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# il mare e la città 2 /sea and the city 2

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### Trieste and its port as paradigm of a renewed sea-oriented vision?

### Gabriella Pultrone

### Abstract

Historically, the identity of the coastal cities is closely linked to the complex relationship with the sea, a primary resource for the origin of the processes of economic growth and territorial transformation, with particular reference to the highly-sensitive border between earth and water, and their dynamics. Dynamics more and more complex in the light of the issues related to sustainable development, and to EU policies in the field of multimodal transport. In particular, the current guidelines and directives of the EU, the geopolitical changes of the past two decades in an enlarged and projected onto the East and the Mediterranean are favorable conditions for the city of Trieste, able to reacquire a new centrality in the context Euro-Mediterranean as port of a broader territorial system, where the waterfront can be an opportunity to promote a new urban quality and revitalize local identities against the risks of uniformity. These themes must be tackled at the different territorial and institutional levels, in a perspective of



Fig. 1 Strategic location of the port of Trieste in relation to the trans-European corridors planned on the Italian territory and as a connection node between Europe and the Mediterranean

governance that implies an increasing participation of different local public and private actors in planning shared scenarios and looking for a delicate equilibrium between local and global dimensions. The need to include the single projects of transformation in a shared strategic vision, the capacity to elaborate an innovative management of plans, projects and partnerships with a strong local character and the decisive importance of time, as a crucial variable in a rapidly evolving context, must be driving forces behind the development of Trieste, so that it can be projected into the future with a new Euro-Mediterranean role, without forgetting the problems connected to sustainability.

# Trieste ed il suo porto come paradigma di una rinnovata visione ispirata al mare

Storicamente, l'identità delle città costiere è strettamente legata al complesso rapporto con il mare, risorsa primaria all'origine di processi di crescita economica e di trasformazione territoriale, con particolare riferimento a quell'ambito altamente sensibile che è il limes terra-acqua e alle dinamiche che lo riguardano. Dinamiche sempre più complesse alla luce delle questioni relative allo sviluppo sostenibile e alle politiche UE in materia di trasporto multimodale. In particolare, gli attuali orientamenti e direttive dell'UE, i mutamenti dell'assetto geopolitico dell'ultimo ventennio in un'Europa allargata ed Est e proiettata sul Mediterraneo costituiscono le condizioni favorevoli affinché la città di Trieste possa acquisire una nuova centralità nel contesto euromediterraneo quale gateway di un sistema territoriale più ampio, dove il waterfront si può configurare opportunità per promuovere una nuova qualità urbana e rivitalizzare le identità locali contro i rischi dell'omologazione. Questi problemi vanno affrontati ai differenti livelli territoriali e istituzionali, in una prospettiva di governance che contempli una sempre maggiore partecipazione nella prefigurazione di scenari condivisi da parte degli attori territoriali, pubblici e privati, alla ricerca di un delicato equilibrio tra dimensione locale e dimensione globale. La necessità di inserire i singoli progetti di trasformazione all'interno di una visione strategica condivisa, la capacità di elaborare forme innovative di gestione di piani, progetti e di partenariato con forte base locale, l'importanza del fattore temporale come variabile determinante in un contesto in rapida evoluzione devono alimentare il motore dello sviluppo, per far sì che Trieste sia proiettata verso il futuro con rinnovato ruolo in chiave euromediterranea, senza dimenticare le questioni legate alla sostenibilità.

### **Keywords:**

Adriatic-Ionian Region, European Union Strategies, multimodal transport system, port cities, Trieste.

# Trieste and its port as paradigm of a renewed sea-oriented vision?

Gabriella Pultrone

### Port cities in the complex global scenario

The process of market internationalization; the presence of Countries which were once excluded from the geo-economic chessboard; the strategic value of material and immaterial flows, of people's mobility, of the transportation of goods and of the logistic chain, make port cities the main protagonists of a new competitive game. On the one hand, they assign them a new central role as development factors (CENSIS, 2008), on the other hand, they confront them with ongoing global challenges, such as: the global economic crisis, demographic dynamics, climate change concerns, energy issues, the rarefaction of natural resources and the emergence of new economic powers. Port-city relations in fact cover a wide range of themes related with logistics, tourism, tertiary activities, and planning, as in proposed classifications (Bienfait and Delsalle, 1989; Amato, 1999; Ducruet, 2011).

The effectiveness of the possible solutions to the numerous unresolved questions depends on the quality and on the innovative character of the answers given by all the local public and private actors by using tools that may be voluntary or compulsory under national laws, within a scenario of common objectives and responsibilities.

In the wider debate about the contemporary city, these aspects are closely related to the following significant and more specific themes: conservation and re-use of the historical, cultural, functional and environmental heritage; rehabilitation of derelict areas; urban regeneration; coexistence of different ethnic groups, cultures and life styles; additional economic role of the functions and spaces of culture; ongoing transformations in public spaces and in social relations (*Torres*, 2003); different competences and interinstitutional relations between Authorities as regards territorial management; governance; role of public-private partnership in the implementation of programmes, plans and projects. These issues should be considered within a complex and varied framework of economic, psychological, socio-cultural and political factors which affect spatial transformations and which should be taken into account by town planning in order to analyze phenomena, interpret them critically, propose solutions to weaknesses, enhance and revalue specific local identities, using its typical tools.

On a world level, the historical port cities, which have experienced industrialization and post-industrialization (Boston, San Francisco, Toronto, Cape Town, Sidney, Hong Kong, Shangai, Liverpool, Rotterdam, Barcelona and Genoa, to mention just a few of the

most famous examples), with different times, modes and results, have bet on actions of urban regeneration and on the refunctionalization of the urban areas close to the port, with a view to elaborating a new model of overall development that is able to combine economic, environmental and social sustainability needs (*Greco*, 2009).

Moreover, in the international debate, the analysis of waterfront morphology reveals a consistent connection between the economic history of city ports and evolution of their waterfronts (Minca, 1995). As an increasingly sensitive border/contact area between city and water, the waterfront is considered strategic for a social, economic and image revival of the whole urban context, which should be founded on the rediscovery and enhancement of a relation that the growing port activities had once broken. The various transformation policies show a twofold orientation: to act on the reorganization of port functions, in the strict sense of the word, in order to offer a more effective and integrated logistic system; or to establish a strong bond with the city, also by introducing a mix of typically urban functions, such as those related to the tertiary sector, tourism and cultural heritage. That is the reason why, for example, the Port Master Plan, provided for by the Italian Law L.84/94, aims at synthesizing the two dimensions by bringing together the interests of the operational port and those of the area of city-port interaction (CENSIS, 2008). However, any port reform process should take into account the linkages between city objectives and the port objectives. Transport integration is an essential port function, but it does not take place in isolation; a seaport node within a multimodal transport system is frequently associated with the development of an urban center and generates substantial employment, industrial activity, and national and regional development. Both the port authority and the port city should use their influence to establish needed intermodal infrastructure and agreements; in addition, the port authority and the port city should collaborate to efficiently accommodate traffic flows and limit transport costs (The World Bank, 2007). In wider terms, though often changing its role within the economic and territorial context, the port has always had a strong attraction for things, people and investments. Moreover, today more than ever, competition is based on the systems of relations, services and infrastructures, which give a crucial importance to the interconnection networks linking the port to the other territorial nodes, such as the city itself, the railway station, the airport, highway interchanges and the inland port (Delponte, 2008). On the one hand, new goods handling technologies, the development of container traffic and the growing size of vessels have revolutionized port areas, which are experiencing an escalating phenomenon; on the other hand, the global economy of trade is attaching ever-new symbolic meanings to port areas (Pavia, 2008). While, in the past, urban identity blended with that of its port, today the two identities are well distinct and often conflicting. Therefore, the new identity of ports demands a careful reflection since, if they demand ever-greater autonomy for their specific functions, cities, for their part, claim greater integration and dialogue and a physical, functional and social reorganization.

The presence of the port affects above all the growth of territorial productive systems, logistic capacity and territorial competitiveness by driving growth, as a global player

open to the international trade of the new economy and as a local node of a global network. It is a virtual space of flows always rooted in a real space to be reconsidered and redesigned with the purpose of fruitfully integrating flows and physical places (*Castells*, 2004). Furthermore, each port is a gateway, a junction of the land-sea cluster, a hinge between flows and territories in the global scenario. Thus, public and private investments should aim at continuously improving international standards in terms of depth of seabed, modernization of docks, safety and security systems, and easy connection with the road and railway networks (*CENSIS*, 2008).

In particular, the ports located at the intersections between sea and land routes will become increasingly important for the implementation of an effective European multimodal transport system, considering that the rebalancing of transport modes is one of the main goals of a transport policy pursuing sustainable development. The external dimension of the transport sector should be well integrated in the general EU transport policy and the transport policy should be part of wider relations with third countries and external organizations (Commission of the European Communities, 2006). The EU transport policy aims at the creation of a multimodal transport system that integrates land and sea transport networks. In 2007, the European Commission launched a series of initiatives, concerning ports and logistics, through the following communications: "Integrated Maritime Policy for the European Union"; "The EU's Freight Transport Agenda"; "An EU Port Policy" and "Freight Transport Action Plan". Furthermore, a Communication of 21 January 2009 fixed the "Strategic Goals and Recommendations for the EU Maritime Transport Policy until 2018" to support the EU maritime transport in the globalized markets through the development of human resources, skills and maritime know-how (Commission of the European Communities, 2009).

One of the problems, which are set to become increasingly important, is related to the links between the European Union and the neighbouring countries overlooking the Mediterranean and the Adriatic Sea, which is a "multimodal corridor" for the combined transport within the trans-European connections envisaged by the Treaty of Maastricht. Its upper coasts, with the ports of Trieste, Venice, Koper and Fiume, are the channel of the south of the Community, which is most projected towards the centre, north and east of Europe. Nevertheless, it should always be taken into account that the competitiveness of port nodes for the transportation of passengers or goods is influenced by both the functionality of the connections with the port hinterland and the levels of spatial integration between the port and the surrounding town. Thus, many questions emerge. All deserve further analysis and concern different territorial scales, from the local to the global level: Trans-European Networks (TEN); intermodal transports; integration between port functions and urban spaces; projects of rehabilitation, renewal and development of the historic dock-basins; reconciliation of the recreational and landscape vocations with the economic interests of the port, of the tourist industry and of local communities.

In the light of these remarks, the article focuses on certain significant aspects of the case of Trieste, which is considered emblematic for its history - it contains events com-

mon to all the ports that, from the Industrial Revolution on, have been concerned by processes of growth and implementation of industrial innovations, though with their own peculiarities and different times (*Alemany Llovera*, 2010) - and for its ongoing dynamics and future prospects. Today, the case of Trieste condenses the expectations, hopes, risks, opportunities, unmissable occasions and cards up the sleeve of a city that, thanks to its great port tradition related to its strategic position and to its role of Mediterranean gateway of Central Europe, has the possibility to renew its strategic role as smart gateway between Europe and the Mediterranean.

# The port of Trieste between historic heritage and search for a new strategic role

As in other Mediterranean cities, the port of Trieste is the main factor of development of the city and gives origin to deep changes, both in the spatial organization and in the management of the different activities. Its rise in the sector of maritime trade started in the early 18th century. In 1719, the free port established by Charles VI of Austria gave fresh impetus to merchant and shipbuilding activities that, in the space of a century, led to the transformation of a small sea village into the Mediterranean gateway of Central Europe. It even replaced Venice, which, until then, had been the undisputed queen of Mediterranean traffic in the Adriatic Sea.

This new geo-economic role became more definite over time as the new city developed,

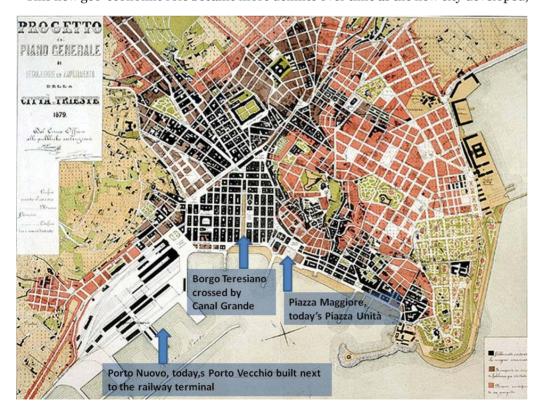


Fig. 2 The City and Port of Trieste in a draft plan of 1879

Fig. 3 Trieste. View of the Canal Grande, considered as the actual port of the city until mid-19th century, with the scenic backdrop of the Neo-classical church of S. Antonio Nuovo



starting with the construction of the *Borgo Teresiano*, which had the double function of urban extension, adjoining the old city protected by walls, and of port area with innovative characteristics. Actually, its regular grid plan integrates urban and port facilities allowing vessels to enter the new city through Canal Grande, whose scenic backdrop is the Neo-classical church of S. Antonio Nuovo. The capacity of integration between waterfront and urban space was then wonderfully expressed by the construction of Piazza Maggiore (today's Piazza Unità), which overlooks the sea. It was obtained by filling in the Mandracchio and moving the new port further north through what Rosario Pavia (2008) defines as the first waterfront rehabilitation in Italy. The subsequent transformations, the expansions of the city and of port facilities, which were destined to more and more specialized activities, followed the increase in traffic. At first, the Canal Grande was considered as the actual port of the city, with which it was closely integrated. Yet, in the mid-19th century, with the passage from its status of emporium to that of port of transit and with the development of railway networks, the need to further extend port facilities became pressing.

In the second half of the 19th century, *Porto Nuovo* (today's *Porto Vecchio*) was built further north, next to the railway terminal. It covered a coastline of 1200 metres and was conceived as the most high-tech port of the time. In the '20s, 37 buildings (warehouses and hangars) and 45 service buildings were built in the area, some of which were of great interest, such as the hydrodynamic station, which utilized pressurized water to produce the energy needed for goods handling. Others were of great architectural value, such as interesting examples of industrial archaeology (*Marin, 2006*). Yet, as soon as



Fig. 4 Trieste. The hydrodynamic station, part of the Porto Vecchio heritage that is very interesting in all its entirety for its centrality and for the cultural aspects of its architecture, in a renewed prospect of urban enhancement

it was finished, the new port of Trieste was already "old" and inadequate, owing to its seabed, which was low in comparison with the port that would be constructed southward, beyond Rive and Campo Marzio, already in the early 20th century, with further extensions during the century (*Pultrone*, 2004 and 2007).

As in many other analogous cases, in Trieste, buildings, infrastructures and other facilities built in the last two centuries often lie in the surroundings of the old port or in areas involved in the port-city relationship. Owing to their age and technical characteristics, they are part of the port heritage and, as a consequence, they are protected (*Alemany Llovera*, 2010). Even in this specific case, the large area of Porto Vecchio is interesting for its central position and for the communicative and cultural aspects of its architecture and layout, which give such places their distinctive character, whose historical origin is rooted in the dynamic relation between a sea- and trade-oriented economy, society and the sense of community.

Looking to the future, the whole urban waterfront, with its open spaces and its buildings, should take on new meanings in order to go beyond the passive acceptance of symbolic values of the collective memory, which are nostalgically consumed by hasty citizens and tourists, and to become a place of contemporaneity, which is deep-rooted in history and, at the same time, produces a new culture in the post-industrial and post-modern society. The waterfront extends in length and depth, as a social reconquest of public space, which can be used by the community without any hindrances and must acquire a new strategic value that leads to a review of the whole urban fabric in terms of environmental sustainability (*Greco*, 2009). Thanks to its peculiar geographic posi-

Fig. 5 Trieste. Waterfront of the Borgo Teresiano



tion and to human action over time, Trieste has become a privileged place of exchanges of goods, culture and knowledge. If, on the one hand, the analysis of past events has allowed to reconstruct the dynamics that led to the city's current layout, on the other hand, the events of the last twenty years, which were marked by rapid territorial, social and economic transformations, have required town planning and territorial governance tools, at their different levels, to deal, not only with the need to manage ongoing changes, but also with the possibility to foresee further scenarios of change and to test themselves against supranational transformations (*Pultrone*, 2004 and 2008).

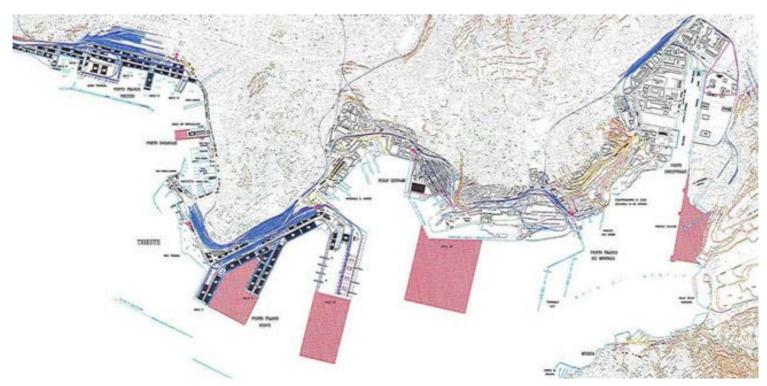
Over the last twenty years, in Trieste, general and sectoral programmes, plans and projects have alternated with feasibility studies and design competitions, with the common will to enhance territorial identity in its multiple aspects and to reassert the central role of the city as a territorial, economic, cultural and social "linking area" between Europe and the Mediterranean. Worth mentioning are the *Prusst* (Urban Regeneration and Sustainable Development Programme), approved in 1999; the *Strategic Plan*, proposed in 2001 on the horizon 2010; the URBAN Community Programme concerning *Cittavecchia*; the *Competition for the Rehabilitation of Waterfront Areas* (2001), whose primary goal was to restore the role of waterfronts as links between the different public and private functions of the historic buildings located in the area and in its surroundings; the various proposals for the *regeneration of the Porto Vecchio area*, up to the Master plan (2006, supervised by Norman Foster & Partner); and, finally, the proposal of the *Parco del Mare*.

The analysis of these and other experiences highlights the following significant themes:

maritime and land transport infrastructures; the rehabilitation of the waterfront and of derelict areas; the redevelopment of the whole urban area and of its surroundings (e.g. karst villages); the extension of the port areas, due to the expected increase in traffic following the completion of Corridor V, the extension of Pier 7 and the construction of the Logistic Centre, in the area between the Timber terminal and the former Italsider steelworks, and of the consequent road and rail connections. Implementation times and results are obviously different: in some cases, goals can be considered achieved (PIC URBAN); in others, e.g. the *Strategic Plan* and the winning projects of the *Competition for the Rehabilitation of Waterfront Areas*, which have remained on paper, only the study and design phases have been carried out. This is due to many factors, some of which are endogenous and related to the succession of administrations with different orientations; others are exogenous, i.e. they depend on national and international choices. Anyway, actions are effective if they are implemented in a wider reference framework and if the various stakeholders concerned have a strong governance and participation capacity.

Nevertheless, history goes on and Trieste can continue to be an interesting workshop where new policies, plans and projects can be elaborated and tested. Through its resolution n. 70 of 22 November 2011, the municipal administration issued the directives, with their relative safeguard measures, that fixed the preconditions and objectives of the creation of a new town planning tool, which was different from the previous Variants n. 66 and n. 118. It could tackle some of the central themes concerning planning and the contemporary city: pursuit of sustainable development; control of land consumption; rehabilitation, upgrading and refunctionalization of the existing urban heritage; promo-

Fig. 6 Trieste. Port Master Plan



tion of environmental and landscape quality; promotion of sustainable mobility. Among the reasons that led to the decision to elaborate a new general town planning tool, besides those directly deriving from normative provisions and from the limits and weaknesses emerged during the implementation of the Variant n. 66, was the change in the "surrounding" factors that modified the geopolitical and economic scenario a Master plan should deal with: e.g. the lifting of tariff barriers to the east, on the borders of the municipal territory; and the need to define a new role and new development and competitiveness strategies for the Municipality of Trieste, within an increasingly wide and complex territorial framework (Municipality of Trieste, 2011). It was only the beginning of a complex procedure of formation which was started at the height of a national and international economic crisis and whose crucial choices would be based on the natural vocation of an area characterized by an economy of flows and relations, of ideas, people and goods. These potentials are linked to a sea-related economy, to advanced services, to quality tourism and to the knowledge system and require quality strategic choices for an optimal use of territory, infrastructures and heritage in order to virtuously connect past, present and future. They are strategies that can give substance to innovative forms of development and competitiveness in the different economic sectors (industry, ports, trade, tourism, agriculture and tertiary sector) and yet need the collaboration of other authorities that are involved also in economic activities, such as the Provincial Administration of Trieste, the Port Authority, EZIT (Trieste Industrial Area Authority), University, Area Science Park and the Chamber of Commerce. The definition of new roles, prospects, location and spatial solutions should also emerge from the comparison with bordering territories, within a large area encompassing the Italian and Slovenian

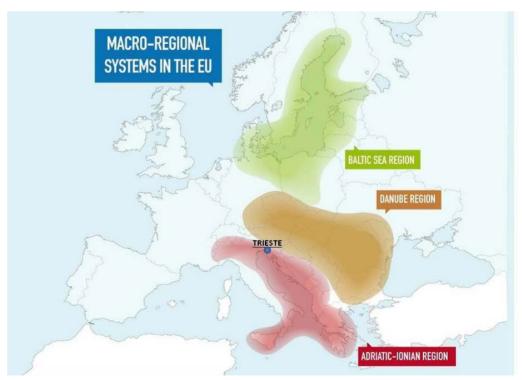


Fig. 7 The map highlights the centrality of Trieste within the Macro-Regional Systems of EU

territory and, however, within a process of listening and participation of citizens, economic and social operators and public and private actors that actively contribute to city development and to the management of spaces and activities.

As regards interinstitutional relations, the Memorandum of Understanding, signed by the Ministry of the Environment and the Port Authority at the end of 2011, is a focal starting point to trigger a concrete process of revitalization of Trieste free port and of its central position in the Northern Adriatic Arc. Such a process should include actions of rehabilitation and strengthening of Trieste *Campo Marzio* railway terminal, the regeneration of the Ex-Esso area and the creation of a new port terminal in the area of the former Aquila Refinery. Furthermore, the decisions concerning the urban waterfront should be shared by the Municipality and the Port Authorities so that full functionality and project consistency can be achieved in the relationship between city and waterfront. An example of co-operation between Municipality and Port Authorities is the Port Master Plan. It is a tool for planning, controlling and managing port areas, according to the Act of the Italian Parliament n. 84/1994, art. 5, and to the guidelines set by the Ministry of Infrastructure and Transport, which was adopted in May 2009 and is currently undergoing the procedures concerning the Environmental Impact Assessment (EIA) and the Strategic Environmental Assessment (SEA).

Though Trieste had been relegated to a the marginal role after the Second World War, the theme of "infrastructures" has recently given rise to a new focus on the city, owing to the change in the European geopolitical scenario that has been caused by EU strengthening and progressive enlargement to the east; by the programming of TEN-T infrastructural networks, which pursue the goals of cohesion, integration and development; and by the presence of international scientific and cultural institutions. The strengthening of intermodality and of railway and road networks may introduce the port of Trieste, as a specialized organism, in an international logistic network that, however, should not risk to be cut off from the territory it crosses and to reduce its historic port-city symbiosis to occasional convergences. The latest data show that its port is an effective hub for the goods coming above all from Turkey, which can be directly routed to the heart of Europe (Austria, Germany, Czech Republic and Slovakia), partly by road transport and partly by special Ro-La (rolling road) trains with tractor and trailer. Thus, Trieste is a strategic hub in these actual Motorways of the Sea. Furthermore Trieste, the Autonomous Region of Friuli Venezia Giulia and the Italian Government cannot miss the historic opportunity of the Baltic-Adriatic Corridor after the European Parliament's final approval in November 2013 (https://www.ansa.it/nuova\_europa/it/notizie/rubriche/ eusair/2013/11/28/Infrastrutture-Afe-perdere-occasione-Adriatico-Baltico\_9697741. html). In particular, the presence of a infrastructure with a great potential which is exploited only 50%, the *Pontebbana railroad* already double track, that within a few years and with a lower investment, amounting to a few hundred million euros, could allow the port city to take the opportunity of the above mentioned Corridor.

The potentials of the port of Trieste in the Euro-Mediterranean context can be further enhanced by innovative network cooperation with the other ports of the northern Adri-

atic Sea, as it already happens through studies and projects. In particular, the Northern Adriatic Ports Association (NAPA) has agreed to develop a study, which includes a pilot action involving Italy and Slovenia and focuses on the future deployment of ICT solutions to enable an efficient information exchange between the NAPA ports. It will also include the port of Rijeka and all the actors involved in intermodal transport processes (http://tentea.ec.europa.eu). A prototype of a common e-platform (http://www.its-na-pa.eu/) based on the development of a NAPA web portal for data sharing allows the interconnection between port systems, according to common standards and technical requirements defined on the basis of a port process analysis. The final aim is to gradually transform the present four northern Adriatic neighbour ports into a single integrated port system in which each individual infrastructure would have its own recognized specialization. This transformation is also in the interest of the EU and its principles (intra-regional-cross-border cooperation), and the EU is prepared to support it.

The EU Strategy for the Adriatic and Ionian Region (EUSAIR) is another significant initiative aimed at pragmatic, realistic and measurable common objectives that will strengthen complementarity, coherence and collaboration in the region. In fact, at the European Council of 14 December 2012, EU Heads of State and Government invited the European Commission to put forward a proposal for a new Macro-Regional Strategy for the Adriatic-Ionian Region before the end of 2014. The EUSAIR, which builds on the Maritime Strategy for the Adriatic and Ionian Seas adopted by the Commission in 2012, and will cover eight countries: four EU Member States (Croatia, Greece, Italy and Slovenia) and four non-EU countries (Albania, Bosnia and Herzegovina, Montenegro and Serbia). The strategy will promote the economic and social prosperity of the region by improving its attractiveness, competitiveness and connectivity. It will take into account the work already done by the Adriatic-Ionian Initiative that in 2000 gathered the same countries from the region around some common goals. The formal adoption is expected in the second semester of 2014 under the Italian Presidency of the Council of the EU (European Commission, 2013).

Ultimately, Trieste is facing or is going to face many challenges, not least, its ambition to become increasingly smart in the competition with the other European cities and to find an intelligent way to combine its material and immaterial resources to serve a smart community. Much is still to be done to improve the value of the smart identification and measurement parameters, which were analyzed in the "European Smart Cities" Report (http://www.smart-cities.eu), elaborated by Vienna University of Technology, in collaboration with the University of Ljubljana and Delft University of Technology, and concerning medium-sized cities with less than 500.000 inhabitants. Nevertheless, in a list of 70 cities, Trieste ranked 49th, i.e. the second Italian town after Trento, which ranked 45th. Obviously, these positions are not definitive, since they may rise or fall. The possibility to reach the top of the list depends on various factors, such as the quality of the initiatives that will be planned and undertaken; the capacity to achieve the established project goals; and, above all, the local governance and innovation capacity.

### **Conclusions**

The future of Europe and of the Mediterranean Sea is linked to the sustainable development of Mediterranean cities. Understanding between port cities leads to a common policy across the EU: ports and cities working together to solve their problems. Creditable common initiatives and strategies of cooperation are already recorded between northern Adriatic ports, such as Venice, Ravenna, Koper and Trieste, which is the northernmost port and has a strategic function of connection between Europe and the Mediterranean as well as a historic, industrial, tourist and commercial function related to its rail and road connections.

At the urban level, the projects of development and rationalization of port facilities should consider the functional and economic aspects of investments and may trigger actual widespread processes of regeneration, capable of generating new urban and territorial poles, such as dock stations, public squares, well-equipped urban pathways and waterfronts related to tourist, cultural and leisure activities. Building an innovative sustainable model of development, which includes the "wholly urban" waterfront, should be a strategic goal, because the maintenance of compatible port functions in the heart of the city, at the city-port interface, opens new prospects in terms of projects with a high economic added value for both the city and the port itself.

The city waterfront may become a space of connection, where material port service and urban crossing traffic and compatible urban and port activities, but also immaterial networks, which exalt port relations with global networks, flow at different speeds and with varied needs. The Rive and Porto Vecchio of Trieste are still an extraordinary opportunity, areas on which vital energies should be focussed to elaborate projects leading to innovative urban forms and relations and where the spaces of connection between city and port are spaces of interaction and integration of new urban central areas. The city-port area is a limes, a border area, but also a highly sensitive area of junction where it may be possible to test new forms of innovation, which originate from a deep reflection about the delicate and often conflicting relation between different territorial and institutional levels, between the legal statuses regulating it, between the different interests involved and between urban and port activities. This should be part of a common strategy that cannot be separated from the time factor, from the availability of resources, from the modes of coordination of active, public and private actors.

Actually, any physical territorial, architectural or town-planning action should be considered in relation to the evolving economic and governance models of a wider urban and territorial reference system. In particular, it should be an integral part of a development plan where strategic planning and territorial and town-planning tools play an undoubted important role in coping with the multiple problems generated by the complex relation between city and port, through the elaboration of plans and projects that can give consistency to the fragmented policies of territorial transformation (*Pultrone*, 2011).

These themes must be tackled at the different territorial and institutional levels, in

a perspective of governance that implies an increasing participation of different local public and private actors in planning shared scenarios able to transform conflicting areas into dynamic areas of dialogue and cooperation and of creative enhancement of the city-port identity. This would allow to carry on processes of endogenous development, which is founded on the exploitation of local resources and can substantiate the adjective smart referred to cities, territories, policies, societies and communities. Hence, Trieste can become a smart city if, aware of its own resources, it will be able to manage them in the most efficient and effective, thus expressing his "intelligence". This broad approach implies both the intervention of the public institutions, with their powers of direction and control, and on the other the involvement of citizens and businesses, which becomes, for the latter, even enabling factor.

In the early 21st century, Trieste is showing interesting potentials in the Euro-Mediterranean scenario. They may be given tangible shape if the various levels of government act by following a middle- or long-term strategy that is aimed at finding the right balance between local and global dimension, needs of economic development and needs of urban and environmental quality.

### REFERENCES

- Alemany Llovera Joan, "La tranformación de los puertos desde la revolución industrial", in Portus. La ciudad portuaria: globalización y desarollo sostenible, n. 19/2010, pp 14-19
- Amato D., "Port planning and port-city relations", in *The Dock and Harbour Authority*, Vol. 80, No 896-900, London, July-December 1999, pp. 45-48
- Autorità Portuale di Trieste, Il Porto di Trieste. Cronaca e storia delle costruzioni portuali, Trieste, Edizioni Italo Svevo, 2002, 269 pp
- Bienfait Philippe, Delsalle Bruno, "Les enjeux internationaux d'un grand port urbain: 11 exemples européens", in *2nd International Conference Cities and Ports*, IACP, Le Havre, 1989
- Bradaschia Maurizio, *Decalogo post-urbano. Progetti e politiche per Trieste*, Roma, Meltemi, 2003, pp 137
- Bruttomesso Rinio, "Città portuali e fronte mare urbano: un nuovo rapporto", in Paone F., Torbianelli V.A. (eds.), *Port planning: urbanism, economics, design*, Proceedings of "Days of Higher Study in reference to the organisation of transport in the European Economic Integration", Trieste, 8-14 settembre 2002
- Bruttomesso Rinio (ed.), *Città-Porto/City-Port*, Catalogo della 10. Mostra Internazionale di Architettura di Venezia, Venezia, Marsilio, 2006, 2 v.
- Castells Manuel, La città delle reti, Venezia, Marsilio, 2004, pp 82
- Censis, Note & Commenti. La portualità come fattore di sviluppo e modernizzazione. L'impatto economico e occupazionale dei porti italiani, n 9, settembre 2008
- Commissione delle Comunità Europee, *Comunicazione della Commissione al Consiglio e al Parlamento Europeo. Mantenere l'Europa in movimento "Una mobilità sostenibile per il nostro Continente*, Riesame intermedio del Libro bianco sui trasporti pubblicato nel 2001 dalla Commissione europea", 2006, http://eur-lex.europa.eu
- Commissione delle Comunità Europee, Comunicazione della Commissione "Obiettivi strategici e raccomandazioni per la politica UE dei trasporti marittimi fino al 2018", 2009, http://eur-lex.europa.eu.
- Comune di Trieste, *Direttive per la predisposizione del nuovo Piano regolatore*, Allegato "A" alla Deliberazione del Consiglio Comunale n. 70 del 22 novembre 2011, http://www.retecivica.trieste.it
- De Andreis Marco, *La politica europea dei trasporti e le dogane*, Interventi aprile 2010, http://www.agenziadogane.it.

- De Carli Giulio, "Progetti per il futuro sviluppo di Porto Vecchio a Trieste", in Portus 14, novembre 2007
- Delponte Ilaria, "Porto-città-retroporto logistico", in Portus 16, ottobre 2008, pp 4-7
- Di Biagi Paola, Marchegiani Elena, Marin Alessandra, "Trieste. Laboratorio di politiche, piani e progetti", Urbanistica 123, gennaio-aprile 2004
- Di Venosa Matteo, "Porti e Autostrade del Mare", in R. Pavia (ed.), Adriatico risorsa d'Europa. Dall'economia del mare alla euro regione adriatica, Reggio Emilia, Diabasis, 2006, pp 125-130
- Ducruet César, "The port city in multidisciplinary analysis", in Alemany J., Bruttomesso R. (eds.), The Port City of the XXIth Century: New Challenges in the Relationship between Port and City, RETE Association & International Centre for Cities on Water, Venice, 2011, pp. 32-48
- European Commission, Discussion Paper on a EU Strategy for the Adriatic and Ionian Region (EUSAIR), August 2013, http://ec.europa.eu/regional\_policy/consultation/eusair/pdf/discussion\_eusair.pdf
- Favaretto Tito, Gobet Sergio, L'Italia, l'Europa centro-orientale e i Balcani. Corridoi pan-europei di trasporto e prospettive di cooperazione, Bari, Laterza, 2001
- Geoghegan Pauline (ed.), Trieste: A gateway to the Mediterranean in the heart of Europe,
  Theme 1/Transforming, regenerating, adapting the physical and environmental components
  of the port city system "Regeneration & Environment concern", Report of the Third seminar,
  Thematic Conference of CTUR THEMATIC NETWORK, held in Trieste, 2009, September
  28-29 http://urbact.eu/fileadmin/Projects/CTUR/outputs\_media/light\_CTUR\_Trieste\_
  meeting\_report.pdf
- Giovinazzi Oriana, Moretti Marta, "Città portuali e waterfront urbani: trasformazioni e opportunità", in. TeMA, Vol. 2, N. 3, 2009, http://www.tema.unina.it
- Greco Nino, La città e i suoi mari. Il waterfront fra sostenibilità e governance, Milano, FrancoAngeli, 2009, pp 190
- Honsell Fulvio, Malinconico Carlo, Maresca Maurizio, Oltre Trieste una via per l'Europa.
   Una proposta di sistema logistico tra Friuli, Venezia Giulia, Slovenia e Istria, Udine, Forum
   Editrice Universitaria Udinese, 2006
- Marin Alessandra, "Il Porto Vecchio di Trieste da vuoto urbano a risorsa per la città", in Industrial Heritage and Urban Transformation Productives Territoires and Industrial Landscape, Terni-Roma, 14-18 settembre 2006
- Marin Alessandra, "Trieste, prove d'innovazione", in Savino M. (ed.), *Waterfront d'Italia. Piani progetti politiche*, FrancoAngeli, pp 105-127
- Migliorini Franco, "Il Corridoio V paneuropeo", in Urbanistica, n. 124, maggio-agosto 2005, pp 8-19
- Minca Claudio, "Urban Waterfront Evolution: The Case of Trieste", in *Geography*, Vol. 80, No. 3, July 1995, pp. 225-234
- Pavia Rosario, "I porti delle città", in Portus 15, maggio 2008, pp 4-13
- Pultrone Gabriella, *Trieste. Alla ricerca di una nuova centralità della regione adriatica nel contesto euromediterraneo*, Reggio Calabria, Iiriti, 2004, pp 221
- Pultrone Gabriella, "Trieste. Città cosmopolita", in: C. Fallanca De Blasio (eds.), Luoghi dello scambio e città del Mediterraneo. Storie, Culture, Progetti, vol. II, Reggio Calabria, Iiriti, 2007, pp 178-219
- Pultrone Gabriella, "Trieste. New Challenges and Opportunities in the Relational Dynamics between City and Port", in *Méditerranée revue geographique des pays mediterraneens*, titled «Villes portuaries horizons 2020. Les nouveaux enjeux du développement», Rachel Malta Rodriguez (ed.), 111/2008, mis en ligne le 01 juin 2010, http://mediterranee.revues.org/2857
- Pultrone Gabriella, "Trieste e il suo waterfront fra storia e futuro: problemi e prospettive", PORTUS PLUS, 1, 2011, http://www.reteonline.org/media/pdf/Portus-Plus-2011/Gabriel-la%20PULTRONE.pdf
- Pultrone G., Trieste, gateway city between Europe and the Mediterranean, Contribution at the 13th World Conference Cities And Ports, Nantes-Saint Nazaire (France), 18-21 June 2012
- TICCIH (The International Committee for the Conservation of the Industrial Heritage), In-

- dustrial heritage and urban transformation productive territories and industrial landscape, XIII International Congress, Terni-Roma, 14-18 September 2006
- The World Bank, Port Reform Toolkit Second Edition. Module 3. Alternative Port Management Structures and Ownership Models, The International Bank for Reconstruction and Development/The World Bank 2007
- Torres Marco, Luoghi magnetici. Spazi pubblici nella città moderna e contemporanea, Milano, Franco Angeli, 2003

### **IMAGES SOURCES**

Fig. 1 http://www.logisticamanagement.it/UserFiles/Image/corridoi.jpg, slightly modified by the author

Fig. 2 AA.VV., Dalla città moderna alla città contemporanea. Piani e progetti per Trieste, CD-ROM Casamassima Libri, Tricesimo-UD, 2002, slightly modified by the author

Fig. 3-5 Photos by the author

Fig. 6 http://www.ship2shore.it/italian/articolo.php?id=6580

Fig. 7 http://www.regions.eu.org/wp-content/uploads/2011/06/macroregions\_eu\_system.jpg

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