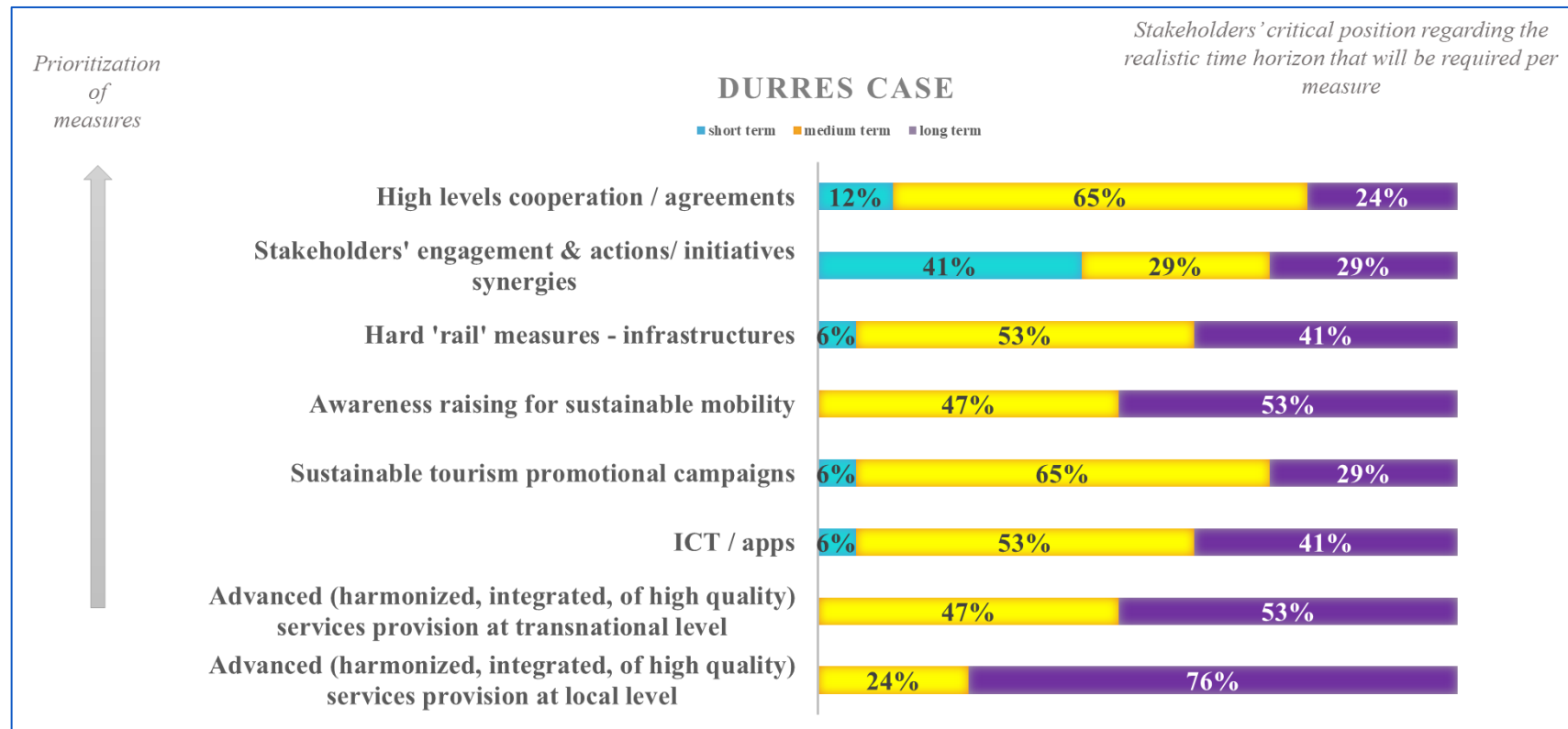


Figure 29: The case of Durres, AL

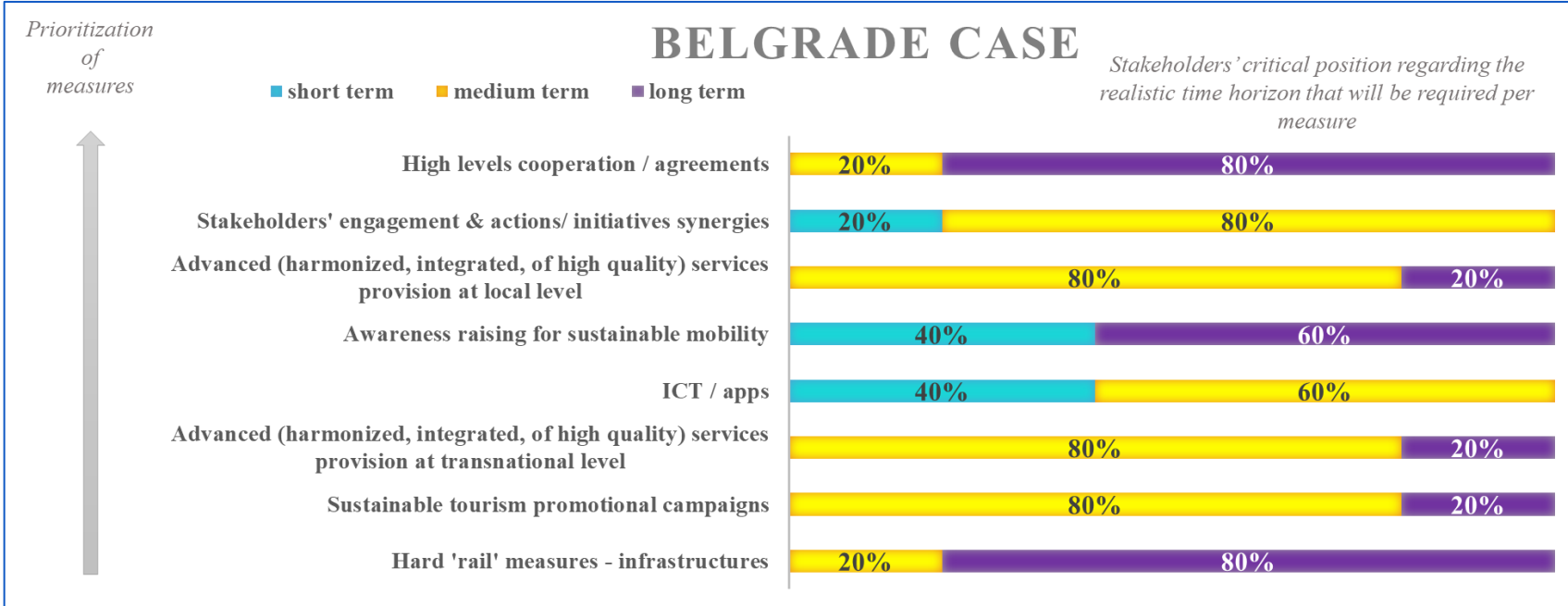


Figure 30: The case of Belgrade, SB



Stakeholders' critical position regarding the realistic time horizon that will be required per measure

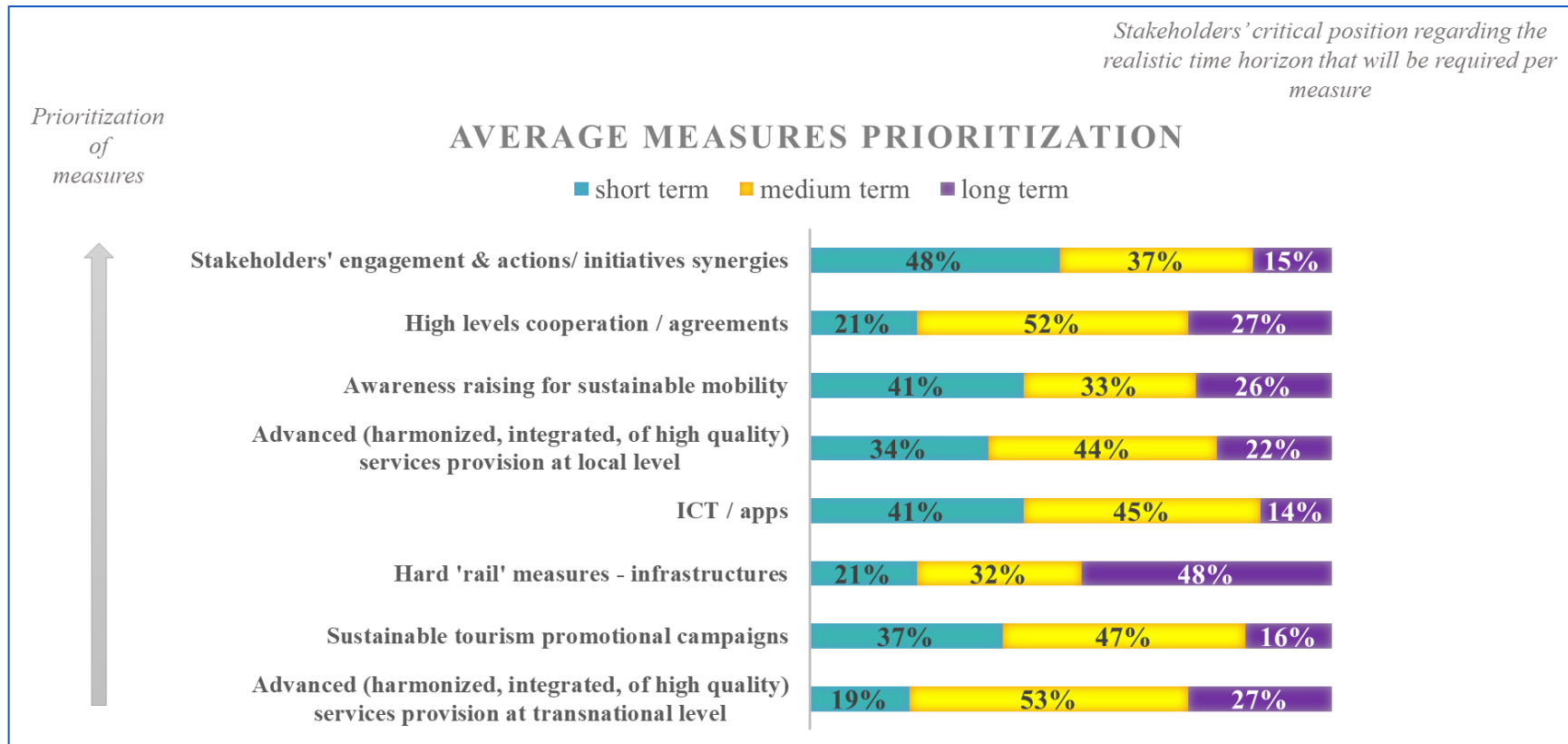


Figure 31: Measures hierarchical order – joint analysis

It becomes apparent that stakeholders have prioritized the measures in a different way, according to the special needs of each case. For example, as regards the hard measures priority, it is interesting that 2/8 cases ranked it as a high priority while 4/8 as a low priority. Furthermore, there are cases that seem to present similar enough rankings i.e. Zagreb and Igoumenitsa (4 lowest priority measures are the same for both). Stakeholders' engagement as well as high level cooperation agreements rank for almost all cases at the very first places (for engagement 2/8 as 1st, 4/8 as 2nd, 1/8 as 4th while for cooperation 3/8 as 1st, 1/8 as 2nd, 2/8 as 3rd).

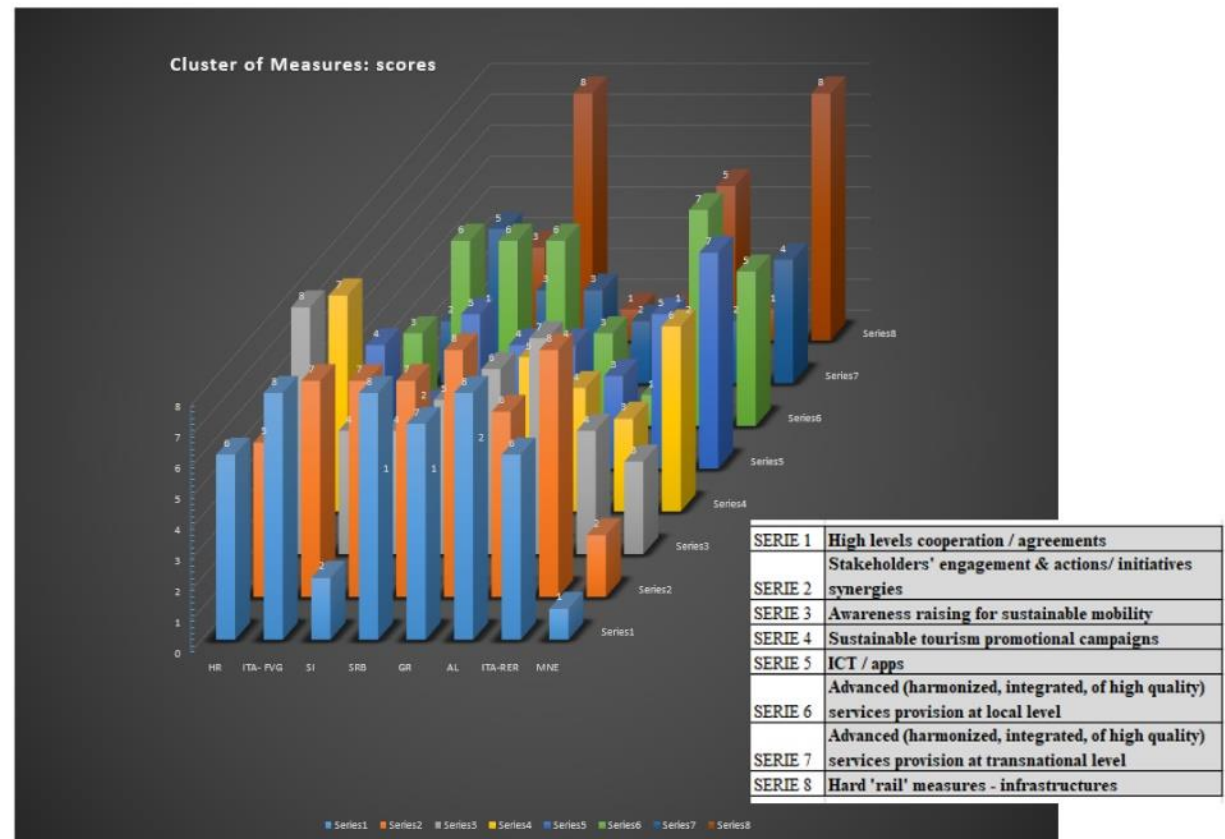
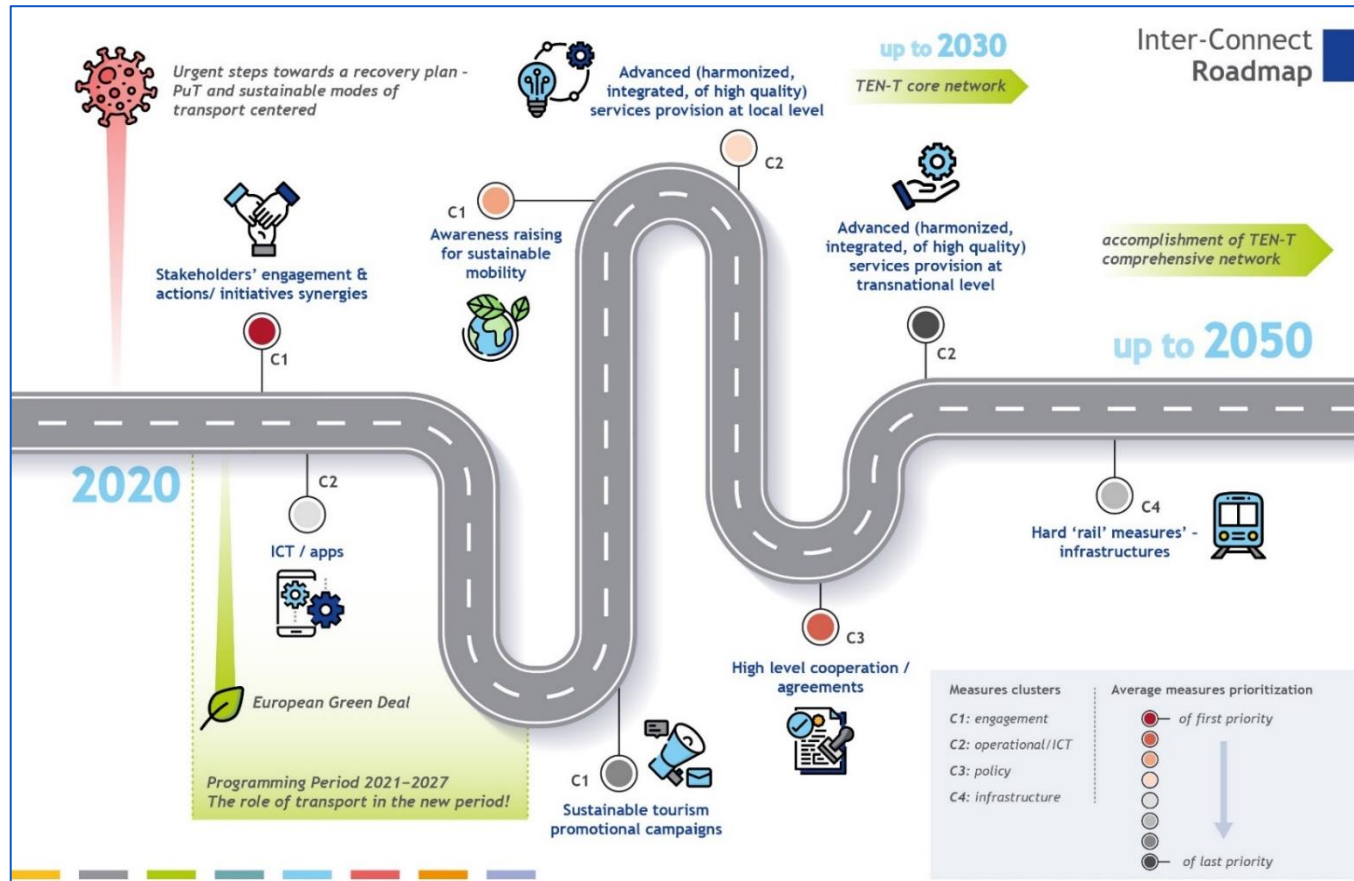


Figure 32: Measures ranking per case (Inter-Connect Del. 3.2.1)

ROADMAP

Based on the input received by the stakeholders, averaging of prioritization took place giving birth to the Inter-Connect Roadmap. This participatory approach with the injection of further critical assessment by the partners resulted in the Inter-Connect Roadmap.



Inter-Connect (1/2) Roadmap

Stakeholders' critical position regarding the realistic time horizon that will be required per measure

ICT / APPS

- Digital tools exploitation for making ADRION cities more accessible, sustainable and attractive (e.g integrated APPs presenting the city, museums, areas of interest, public transport itineraries)
- ICT exploitation at terminals
- Transnational intermodal journey planners
- Early warning services and information services for travellers

AWARENESS RAISING FOR SUSTAINABLE MOBILITY

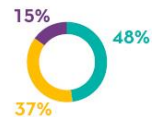
- Providing motivation for ADRION citizens to travel inside ADRION with rail and maritime modes
- Investment on travellers' behaviour change – towards eco-tourist profile development
- Participatory planning via injecting the knowledge of the crowds

2020

2050

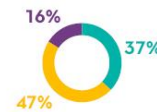
STAKEHOLDERS' ENGAGEMENT & ACTIONS/ INITIATIVES SYNERGIES

- High level of stakeholders' engagement (guaranteeing cooperation)
- Public Private Partnerships (i.e. for improving intermodal hubs)
- Establishing a regular communication, information and initiatives exchange and coordination of joint projects within the intermodal PuT sector
- EUSAIR – TEN-T: from macro-regional strategies to development
- Establish a firm communication to the relevant stakeholders through regional organisations / Transport Community active role – monitoring and continuity/ stability in area's plans and projects
- Synergies among cross-border and territorial development projects for implementing pilot projects and guarantee continuity of financing for a long period

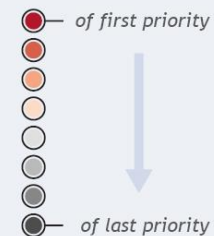


SUSTAINABLE TOURISM PROMOTIONAL CAMPAIGNS

- Campaigns for promotion of new types of tourism – finding ways to reduce seasonality (e.g. winter visit places campaigns), sport tourism, religious tourism, eco-tourism etc
- Joint promotional campaigns among ADRION countries for increasing flows (trips within ADRION Region)
- Special services e.g. old rail trip in SEE, connected to marine life via ferry experience



Average measures prioritization



Time horizon



Inter-Connect (2/2) Roadmap

Stakeholders' critical position regarding the realistic time horizon that will be required per measure

HIGH LEVEL COOPERATION / AGREEMENTS

- National level decisions: intermodal terminals categorization, definition of national terminals' transnational role and identification of potential clusters/alliances
- Transferring programme development of 'best practices of intermodal solutions' at national and regional level – make the matching of terminals / cases and adopt best practices
- Assuring / allocating dedicated budget per year with a long term timeplan – allocation of various re-sources (funds) to enable competent authorities to subsidise cross-border services during the start-up phases

- Develop an integrated approach of transport policy (to achieve sustainable transport—integration horizontally among sectors, institutions and modes, and vertically among levels of jurisdiction and authorities.)
- Encourage territorial integration—aligning goals and responsibilities of neighbouring cities and towns, and countries—can also help create effective governance frameworks and policies (e.g. MoU signed- among ADRIAN Countries)
- Fostering the integration of Intermodality policies for passenger travel
- Legislative actions to promote joint operation of an international service (contracts among national PSO's) - Considering the fact that passenger transport is non profitable, it can't survive without financial support from States. Public Service Obligations in transnational transport services should be further examined
- Elaboration of a multilevel protocol at regional, national level and transnational level to promote maritime-rail intermodality

HARD 'RAIL' MEASURES' – INFRASTRUCTURES

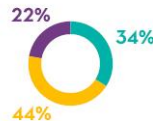
- Interoperability issues for rail transport (– or technical compatibility - of infrastructure, rolling stock, signalling and other subsystems of the rail system, as well as less complex procedures for the authorisation of rolling stock across the European Union's rail network)
- Infrastructure projects for rail – completion and interconnection of the national and cross border network
- Connecting peripheral ADRIAN areas with the TEN-T core network (present and future network, referring in particular to the extension in the western Balkans)
- Infrastructure projects for terminals – facilities, connectivity port – hinterland or rail main stations – hinterland
- Facilitation of border crossing in rail transport

2020

2050

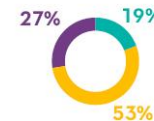
ADVANCED (HARMONIZED, INTEGRATED, OF HIGH QUALITY) SERVICES PROVISION AT LOCAL LEVEL

- Harmonization of PuT timetables within cities and related catchment areas (linking also Points of Interest)
- New services / enhanced PuT services connecting intermodal nodes (e.g. ports/airports) with cities
- Innovative forms of mobility inside ADRIAN cities – e-bikes, shared bikes, micromobility etc
- Early warning and information services for travellers
- Regional railway for speedy regional connections
- Tramway/light rail to move high numbers of passengers within conurbations
- Area services to feed rail-bound services
- Online tickets purchase
- Upgraded services and plans for PuT support in case of 'shock variations' – sustainable and resilience recovery plans

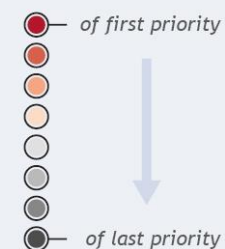


ADVANCED (HARMONIZED, INTEGRATED, OF HIGH QUALITY) SERVICES PROVISION AT TRANSNATIONAL LEVEL

- New transnational services / enhanced transnational services connecting ADRIAN hubs – PSO implementation
- Integrated tickets for 'transnational' mode (for the transnational trip e.g. rail, ferry) and local PuT modes (last mile), combined services
- Cooperation among rail & maritime sector and air transport providers (e.g. Bologna as an airport node connected via rail with the rest Italian cities and Slovenia)
- Cruise cities alliances which would also promote sustainable mobility in port towns.
- Early warning services
- Online tickets purchase
- Coordinated and fully communicated actions to support rail and maritime connectivity arising also as opportunity through crisis



Average measures prioritization



Time horizon



CONCLUSION

The Inter-Connect project built on the knowledge from previous projects and sought new solutions tailored on ADRION's specificities for the promotion of intermodal transport, guiding the respective actors on how to turn connectivity plans into reality. Main aim of the project was to improve the integrated transport capacity, mobility, and multimodal services in the ADRION Region. The project's approach consisted of hubs clustering, the identification of current and future trip generating poles, users' surveys for understanding mobility needs and expectations, the mapping of drivers, the establishment of cooperation schemes, the application of soft mobility measures (e.g. integrated ticketing, harmonized timetables and procedures) and the examination of funding opportunities as well as roadmap formulation.

With the target of helping organizations to plan intermodal passenger transport, the project realized the open online platform "Inter-Connect Toolkit", which helps understanding intermodality by providing access to EU, national, regional and local policies and strategies related to sustainable passenger mobility. Moreover, the toolkit gives information on potential funding tools/ sources for mobility solutions and provides insights on cooperation schemes for showing the most effective interfaces for stakeholders to define intermodal transport policies and measures. Concrete solutions of new public transport services for residents and for tourists were also tested in eight case studies realized in each country involved in the project. Thanks to Inter-Connect and the active cooperation of the ten partners, public transport services saw a significant improvement and will soon enhance international connectivity in the ADRION Region.