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TRANSPORT, 1



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Editorial Note

Transport 1 is the first special issue of the GeoProgress Journal on the various and multiple themes of transport, a field of studies that is truly important and central to a journal, like this, that is primarily concerned with development problems from the global to the local scale.

The papers proposed for publication in this Special have obviously been subjected to the same evaluation process as those proposed for the ordinary issues and approved according to the same rules and, in addition, on the basis of their thematic coherence.

We are grateful that the AGeI (Association of Italian Geographers) Group has proposed to this Journal the publication of the results of research of its members and its meetings and we can only hope that they will develop their research and put forward new proposals. We also hope that other study groups of the same AGeI and, no less, of other associations and disciplinary sectors, will entrust us with the editing and publication of the results of their scientific works.

For the specific contents of this issue, we refer to the Introduction, by Giuseppe Borruso.

Introduction

The Trieste Conference 2023

This special issue, dedicated to the broad and articulated theme of transport from a geographical perspective, brings together some contributions from colleagues with interests in transport and logistics within the AGEI working group on the Geography of Transport and Logistics. More specifically, the contributions in this issue can be traced back in part to the conference “Transport and logistics between global challenges and local development”, held in Trieste on November 22 and 23, 2023, and they are just a small part of the results of this meeting.

In fact, the Trieste Conference – organized by the undersigned and intended as a handover in the coordination of the group from Giuseppe Borruso to Marcello Tadini of the AGEI Group “Geography of Transport and Logistics” – aimed to provide an opportunity for interdisciplinary debate with the participation of colleagues from various national and international institutions in the fields of geography, economics and law, as well as territorial stakeholders interested in these issues. Two round tables addressed the theme: “Maritime transport between local and global challenges. Geoeconomic and geopolitical aspects” and “Logistics and supply chain. Scenarios for logistics chains between de-globalization and re-globalization”; two thematic sessions also delved into the topics of “Smart cities, ports & regions. City, port, region relations; last mile distribution, accessibility and internal areas” and “Sustainability and transport. Circular economy and energy transition”. The discussions around these events, during the Trieste days and in the subsequent period, have resulted in several contributions that, in this volume, address a varied and articulated series of topics, independent of each other but broadly centred on the themes of current debate on the issue of transport and logistics.

A first point of view is an expression of the reflection on the issues related to the development, in a broad sense, of territories linked to the articulation of the logistics and transport system. In this sense, the contribution on the relationship between hinterland and foreland (Prezioso) is positioned, recalling the port and coastal function as a line of demarcation and development for the two parts (sea and land) of the same context. In line with this, focusing on the land side, is the contribution on SEZs - Special Economic Zones (Esposito), on which there is ongoing debate and regulation, from a political and economic point of view, on their ability to attract and create local development, especially in the contexts of Southern Italy, specifically in the Italian case. To align with the maritime component, the contribution on the specialization and characteristics of the Italian port system (Tadini), between containerization and the development and consolidation of other traffic categories. The sea side is also joined by the energy issue, with reflections on the opportunities, risks, and hypotheses regarding the use of alternative fuels in shipping (Di Fazio, Palmentieri, Paradiso). On the subject of mobility, moving on to consider collective mobility, the review is concluded by the virtuous case of innovation in on-demand transport systems for areas with weak demand in the case of Friuli Venezia Giulia (Mazzarino).

Giuseppe Borruso (Università degli Studi di Trieste)

Research priorities of the AGEI Group “Geography of Transport and Logistics”

The AGEI Group “Geography of Transport and Logistics” intends to investigate the main research topics in the field of transport geography, finding a study segment in the relationship between the transport of goods and people in relation to territory and space. The aim of the Group is to bring together the different research paths in the field of transport geography in a common space of comparison and research.

In general, this discipline intersects issues such as trade flows, communication and connectivity systems, tourism, demography, migration phenomena, politics, society and culture. Few disciplines are able to put the role of territory and space so much at the centre of their scientific interests.

The research areas that the Working Group is focusing on concern the freight transport in relation to territory and space. This is a topic that is particularly declined in terms of globalisation, international trade, supply chains and complex systems and networks. Innovations and trends relating to urban transport are of definite scientific interest in the future, with particular reference to the freight sector in terms of sustainability, assisted by the theme of great interest represented by the development of transport infrastructures and networks.

A further topic of great relevance is the issue of the energy transition that is affecting the transport and mobility sector in particular (transition to electric mobility), calling into question the analysis of the repercussions on the geography of energy sources and world geopolitics and geo-economics. The energy transition, again, brings with it the issue of environmental sustainability and the effects on the environment, primarily in terms of pollutant emissions and global climate change.

The theme of transition also strongly recalls the strategic relevance of modal shift choices and the development of intermodal transport in the transfer of goods and people, which have increasingly become essential issues in modern public policies.

Connected to the phenomena of globalisation is the area of study concerning maritime transport and port activities. The processes triggered by this phenomenon are causing profound territorial transformations, in the areas of exchange (ports and retro-port regions) and in the places of destination, changing the logics of production and transport in a reticular way. Lastly, in the sphere of maritime-port transport and its territorial values, the role played by the cruise sector is worth mentioning, in its twofold value, linked to its importance in terms of tourism, its economic impact in the territories affected by the flows, as well as environmental and safety issues.

Marcello Tadini (Università degli Studi del Piemonte Orientale)

ARTICLES

TOWARD A NEW AND DIVERSE SUSTAINABLE LAND-SEA REGION THE CASE OF TRIESTE CITY-PORT

Maria Prezioso*

Abstract

It is essential that any plan is integrated into existing planning systems in order to facilitate the harmonious and sustainable development of a land-sea continuum. This recognition, along with the related discussions at the EU level, led to the incorporation of the maritime dimension into the new Blue Economy Strategy and Agenda.

In light of the extensive literature and experiments on this subject, beginning with the publication of the "Guidelines" for ports in Italy, it is evident that there is a growing trend towards a "Green and Blue Economy." This paper refers to an increasingly sustainable, competitive, and systemic vision between city-ports that is both cohesive and integrated in accordance with the Recovery and Resilience Facility Plan guidelines.

The established approach to land-sea planning, which is oriented towards geography and economics, will be re-examined in order to ascertain its suitability for application to port cities, such as Trieste. In light of the varying dimensions and types of these entities, the paper examines the benefits derived from policy decisions that incorporate place-based evidence for long-term sustainable development. The objective is to address the challenges posed by a context that is strongly identity-based and politically-geographically diverse, with a view to promoting blue-green scenarios in support of public and private investments.

Keywords: land-sea territorial integrated planning; sustainable Trieste city-port; Blue and Green growth; Recovery and Resilience Facility.

1. Introduction

The policy objectives of territorial cohesion are not stranger to address and fully explore the potential of all distinct types of regions and seas, with a view to ensuring the successful achievement of their sustainable, inclusive and smart growth in the context of the New Green Deal. The Territorial Agenda 2030 (Germany Presidency, 2020) explicitly acknowledges the significance of maritime activities for territorial cohesion in Europe and advocates for a unified approach by member states in the field of Maritime Spatial Planning (MSP) (Ramieri, Bocci, 2024).

At the same time, it has been recognised that the territorial capital and development opportunities lie in the regional and territorial diversity that are pivotal attributes of maritime Europe. The diverse types of territories, with their differing combinations of resources, endowments, challenges and opportunities, are in distinct positions to

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contribute to the realisation of the EU's New Green Deal through the protection of Ocean biodiversity.

In this context, it is essential to consider the interrelationship between land and sea in a unified approach to planning. This sentence may seem predictable, but the ongoing experience shows otherwise, as the economic crisis is still a strong protagonist in several European regions and cities, and the application of the land-sea policy has proven to be able to make them more resilient (Cramer et al., 2020). This has intensified the imperative to identify new avenues for growth and employment to help regions emerge from the economic recession and move forward.

EU Member States are investigating the potential of the sea and land to facilitate smart, digital, inclusive and sustainable growth, and as a way to get closer to citizens on the periphery (e. islands). Coastal tourism, offshore renewable energy, more efficient shipping and aquaculture are some examples of policies that can contribute to this scope (Prezioso, 2022).

Several policy developments have demonstrated the potential of European seas during the 2007-2013 and 2014-2020 periods¹.

DG Mare calculated that more than 205 million people live and 88 million people work in coastal regions, and that before the pandemic, the Blue Economy was expected to generate almost €500 billion euros of Gross Value Added (GVA) and 5.6 million jobs. Several studies on Blue Growth (Bencardino, 2021) have identified a number of sectors that are either mature, emerging or prospective, including coastal tourism and shipbuilding, offshore oil and gas, coastal protection, short sea shipping with consequent re-routing.

Other sectors are requiring a review of the role of ports: cruise tourism, offshore wind, marine monitoring and surveillance, and aquatic products. Additionally, the pre-development phase necessitates a review of marine renewable energy, marine mineral mining, blue biotechnologies, land-sea planning, and changing the scene, which will consequently inform growth scenarios up to 2030.

The European Union's Integrated Maritime Policy (IMP) and the related sea-basin strategies are being implemented through MSP. Smart infrastructures, clusters, access to finance, participatory decisions, low impact, climate change adaptation and mitigation, social well-being are the challenges of MSP confirmed for the period 2021-2027. Integrated Coastal Zone Management (ICZM) is an indispensable tool for achieving a sustainable port (Fig. 1).

¹ e.g. the Blue Book (2007), the Marine Strategy Framework Directive (2008), the Limassol Declaration on the Common Fisheries Policy (2012), the Marine Knowledge document (2012), the Directive on a framework for maritime spatial planning and integrated coastal management (2008, 2013) and the Communication on Innovation in the Blue Economy: *realising the potential of our seas and oceans for jobs and growth* (2014) (Blue growth Strategy by DG Mare).

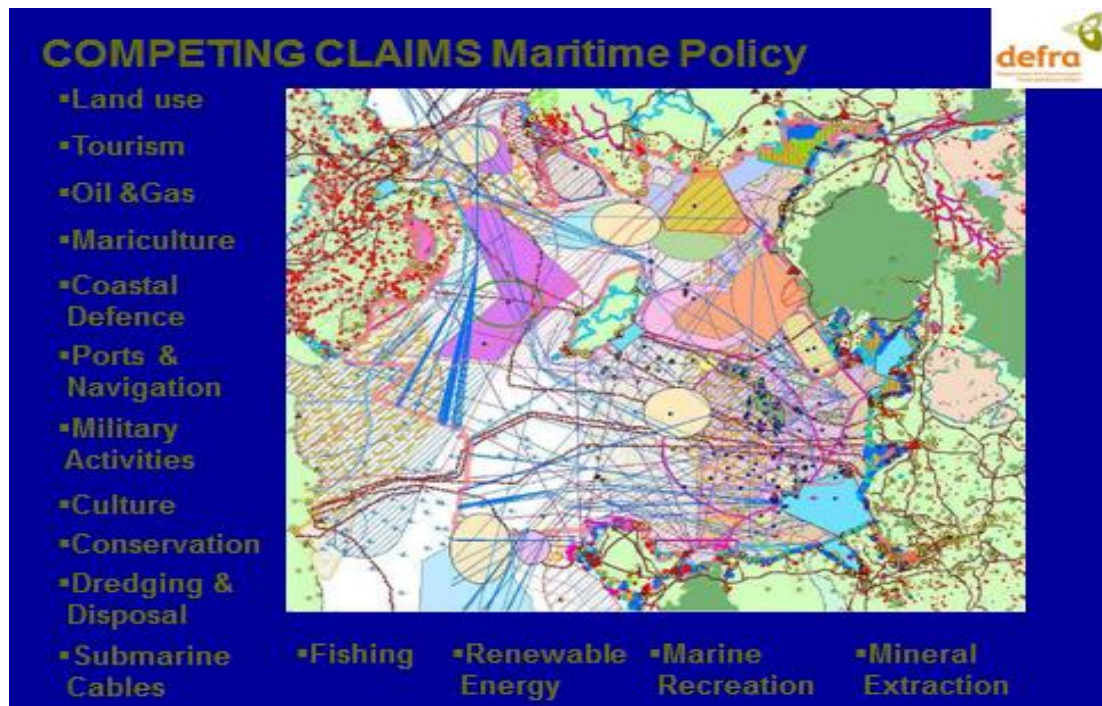


Figure 1: Example of competing dimensions to the Maritime Policy in the Baltic Macroregion

Source: Siemers and DG Mare, 2011.

MSP, ICZM and land-sea interactions (LSI) may also serve as resilience tools in the context of the current crisis (D'Orazio, Prezioso, 2017).

Cross-border cooperation between European countries, regions and city ports is implementing climate-related investments (155 million in 2007 to 1.6 billion euros in 2030) and adopting comprehensive planning strategies as by the VASAB Plan (Vision and Strategies around the Baltic Sea, 2023) in offshore grid, reuse of oil platforms, interaction with shipping, fisheries, services, marine protected areas - MPAs, implementation of the EU Marine Strategy Framework Directive (MSFD) with the Natura 2000. Furthermore, ports are actively engaged in these initiatives..

The strong interaction between land and blue economic activities and vice versa is no longer a novelty. What is a novel is that the potential for blue growth varies significantly across different types of territories. Growth is achieved in unusual ways in islands and their mainland, in coastal areas and their hinterland, in prosperous areas and more challenged areas (ESPON, 2012, 2013, 2017). Each region has its own potential for development and growth. However, these are frequently constrained by the prevailing national and regional structures and policies. In accordance with the new EU Directive 2021 on the Blue Economy, the city-port-regional structure (as exemplified by Trieste) should be incorporated into the MSP land-sea relationship and orientation. It includes circular economy, carbon footprint and several impact assessments that deeply change the MSP. For example, since 2015 Slovenia has included coastal zones and ports into its programme for the transition to a green economy, involving the neighbouring countries in ICZM through the EUSAIR cross-border programme.

2. Orientation to new MSP.

From 2022, new paradigms are guiding the concept of the city in Europe, with models and policies based on polycentrism, cohesion, sustainability, recovery and regeneration. They also affect the organisation and planning of city ports, which are affected by phenomena such as metropolitanisation, the participation of small and medium-sized towns in polycentric development, the inner periphery, shrinkage and more.

New policies and instruments such as the Urban Agenda 2016-2019 and city-port governance consider implications in land-sea planning. Many guidelines have been established for a new sustainable MSP:

- Resilience towards unique cross-border ecosystem zones at sea and on land (including Trieste)
- Cooperation in spatial planning systems through MSP
- Governance and interoperability of planning systems
- Role of stakeholders, including port authorities
- Close relationship with almost the regional level

Geography plays a pivotal role in shaping the vision, perspective and strategy development that guides MSP, i.e. defining a desirable but realistic picture of the future, which is inherently long-term in land-sea matters.

The more advanced regions, such as that around the Baltic Sea (which forms part of the TEN-T corridor comprising the port of Trieste), have adopted visions for 2040-2050 and have already achieved a just transition of the economy, using their own territorial specificities. These regions characterised by a territorial balanced distribution and high level of interconnection. The shared sea and maritime environment represent the central asset upon which the regional economy is based.

Through the MSP, both the German and Swedish ports and the Latvian, Lithuanian and Estonian ones are collectively advocating for the TEN-T Polish and North Sea Baltic to be delivered in 2040 (in alignment with the VASAB plan) with the aim of ensuring its availability for future generations:

- A diversified and new land-sea region, where the diversity of places, nature and people coexist and stimulate each other in all corners of the territory/sea.
- Active integration of all dimensions of development. Rural areas, functional areas of small and medium-sized towns, cities and metropolitan areas offering a high quality of life and well-connected, with clear objectives to develop their comparative advantages, capacities and complementarities.
- Strong links between people and places (territorial cohesion), including through participatory actions (commonly referred to as communities of practice). Physical and virtual connections for goods, people and their knowledge are green, safe, efficient, reliable and convenient, connecting the region to the global system and small and large places according to polycentric organisational models. Energy production is carbon neutral, secure, decentralised and well distributed.
- Ecosystem resilient and zones unique/special land-sea economic zones that have high levels of biodiversity and are contiguous, and overall, a healthy nature that ensures livelihoods, production and good quality of life in all parts of the region. Ports are only part of the picture.
- Cooperative land-sea planning systems that coordinate transnational land use and shared maritime systems across sectors, borders and administrative levels, making the region a leader in sea and land planning, improving resilience and security.

Under these addresses, population has grown more than 5% and increased cohesion and solidarity in areas as:

- Helsinki – Tallinn – Riga
- Ventspils – Riga
- Riga – Kaunas
- Klaipėda – Kaunas – Vilnius Kaunas – Warszawa
- BY border – Warszawa – Poznan – Frankfurt/Oder – Berlin – Hamburg
- Berlin – Magdeburg – Braunschweig – Hannover
- Hannover – Bremen – Bremerhaven/Wilhelmshaven
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achieving comparative advantages and complementarities in development, reducing land use and eutrophication of oceans, preserving biodiversity and marine and terrestrial ecosystems.

These regions started a joint process in 2007 and consolidated it in 2011, making it a fulcrum for the EU 2021 Directive on the ecosystem approach in MSP and strengthening the local and macro-regional governance structure.

3. The Trieste city-port in the relationship between the maritime spatial development plan and the regional plan.

Through the Italian Recovery and Resilience Facility Plan (RRF), the Port of Trieste project (*Adriagateway*) could fit into this experiential framework, due to the entity of interested area and financing.

Furthermore, the project provided an opportunity to update the Port Master Plan (2016), creating a land-sea MPS, and to rethink the city-port, considering that Trieste is the first railway port in Italy, with approximately 11,000 trains passing through in 2022.

Although the single works are planned within a long-term scenario of development (beyond 2026, that is the RRF deadline), they only focus on the port policy needs and not between the interrelations with the city and land-sea, as in the previous examples. In any case, the characteristics of a land-sea MSP are omitted or missing, and the sustainability of the project has not been assessed in relation to the the impact on the planned interventions in accordance with the Directive 2014/89/EU on Maritime Spatial Planning (MSP). In particular, the absence of a Territorial Impact Assessment (TIA) and a Strategic Environmental Assessment (SEA) extended to large urban area does not make the port project consistent with the MSP and Blue Growth objectives, to which the Friuli Venezia Giulia Region has subscribed since 2018 by signing the Methodological Manual for the Planning of the Marine Space in the Adriatic Sea. This is also inconsistent with the Integrated Coastal Zone Management (ICZM) under the EUSAIR programme.

At the same time, since the port project is related to the revision of the Port Master Plan (2016), it should be defined as a regeneration planning initiative for the city, minimising strong impacts interesting the territorial relationship of the port with the complex system of the Trieste metropolitan area.

The strategic integrated planning required by the blue-green EU doesn't appear in the matter of environment and socio-economic development including issues such as youth employment and gender, nor in the revision of the land-sea and city-port plans that are part of a public programming agreement between the city and the port (at the moment work in progress). Conversely, the coherence with the EU programme "Fit for 55" (2022) and "FuelEU Maritime" (2023) was necessary for addressing the challenges that reinforce the TEN-T system in the framework of the Connecting Europe Facility (CEF) programme, which emphasises sustainable solutions since 2013.

The Maritime Space Management Plan (MPMS) is an overarching plan, serving as a coordination tool that addresses all other plans and programmes with an impact on the same application area. It operates under the umbrella of Directive EU/2014/89 and must respond to all the objectives of national maritime space planning.

Since 2006, it has been considered as a "super-plan", and from 2020, the national government legislation obliges all planning acts of the maritime territory to converge in it. However, the super-plan excludes the waters managed by the Port Authority.

In any case, from 2016, this maritime space management tool has incorporated and harmonised forecasts, perspectives and scenarios contained in territorial plans and programmes that are relevant to land-sea interaction. The harmonisation process considers the geographical, economic and political diversity and provides fundamental drivers for land-sea planning.

Looking at the General Territorial Plan of the Friuli Venezia Giulia Region (2013), several territorial values of interest can be discovered in the large area of the Port of Trieste and the City-Port:

- urban settlements of historical importance, nucleus and villages (such as Servola and Muggia), archaeological areas;
- territorial systems of excellence where research, training and development functions are carried out (e.g. the Industrial Development Consortium and EZIT);
- a regional ecological network and related infrastructures;
- a hydrographic basin (Isonzo river) and a sensitive coastal area;
- an agricultural and forest network surrounding the city with a high landscape value
-

The new port project, its mobility and accessibility, does not refer to these parametric elements of European design (Urban Agenda principles and New Bauhaus), despite ongoing discussions about slow mobility and the preservation of symbolic values for the citizens (the VIII dock, the industrial archaeology of the old port, ...) in relation to the new logistic and productive intervention (e.g. the ship channel, the new railway station of Servola).

At the same time, the Programmatic Agreement excluded the assessment of the coherence of the new port with the 2016 Strategic Plan of the City Port, even if the project is in the respect area of the marine coastline (site of polluted national interest of Trieste in 2001-2003, with areas at risk of major accidents, within the Regional Hydrogeological Boundary Plan).

4. Land-Sea planning, port development and urban regeneration: a possible synthesis?

The 2016 reform of the Italian port system was born to adapt a crucial resource of the country to the European context, in accordance with the integrated perspective set forth in the Core-TEN 2030-2050. This required the planning of integrated sustainable land-

sea, at different scales, which were territorially coherent instruments of capacity building process innovation (Ministero delle Infrastrutture, 2016; Prezioso, 2018).

The European objectives 2021-2027, together with the ongoing structural changes provide a coherent framework within which to operate in the context of the new land-sea policy. This policy involves, since 2014, 1200 European ports of diverse sizes in Blue Growth, with the aim of relaunching competitiveness both inside and outside national and regional contexts. Sustainability and digital innovation are the key terms of this new lexicon.

The current European literature on land-sea planning has, over the last decade, focused on aspects such as:

- Relationships between functional urban areas (FUA. CEMAT, 2017), as a port is, and large urban zones or metropolitan areas (LUZ; LUA), as a city can be, in the light of the principles of integrated territorial cohesion, sustainability and competitiveness;
- Governance (multi-level and local)
- Instrumental planning (urban and port development plans, master plans and local community development, territorial plans), including interoperable tools such as Geographical Information Systems, ex-ante evaluation such as Territorial Impact Assessment, Do Not Significant Harms and Strategic Environmental Assessment, management and financial instruments such as Integrated Territorial Investments, new cost-benefit analysis, etc.) (Fig. 2).

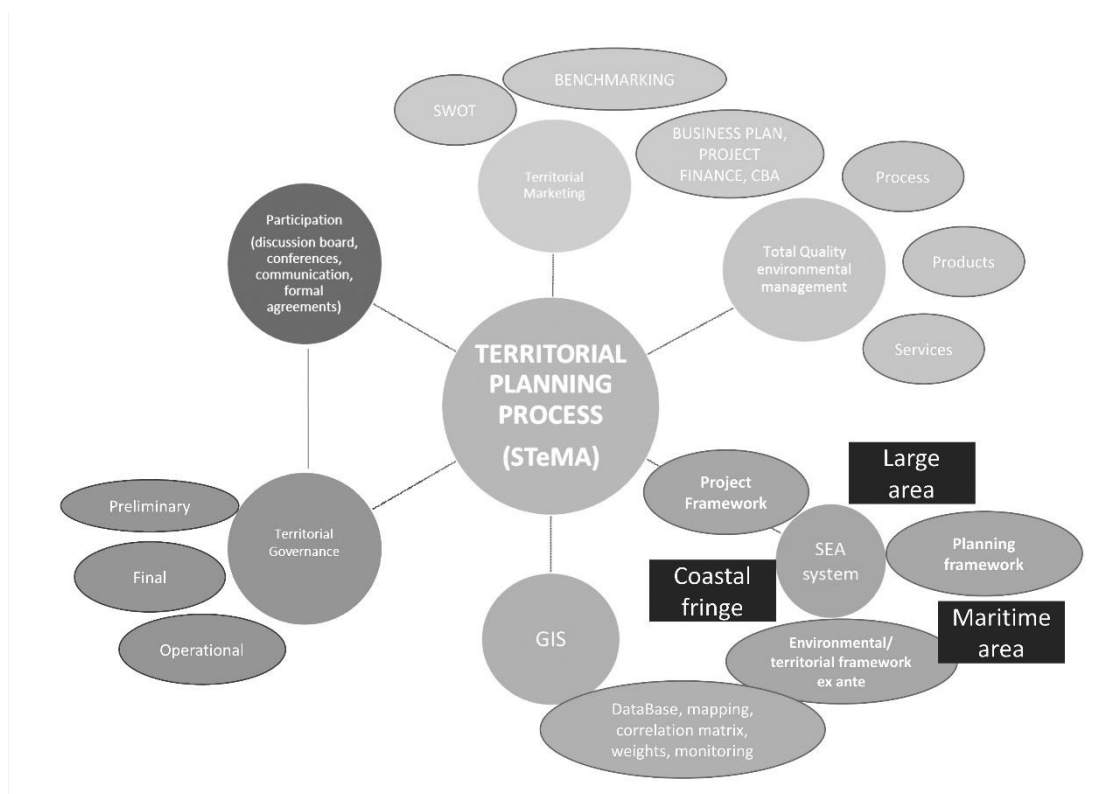


Figure 2: Example of the new territorial planning process

Source: D’Orazio 2017, Prezioso, p. 144.

These processes as part of planning make land-sea longer possible and coherent, by allowing researchers and the EU to propose strategic, integrated, systemic and interdisciplinary approaches. A strong rethinking of the methods used so far in Italy is required, because the "target area" of the port is coherent with the systemic-clustered vision necessary for the construction and development of a competitive port with those of other countries.

Considering some parameters more than others: demography, migration, energy dependency, climate change, energy (moving towards a low-carbon economy), technology (level of innovation), etc., the EU has integrated the regional maritime policy in a perspective of green economy in order to maintain the high attention to the capabilities offered by the maritime space. The European and Italian maritime regions have also been encouraged in this direction by potential public and private investments, and have recognised the advantages offered by macro-regional operability. The European Union has a key role to play in this respect.

The city ports of the Mediterranean and the Baltic Sea, although at the moment self-referential, face each other as an integral part of this process, showing each other the disparities in economic conditions and development, beyond the internal actions of reciprocity offered by the cooperation 2021-2027.

In the Trieste area of influence, the issue of the port merges with that of security, research and innovation and high-tech services in the face of growing pressure from non-EU countries. As a regional hub, it is a cluster that provides employment, mainly in fishing, maritime transport, traditional maritime sectors and other related sectors such as tourism. On the contrary, the main European realities are characterised by the presence of highly advanced economic activities that guarantee their attractiveness beyond the port economy, as in the case of Amsterdam and Hanover.

Using the indicators proposed by Earth Observation for Coastal Cover (OT, OT Copernicus), it was agreed that maritime spatial planning (MSP) for the efficiency of maritime activities, integrated coastal zone management and the land-sea interface (ICZM) affect the position of the port system in the maritime-terrestrial space, resulting in a positive change in local and regional orientation (interaction of the objectives of MSP with those of ICZM). The European scientific debate has therefore embraced Integrated MSP (IMSP) as a theoretical, methodological and empirical evolution in the field of land-sea planning. Participatory is an important quality of plan (Figure 3).

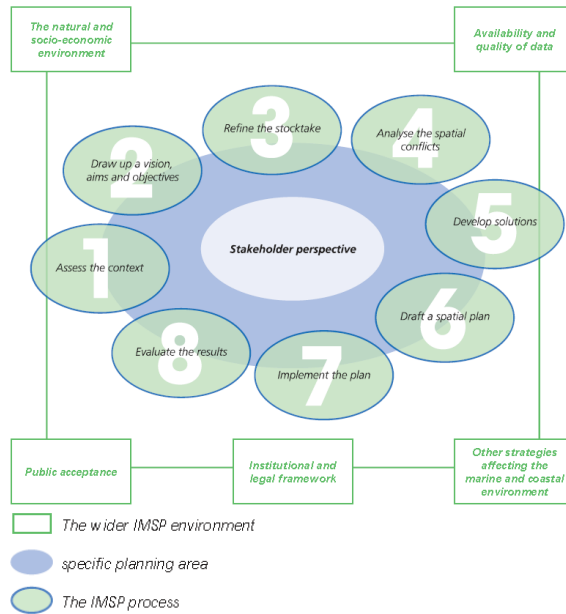


Figure 3: Example of IMSP process

Source: *Plan Cost Partnership, 2008, p. 27*

This model remains largely devoid of Italian context and the multitude of geographical scales and types to which it refers. Consequently, among the numerous cases of IMSP to be considered, only that of Emilia Romagna (Fig. 4), EZZ (North Sea, Germany), Black Sea (Romania), Master Plan City-Port of Amsterdam is applicable. These last ones coherent with the evaluations expressed in Trends in EU Ports governance 2016 and The State of European Cities 2016. The experiences of Rotterdam, Amsterdam, Antwerp and Copenhagen-Malmö also highlight and recommend that port planning should be linked to a strategy at national level, so that the individual port can play its role within a wider system (horizontal cooperation).

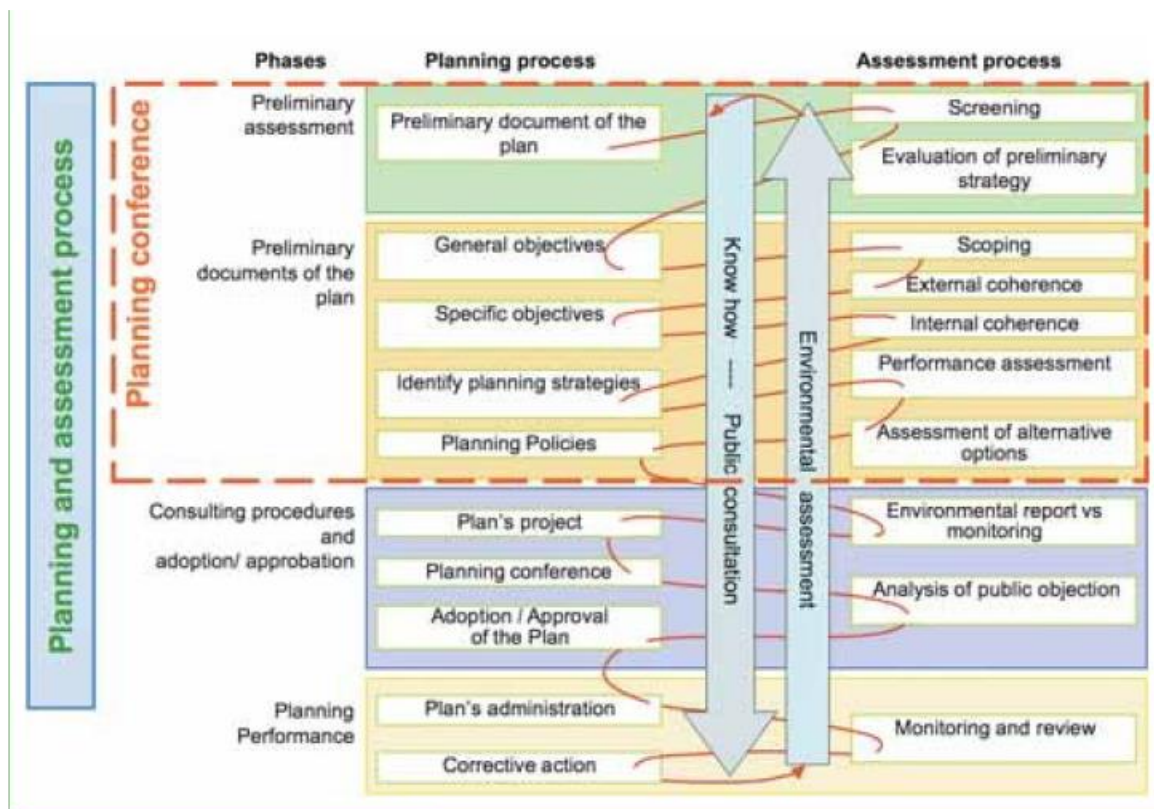


Fig. 4: Schema and contents of IMSP: Emilia Romagna proposal

Source: Plan Cost Partnership, 2008, p. 42

In the European vision, the port, with the port and/or city as a reference, contributes to supporting development: sustainable (from an economic, environmental and social point of view); productive and commercial (through the import/export balance); national and regional (added value for growth and competitiveness); local, regional and national connectivity and accessibility.

Looking for a constant balance between public and private management, and although in Europe only 64% of the ports are currently equipped with a Master Plan (e.g. Dublin and British ports have developed strategic plans in a perspective 2030-2040), 80% of these involved the local community and the investors design. In these experiences, the strategic plan of the port is developed in a strategic horizon of medium along period (min 15 max 30 years), inside which they must find space the question of increase is of investor is of citizenship.

Flexibility is considered to be a fundamental feature of the plan, so that it can be reviewed and adapted to changes and possible new policies. To this end, the inclusion in the plan of tools such as Corporate Social Responsibility and ISO Vision 2000 and 14000 certification can be particularly useful and support transparent procedures, continuous monitoring of customer satisfaction and the quality of the services provided, including to the city (cf. the case of the Port of Valencia in the Catalan ha system), whereas the majority of European ports (91%) are located in or near urbanised areas and the plan relationship with the city is often a source of conflict. However indispensable, this report must be rethought in the context of the new TEN-T policy and the related processes of transformation and innovation, as demonstrated by

Barcelona, which is investing in the connection with 'internal' terminals (Zaragoza and Madrid in Spain, Perpignan in France) to increase accessibility on iron in the vast area to which the port and the city turn. To this end, the experience of intra-regional cooperation structures (e.g. HAROPA, NAPA, FERRMED, etc.) is useful in supporting the development of a plan that includes innovative technologies and digitalisation.

Given that European ports are also the location for the reception and development of industrial and productive clusters (shipbuilding 63%, chemicals 54%, agribusiness 51%, conventional and non-conventional energy resources 49%, construction 49%, steel 40%, fish 35%, automotive 23%), the land-sea relationship that develops through the port also includes aspects of governance (destination, ownership and use of land for productive purposes in the cases of Antwerp, Hamburg, Rotterdam, Marseille), which support decision making in the fight against climate change. For example, European ports already produce and use 28% wind energy and 31% solar energy, mixing their use with traditional sources.

The relationship with the city and the territory outlines an additional economic-strategic positioning of the system for the port, making the plan a complex and multilevel instrument, considering that in Europe the maritime economy concurs to support large and medium-sized city-ports where GDP, innovation, level of access to training, productivity is higher. In these contexts, cities and ports contribute - through proximity or through infrastructural links and the overcoming of "distances", not only physical - to the creation of strong agglomeration economies, based on factors such as: supply and demand of labour on the local market, improved inputs to productivity, knowledge exchange.

In this sense, Italian seaports are potential developers of new external economies linked to intelligent regional strategic specialisation, according to an approach that combines the factors previously mentioned, beyond their still imitative nature. As can be seen from Figure 5, the most efficient city ports are those whose proximity relationships cover distances of up to 45' and whose sustainability measures (obtained through a Sustainable Urban Mobility Plan - SUMP) have reduced some diseconomies linked to access to services of general economic interest. Inland water and seaports are evaluated in the core and comprehensive networks of TEN-T (as adopted by the European Parliament and the Council from 2013).

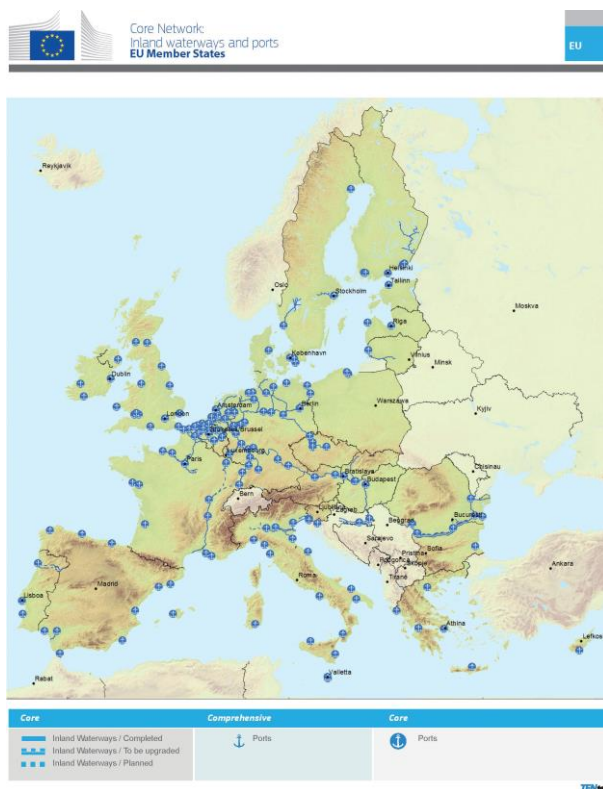


Figure 5: Types of city in relation to travel time to countryside

Source: ESPON, 2019, p. 4.

5. Open remarks.

With the completion of the TRIES programme in 2050, that is the long-term strategy of the climate neutrality, there will be a strong change in accessibility, including the ports one (Fig. 6).

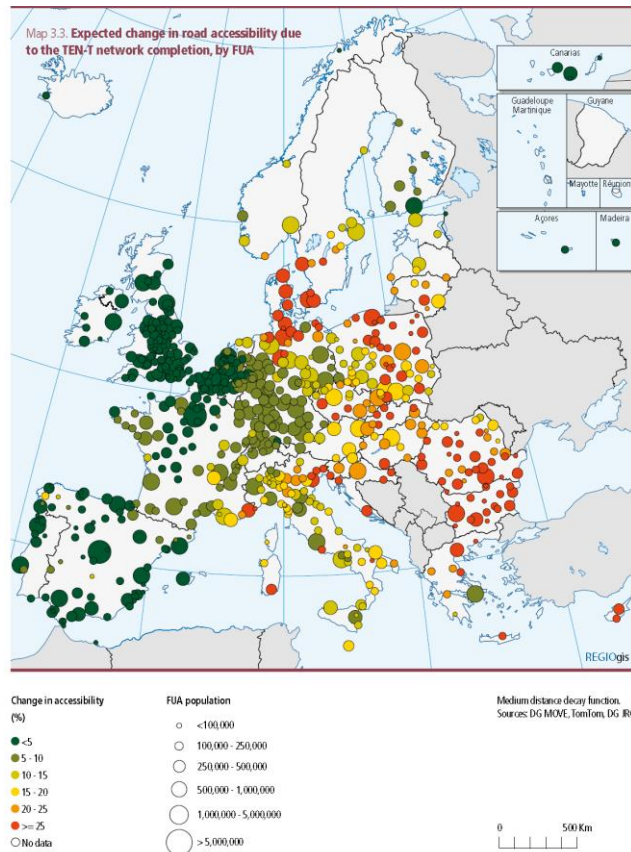


Fig. 6: Expected changes in accessibility by road (in FUAs) with the completion of the TRIES programme.

Source: European Commission, DG Regio and Urban Policy, 2019.

In this framework, the European meta-governance of ports has created a catalytic environment (Europeanisation) of national spatial planning systems and methodologies, increasingly based on "place-based" and environmental assessment approaches, updating, from 2008 to today, the plans of the city-port to the methodological addresses of the IMSP, in the belief that the shared interface land-sea is not an option but a must. The new city-ports based on this scheme, which now include Amsterdam, Antwerp, Barcelona, Dublin, Genoa, Glasgow, Copenhagen-Malmö and Hamburg, are equipped with a development strategy, that is of a plan that on the one hand avoids the competition between ports inside the same country/region; from the other, it establishes the investments of short period inside a picture/scene/plan of medium along, is for both the port and the city (Figure 7).

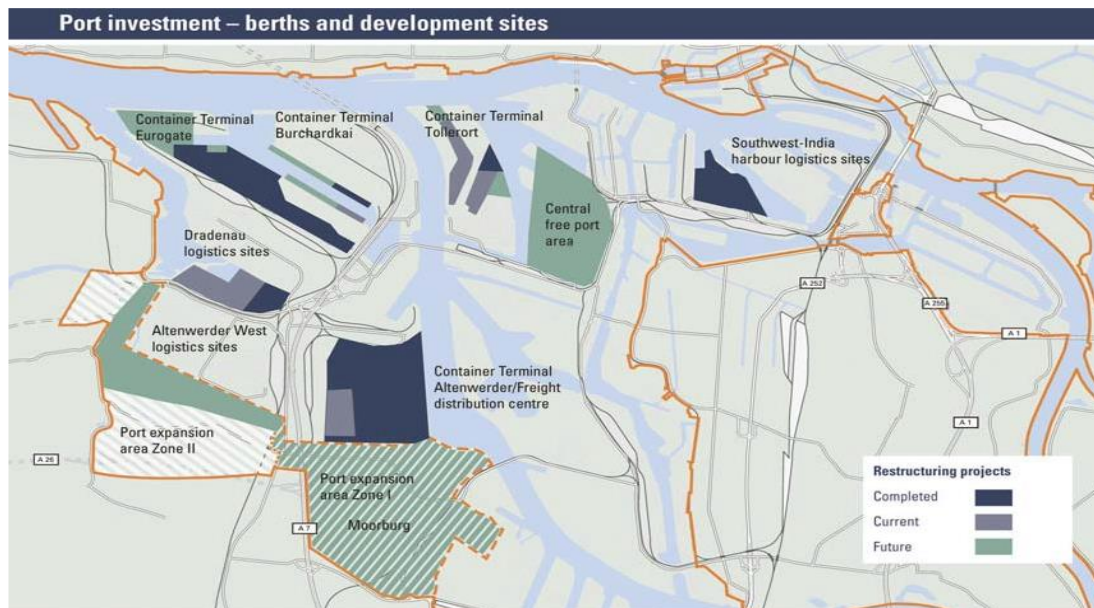


Fig. 7: Investment plan for the Port of Hamburg

Source: Daamen, 2007, p. 17.

The spill-over effects of the major investments carried out to integrate Italy into the TRIES network also involve the clustered port systems, whose ability to generate benefits in terms of the objectives set is clear, while in 2015 53% of EU imports and 48% of EU exports to third countries were by sea: Increasing maritime transport as a sector generating growth and finance for the European economy (Eurostat, 2016); overcoming the central-peripheral model represented precisely by the maritime economy and the land-sea interactions as a whole; integration with the central axis London-Paris-Amsterdam/Rotterdam, where more population and economic activities are concentrated, and mega ports that channel communication and trade routes. Urban regeneration is part of this type of planning towards a zero-emission port, adopting the Green Infrastructures model (e.g. eco-energy village) and needs to follow an integrated approach (Figure 8).

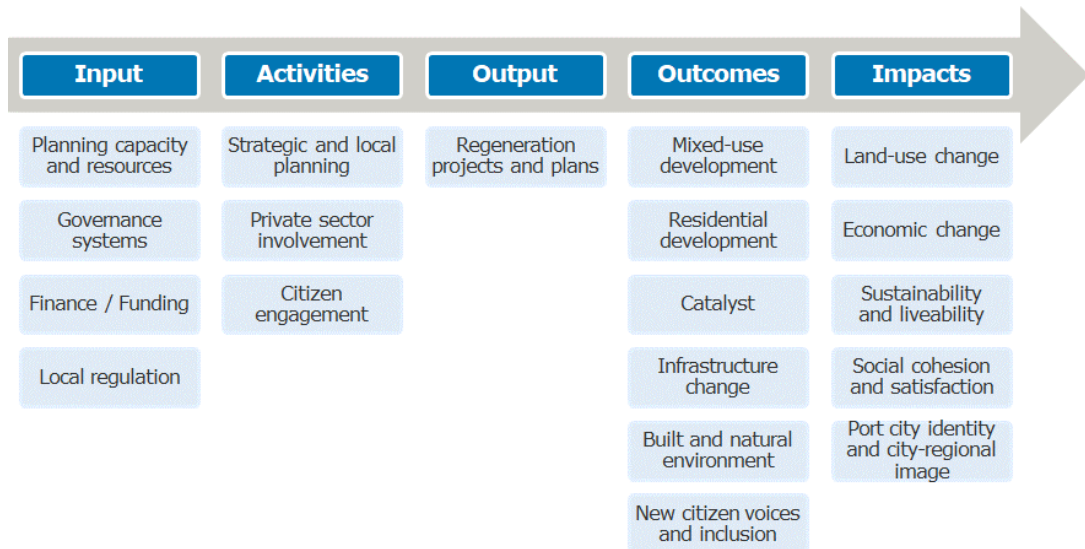


Fig. 8: A generic theory of change for port-city regeneration

Source: ESPON-ENSURE, 2020, Annex II, p. 18

If in a port-city the regeneration occurs in concert with broader urban projects supported at various levels, in Trieste, the new port Master Plan and the redevelopment one of City must walk together.

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