

Project SuMO

*Sustainable Mobility in the Port Cities of the Southern
Adriatic Area*

Main Output

**Cross-border development plan related to
sustainable and multimodal urban mobility systems
of the areas involved, focused on the multimodal
cross-border circuit**

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1. Introduction

This document provides indications on the cross-border development plan related to the sustainable and multimodal urban mobility systems of the areas involved in the SU.Mo. Project. Indications on concrete interventions, previously outlined in the documents drawn up by the individual project partners, to support the multimodal mobility and the implementation of port/maritime patterns are suggested to overcome current bottlenecks that prevent the full effectiveness of the built infrastructures and the developed border interconnections.

Increasing cross-border collaboration is a policy objective at EU level that aims at improving the situation for border regions and exploiting the largely untapped potential of connecting neighbouring regions. A wide range of measures can be implemented to reduce the non-physical obstacles, such administrative barriers, but tangible, physical infrastructure may still play a role as a facilitator of collaboration.

2. The micro-regional strategy in the Central-Southern Adriatic area

The micro-regional strategy for the Adriatic area under examination aims to give new impetus to cooperation and beneficial investments of the countries involved in the development of traffic within the micro-region and from and towards third countries. The new European Union strategy for the Adriatic Region provides four fundamental pillars:

- drive maritime and marine innovative growth;
- connect the Region;
- preserve, protect and improve the quality of the environment;
- increase regional attractiveness.

Within the second pillar "Connecting the Region" finds space also the maritime role of the area as a source of economic development.

In fact, the rigorous implementation of European regulations is identified as a crucial element for the qualitative improvement of maritime transport of both passengers and goods, also through a containment of criminal trafficking involving illegal trafficking. The strategy identifies connections, and sustainable land and sea transportation as key to strengthen social and commercial ties within the micro-area and in its vicinity.

Among the various objectives of the maritime strategy of this Adriatic micro-area the following are envisaged:

- improve cooperation between national and regional maritime authorities of the European Union, establishing mechanisms to ensure the exchange of maritime information between traffic control systems vessels;

- improve the compliance culture of controls on flags and ships international, liability and transport insurance maritime, accident investigation and port security;
- develop modern technologies for the security of the belonging ports to the micro-region;
- improve the resilience of infrastructures;
- guarantee the safety of the environment and its sustainability.

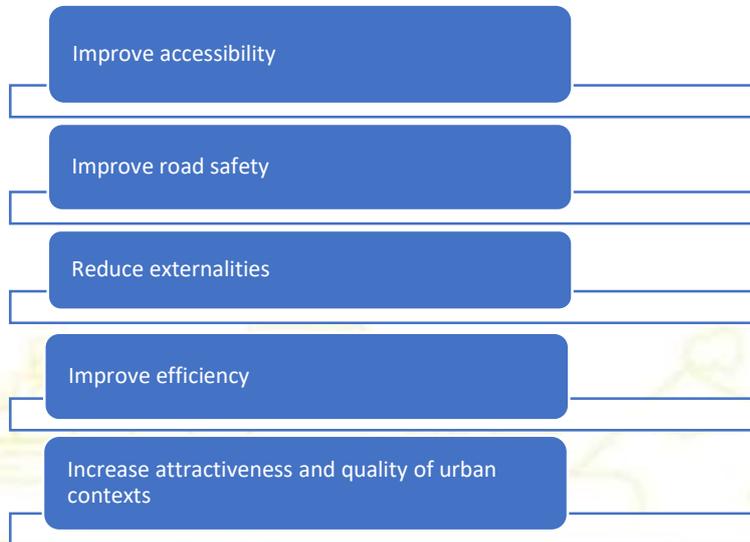
3. The cross-border cooperation

Cross-border cooperation among the port cities of Bar, Vlora, Brindisi and Termoli requires synergistic work which, starting from the strengthening of the peculiarities and the reduction of the critical issues present on a local scale, tends to direct efforts towards the construction of a port micro-region in the Central-Southern Adriatic area.

This synergistic work should start from "increasing internal capacities to develop and implement sustainable, inclusive, integrated and accessible transport strategies, policies, technologies, practices, procedures, tools, measures and transport systems that recognize the end-to-end travel experiences of all users and freight. The time frame is short-medium term, however, once the sustainability objectives have been pursued, the repercussions are also long-term". The general objective could be summarized in the will to change the current situation and to improve it by the means of a sustainable approach. This means that action must be taken not only for mobility, but also for the quality of life and well-being of all users. Therefore, in general terms, it will be necessary:

- to provide all users with transportation options that enable access to key destinations and services;
- to improve road safety;
- to reduce air and noise pollution, greenhouse gas emissions and energy consumption;
- to improve efficiency and costs for transporting people and goods;
- to contribute to increasing the attractiveness and quality of the urban environment for the benefit of residents, the economy and society as a whole.

Box 1 – General actions



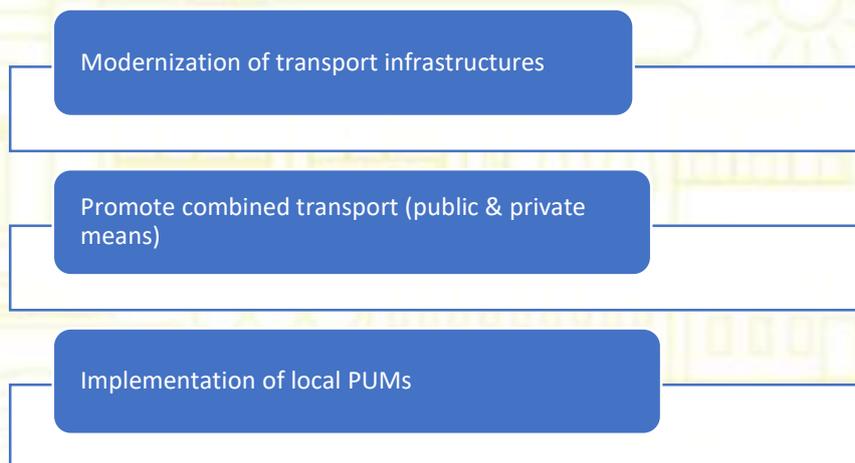
These positions necessarily require considering the different degree of organization of the port area with respect to the hinterland, the local urban system and the existing relational system and/or to be built between the four cities. We can certainly indicate as general and crucial, for each municipality the increasing internal capacities to develop and implement sustainable, inclusive, integrated and accessible transport strategies, policies, technologies, practices, procedures, tools, measures and transport systems that recognize the end-to- end travel experiences of all users and freight, and make it easier and smoother for their citizens to combine walking, cycling, the use of public transport as well as shared mobility (cars and bikes) as more sustainable alternative to individual private car use. However, although there are common key points for the implementation of the cooperative sustainable mobility project, actions at local level tend to differ depending on the current situation related to the critical issues and territorial specificities of the port and transport in each city.

In particular:

- 1) the modernization of transport infrastructures represents the first objective to be achieved since it sometimes does not allow the achievement of the sustainability objective. This is particularly relevant for Vlora where, despite the fact that the Albanian state has taken numerous steps in the development of port and airport infrastructures, road transport remains a very important factor in the traffic of goods and passenger flows as well as “in the territory of the City of Bar, road traffic is the most represented form of transportation of goods and passengers”. The strengthening of intermodal transport is, therefore, indicated as the core of the modernization of the transport system as it would not only guarantee an increase in traffic volume, but would reduce the environmental impact of road transport;

- 2) for all municipalities it is essential to combine walking, cycling, the use of public transport as well as shared mobility (car and bike) as more sustainable alternatives to individual private car use also to guarantee cross-border accessibility based on sustainability objectives;
- 3) the common underlying objective for the projection of sustainable relations at cross-border level is the drafting of urban mobility plans on a local scale capable of strategically evaluating port connections as gateways for traditional and new uses of urban spaces. Within the Plans, it would be appropriate to rethink strategies that generate connections of the port area with the hinterland on the one hand and with the entire urban system on the other. These strategies should be aimed at making port areas nodes capable of orienting towards a use of territorial resources that acquires a strong identity dimension, capable of ensuring the complementarity and subsidiarity of functions on a cross-border scale.

Box 2 – Transport elements to be improved for all partners (infrastructures, services, planning tools)



In each urban territorial area, the Sustainable Urban Mobility Plan (SUMP) is structured to enhance transport in the urban area in order to increase its competitiveness on both a national and cross-border supra-urban scale. However, for the cities of Bar and Vlora, it will be necessary to make a greater effort in its implementation compared to the cities of Termoli and Brindisi, since alongside the objectives common to all four plans, there are needs connected to the modernization and strengthening of the infrastructure.

For Vlora, SUMP has to be based and oriented on actions that must be taken not only for mobility, which is the center of SUMP, but also for the quality of life and well-being of all users.

Therefore, in general terms, it will be necessary to:

- provide all users with transportation options that enable access to key destinations and services;
- improve road safety;



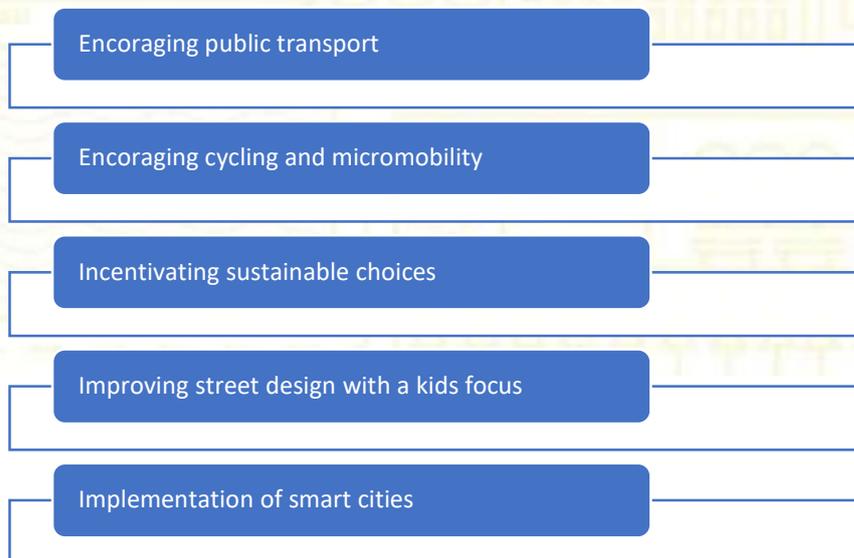
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- reduce air and noise pollution, greenhouse gas emissions and energy consumption;
- improve efficiency and costs for transporting people and goods;
- contribute to increasing the attractiveness and quality of the urban environment for the benefit of residents, the economy and society as a whole. To this end, the approaches to follow are:
 - encouraging public transport to be wider, more efficient, integrated, attractive and inclusive;
 - encouraging cycling and micro-mobility as an alternative to private motorized transport, combining investments in infrastructure making the most of resources (financial and spatial) and increasing the elasticity and responsiveness of the mobility system;
 - providing alternatives and charging for parking as incentives to guide sustainable choices;
 - encouraging the design and use of the city's streets and urban spaces with children in focus;
 - implementing Intelligent Systems, digital solutions, electronic mobility for a (more) intelligent city.

Box 3 – How to improve attractiveness and quality of urban environment



For Bar, future projects in the port region must instead be guided by the objectives of the 2020 Spatial Plan of Montenegro which, for the first time, proposes a systemic organization of spaces. The development of transport infrastructure was defined, which, through the envisaged



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improvement of Montenegro's connections with the economic space of the country (former SFRY), regional and inter-municipal connections and local accessibility, was one of the key preconditions for achieving the Plan's development goals, in particular in relation to more even regional development. The Spatial Plan of Montenegro until 2020 gave the concept of road and railway network development, the concept of development of water transport, as well as aviation infrastructure by 2020. Bar has been designated as a multimodal intersection and the most important port in the country.

In general, based on the entire transport planning, if we observe the priority projects of the transportation infrastructure that directly or indirectly impact the BE sectors, the first place is related to the construction of the highway Bar-Boljare; the second place refers to the modernization of the rail infrastructure, and the third priority project is directed to the increase of the number of shipping lines.

Projected capital infrastructure projects from 2020 include a new container terminal in the Port of Bar, an extension of passenger and bulk cargo terminals in the Port of Bar, increasing the operational capacity in the Kotor cruise port and Marina Kotor, purchasing of new ships within “Barska plovdba AD” and “Crnogorska plovdba AD Kotor”, renewal of the Ro-Ro line between Montenegro and Italy.

Another key element is the redistribution of port functions aimed at guaranteeing the connection of planning. This redistribution should take into account and attribute an active role to local and supra-local actors in planning in order to guarantee links and connections with respect to the transcal reading of mobility. In particular, the synergistic drafting of the objectives of sustainable mobility in urban planning with those of port, regional and Adriatic planning should be ensured. This objective is strongly underlined by the four cities which recognize the port as a focal point for the organization of development both on a local and cross-border scale. The port, in fact, is indicated as a cornerstone of the convergence of local and supra-local flows and, for this reason, requires careful planning of structures and activities which converges intermodal planning aimed at strengthening cross-border relations on it.

Cross-border cooperation will also be strengthened by the consideration of a series of joint objectives that are present within other projects aimed at achieving the objective of sustainability. In addition to those that concern the local dimension (e.g. SUMP, Regional Transport Plan, Regulatory Plans for Port Activities, National Mobility Plans), it would be appropriate to also take into consideration those present in supra-local planning which, potentially, already project cities in a cross-border perspective. In particular, for the city of Termoli it is essential to comply with the objectives of the Adriatic SEZ, of which it is part, and that strategically include:

- 1) attracting investments from large national or multinational groups that allow to absorb the workforce coming from sectors in crisis or subject to heavy restructuring, (See the case of the energy and aeronautical sectors in the Brindisi hub); to strengthen, with a view to completing the supply chains, sectors that already have a substantial production base, such

as in the case of agri-food, automotive, logistics and distribution, pharmaceuticals, chemicals and aeronautics, variously present in the poles of the Adriatic SEZ;

- 2) promoting investments by small and medium-sized local enterprises in the reference sectors of the regional economy, such as agri-food, automotive, mechanics, rubber, TAC, wood-furniture, packaging, ICT, services, large-scale distribution and tourism, aimed at product innovation, the consolidation of “supply chains” and the expansion of outlet markets, especially foreign ones;
- 3) promoting the integration of value chains at a regional and interregional level, through the enhancement and relaunch of the role and functions of logistics and production integration of port systems and platforms and regional logistics hubs;
- 4) coordinating within cross-border cooperation the airport planning with the port planning as a gateway for foreign flows;
- 5) coordinating with other objectives of other planning documents that pursue sustainability as suggested by the municipality of Termoli which links sustainable mobility planning to the Regional Environmental Energy Plan;
- 6) coordinating with the objectives of other cross-border cooperation projects already started in the municipalities having as their object the coast, the port and transport such as the municipality of Termoli involved in Framesport, a project funded under the Italy-Croatia Territorial Cooperation Programme. The project aims to support and guide an integrated and sustainable development of small ports on the Adriatic coast through a new strategic framework that is able to support them in making them socio-economic drivers of the territory in question; Project Innotourclust (Program Interreg IPA CBC Italy-Albania-Montenegro) that has as its objective the consolidation of growth opportunities for tourism, craft and agri-food businesses in the project area, through the establishment of a Cluster. Project TourisMED Plus: demonstrated that fishing tourism is a replicable response to the common challenges of the Interreg MED Program in order to find new solutions to the threats related to the depletion of marine resources and the decline of the artisanal fishing sector;
- 7) substantial recognition of the complementarity connected to resources and cultural and environmental heritage, essential for cross-border cooperation is the recognition of the economic-productive and socio-demographic specificities of the four port cities in order to establish potential lines of interaction oriented towards mutual exchanges that increase the systemic organization making their structure as a functional region of the Adriatic area recognizable. Strengthening tourist accessibility, with particular attention to the sustainability of the impact of flows and the use of public transport to be wider, more

efficient, integrated, attractive and inclusive. This aspect requires careful reconnaissance of elements of local heritage that have been patrimonialized or to be patrimonialized through adequate mobility systems that involve the four cities in a common project. The latter, through cross-border mobility planning, could enhance the attractiveness of places by defining not only better physical accessibility of tourist spaces, but by building a new mental and cultural accessibility mediated by a unitary image of the tourist offer linked to the potential of city. In planning, the different real and potential role of tourist activity must be taken into account by defining complementary relationships between cities that allow them to mutually grow in terms of sustainable receptivity and sustainable use of spaces and heritage. In this perspective, start a survey of projects that would create a fertile substrate. The projects in which the municipality of Termoli participates Molise Coast, the digitization of the Molise coastal heritage carried out within the Molise Coast web app was financed through the European funds of the Management of heritage in coastal landscapes and HERICOAST project born from the need to analyze catalog and digitize the coastal heritage in order to then proceed its enhancement;

- 8) constructing cycle mobility routes that revitalize ancient abandoned communication backbones and parts of the landscape heritage. From this perspective, giving value to already existing projects, also activated from below by civil society subjects organized in communities of practices or by subjects engaged in the world of research as in the case of Brindisi, or involving them at a cross-border level in the construction of new routes or in the integration of existing ones. This transversal project would guarantee the construction of new relationships between the 4 cities and would allow them to be included in a unique and original attractive circuit;
- 9) making the most of other projects developed with non-institutional partners in cross-border planning aimed at the valorisation and innovative modeling of ports and coastal areas, just as Termoli has joined various projects that aim to develop nautical tourism.

4. Specific interventions

Below are the territorial interventions to guarantee not only sustainable mobility but also better accessibility to individual territories. Therefore, below are presented the infrastructural interventions or those linked to the provision of functional transport services aimed at completing the project park plan, useful both for an urban sustainable mobility plan and for a cross-border plan involving the partners of the SUMO project.



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Port of Bar

The proposed measures (solutions) are:

- active mobility. Creation of walking and cycling paths within the port area in order to promote and support non-motorized transport of employees and other commuters;
- port of Bar internal transport by use of hybrid bus. Organization of the Port of Bar internal transport of employees travel within the port area by hybrid bus, in order to reduce the number of vehicles entering the port. Promotion of the use of Low Emission Vehicles;
- transport of passengers from the Port of Bar to the Old City of Bar. Organization of the Port of Bar passenger transport of tourists to and from the Old City of Bar by hybrid bus, in order to reduce traffic impacts and to influence the travel behavior. Promotion of the use of Low Emission Vehicles;
- port of Bar commute transport of employees to suburban areas by use of hybrid bus. Organization of the Port of Bar commute transport of employees to and from suburban areas by hybrid bus, in order to reduce traffic impacts and to influence the travel behavior of its employees and other commuters. Promotion of the use of Low Emission Vehicles;
- car-pooling system for the staff of the port. This measure will allow employees of port to share their own cars;
- E and H mobility. This measure will allow employees of port to use electric and/or hybrid vehicles for business purposes in order to reduce traffic impacts.

Figure 1 – Port of Bar



Termoli

Interventions to reconnect the port area with the city context, to overcome criticalities to favor the accessibility to local and transfrontalier traffic:

- proper allocation of road use to avoid conflicts among private traffic and vehicles used for public transport and commercial maritime services;
- shorten urban and suburban public transport stops from the arrivals and departures area;
- realize larger parking area for parking bicycles;
- provide a cycle/pedestrian itinerary connected to the areas of interest (embarks, car parks, city centre);
- implementation of larger parking spaces for car parking;
- creation taxi stalls;
- implementation of smart mobility stations.

Figure 2 - Termoli



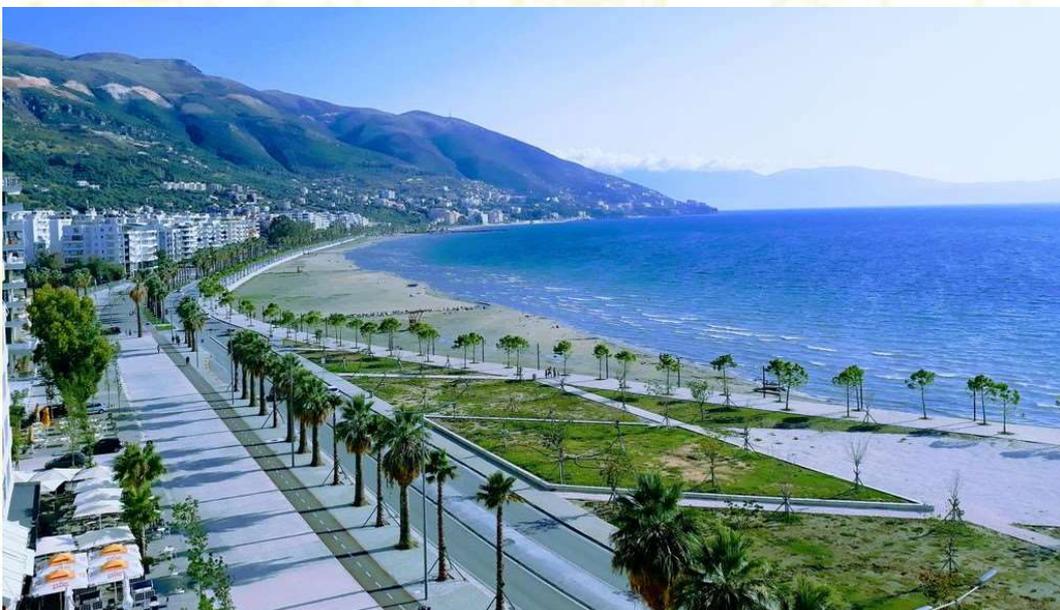
Vlora

The city of Vlora is aiming at:

- encouraging public transport to be wider, more efficient, integrated, attractive and inclusive;
- encouraging cycling and micromobility as an alternative to private motorized transport;

- considering Vlora as a city with sustainable mobility: combining investments in infrastructure making the most of resources (financial and spatial) and increasing the elasticity and responsiveness of the mobility system;
- providing alternatives and charging for parking as incentives to guide sustainable choice;
- encouraging the design and use of the city's streets and urban spaces with children in focus;
- implementing Intelligent Systems, digital solutions, electronic mobility for a (more) intelligent city.

Figure 3 - Vlora



Brindisi

The city port of Brindisi requires to:

- identify the elements of the cultural and environmental heritage of territorial identity, both urban and extra-urban, to which value has been given and/or can be attributed through slow mobility;
- identify the tourist and cycling routes that cross the city of Brindisi and which could cross it to evaluate whether they are integrated with the European Eurovelo cycle network and with those of the national Bicalitalia network;
- identify elements of the territorial heritage to arrive at an analytical census of existing and used cycling resources and potential ones to be allocated to daily and tourist itineraries and verify integration with existing ones;

- research the institutional and non-institutional actors, with particular attention to the self-organised aggregations born from civil society, which have structured cycle itineraries and understand the motivations that pushed them to create such itineraries, giving value to the processes of self- organization and participation which are at the basis of the birth of local and supra-local networks;
- work on the development of an urban and nodal Biciplan, to be included in the PUMS and in a public summary cartography, to define an integrated and integrable cycle network extended to the city and the countryside of the municipality and projected as a hub towards the province and the Salento, with particular attention to the development of the cycle tourism network.

Figure 4 - Brindisi



5. Conclusions

In the territorial area affected by the project it can be said that the perception of the importance of the maritime economy in general has long been lacking. The interventions, in general terms, which have taken place in the maritime-port sector have finally set themselves the objective of creating an integrated transnational transport system where the interconnection among ports, roads and railways plays a decisive role in order to guarantee a centrality and competitiveness of the ports interconnected with other modes of transport in all the project partner cities with a support of informatics technologies.

Current global challenges include:



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- simplifications on seabed excavations and dredging;
- improvement of port-rail-road connections;
- choice and review of strategic environmentally friendly projects with the relevant ministries/administrations.

Administrative rationalization and bureaucratic simplification are two important elements to restore competitive strength to the connected countries. It is necessary to focus on the lengths and constraints of bureaucratic and administrative procedures which make the times and costs of maritime transport too high compared to competitors. Likewise, it should be underlined that the shortcomings of intermodal transport in the reference area have favored the use of road, not only for last mile connections.

The development strategy of the whole port system involves the development of efficient intermodal services, capable of exploiting existing opportunities. The port areas in question have a natural attraction factor which is their strategic positioning which allows us to avoid route deviations: but the intermodal aspect needs to be improved.

The success factors analyzed in this report highlight that the attention to infrastructure is fundamental and without the construction of transport networks efficiency land and port connections there is a risk of be blocked from the evolution of the transport system in the coming years.

The development of a combined cross-border transport system is, therefore, closely linked to the existence of an infrastructure network capable of efficiently and effectively organizing the complex intermodal transport process relating to both the transport system and the services functionally linked to the movement of passengers and goods.