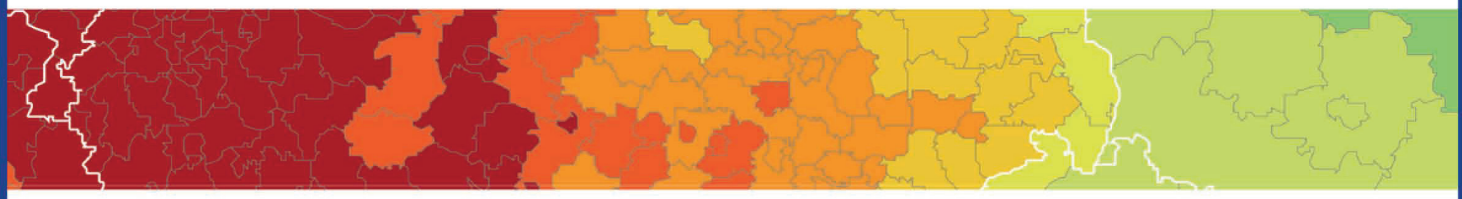
ESPON

EUROPEAN UNION

Co-financed by the European Regional Development Fund

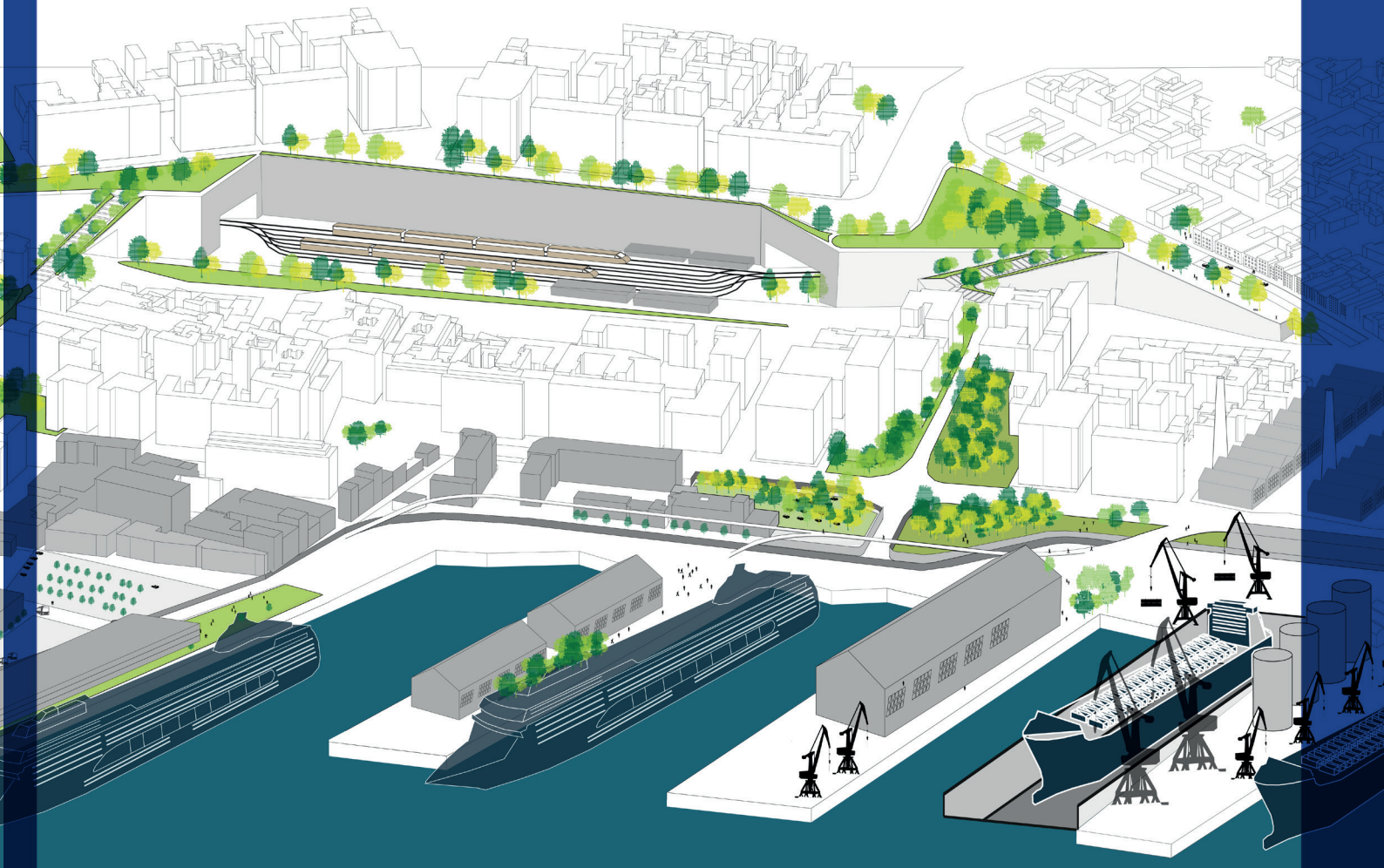
Inspire policy making by territorial evidence



The Good Practice Framework

for European Sustainable Urbanisation through port city Regeneration

An operative guide



ENSURE targeted analysis, Annex 5
The Good Practice Framework for European Sustainable Urbanisation through port city Regeneration. An operative guide.

This targeted analysis is conducted within the framework of the ESPON 2020 Cooperation Programme.

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.

This delivery does not necessarily reflect the opinion of the members of the ESPON 2020 Monitoring Committee.

Authors

Xavier Le Den, Samy Porteron, Elisa Colaiacomo, Henning Thomsen (Ramboll), Maurizio Carta, Daniele Ronsivalle, Barbara Lino (UNIPA), Niamh Moore-Cherry, Aoife Delaney, Eoin O'Mahony (UCD), Cian O'Callaghan (TCD).

This guide is edited by

Maurizio Carta, Daniele Ronsivalle, Barbara Lino (UNIPA) in collaboration with Niamh Moore-Cherry (UCD) for the pre-planning analysis, Xavier Le Den (Ramboll) for the suitable planning approach, Henning Thomsen (Ramboll) for the governance and funding models.

Advisory Group

Hugh Killen, Lorcan Griffin (Cork City Council), Gildas Borel, Tristan Le Guillou De Penanros (Brest Metropole), Gudrun Schack Østergaard, Anne Juel Andersen, Thomas Birket-Smith (Aalborg City Council), Davide Crimi (Comune Catania).

ESPON EGTC: Michaela Gensheimer (Senior Project Expert), Caroline Clause (Senior Financial Expert), Nikos Lampropoulos (Project Expert – European Outreach/Press and Media).

Information on ESPON and its projects can be found on www.espon.eu

The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

Contact: info@espon.eu

ISBN: 978-99959-55-35-9

The Good Practice Framework

for European Sustainable Urbanisation through port city Regeneration

An operative guide

Image credits:


link.svg is designed by Ceaticca Creative Agency from www.flaticon.com


icon.svg is designed by Freepik from www.flaticon.com


warning.svg is designed by Pixel perfect from www.flaticon.com

Other credits listed with associated images.

All quoted websites are accessed at 12/30/2019.

Table of Contents

Toolboxes

5. Index of good practice examples

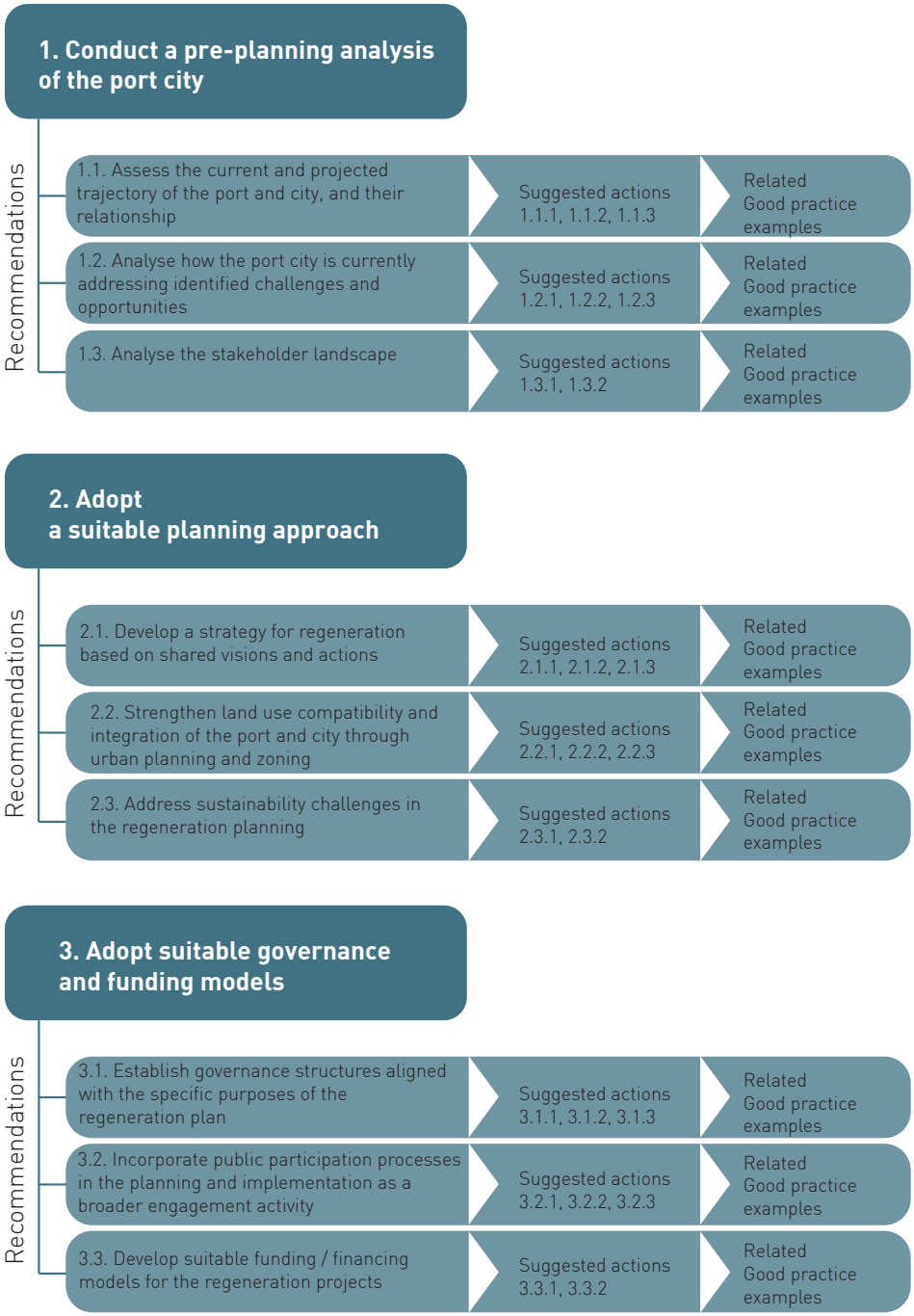


Figure 1. The structure of the Operative Guide is based on the three key policy recommendations.

Preface

Cooperation or competition: could the port and the city achieve sustainable urbanisation as a common goal?

The ENSURE research reveals that port cities are relevant in sustainable urban regeneration. Taking into account the sensitivity of urban and port contexts, and the solutions adopted across European port cities, the research delivers a set of key policies in order to plan and manage the regeneration process.

Why the port city contexts are so relevant in European policies?

The port city contexts are diverse and the interfaces between the port and city are different in nature. These interfaces can be places of conflict and they may also be sensitive areas due to the co-location of port and industrial activities, and the coastal landscape and marine ecosystem.

Regardless of the different models of planning and regeneration implementation, all port cities across European regions aim to promote mixed-use functions for regenerated port city areas, the integration of former port lands into the city or further integration between the port and the city, and liveability.

Because several differences are found between the port cities in terms of governance structures, degrees of separation of port and urban functions, land ownership, paces of the phasing out of port and industrial activities along the harbourfront, the approaches to and implementation of urban regeneration require common basic soundness: in the long run, through a stronger cooperation between port and city stakeholders, urban regeneration of port cities contributes to making European regions more resilient, which strengthens the competitiveness of Europe in the global economy.

Supportive policy framework for port city regeneration

The challenge of port city regeneration has been a topic of debate in several Committee of the Region workshops in recent years and the subject of at least two policy briefings to the European Parliament in November 2016 and May 2017. Globalisation offers an opportunity for port cities to use these old industrial waterfront locations to revive their economy, to strengthen their magnetic pull, to become hubs of innovation and to act as leading examples of sustainable urban planning, ensuring their long-term competitiveness as economic drivers within the EU (European Committee of the Regions, May 2017).

Three recommendations to address the challenge of port city regeneration

For local policy makers engaged in regeneration process, the ENSURE project provides three key policy recommendations, highlighting that political commitment and active leadership are crucial in supporting regeneration processes. In this context, approaches centred on pre-planning, planning, governance and funding models should be followed to ensure the long-term commitment of stakeholders, ideally before shaping any specific regeneration project.

The first key policy recommendation to start an integrated regeneration process is to understand existing port city relationships, using spatial analysis tools and evaluating plans and policies at national, regional and local levels. It is especially important to define realistic goals and the limits of future development.

The second key policy recommendation is for planning ports and cities as a system with interlinked components. Shared strategic plans, integrated masterplans and aligned planned land-use for the port and the city hold the key to resolve the port city mismatch caused by the absence of, or competing, port city relationships, and to help address port city regeneration as part of a wider urban development strategy.

The third key policy recommendation is for establishing suitable governance models and funding arrangements for each of the regeneration projects or plans. It is critical to successful implementation of the city port regeneration vision. Engaging all stakeholders, including civil society organizations, citizens, landowners, and local businesses is essential to ensure that all relevant perspectives are taken into consideration and that a planned regeneration receives widespread support and benefits all.

Each port city has its own history of regeneration, but only through a general rethinking of planning - from pre-planning analysis to implementation - the port cities will be able to contribute to their competitiveness as important EU gates.

Can a guide help the stakeholders to address the challenge of competition in EU port cities?

Who is the guide for?

This guide is targeted at three groups of potential users:

- Decision-makers who are mostly elected politicians, and also persons appointed as representatives to bodies with decision-making powers.
- Policy makers, e.g. public executives and officials in charge of urban governance in local administrations that have the responsibility to implement programmes, strategies, projects related to port cities.
- Practitioners and professionals, in private or public context that are engaged in urban regeneration in small/medium port cities regeneration process.

However, in port city contexts, the essence of governance (largely beyond the government system) is to engage a potentially wide range of stakeholders and non-governmental institutions. We hope this Guide can be useful to them, too.

How to read the guide?

The three key policy recommendations tackle key challenges in the regeneration of port cities.

Each of them consists of specific recommendations concerning how key policy recommendations should be applied: the suggested actions finally depend on the specific recommendations.

These suggested actions generate some key questions for self-reflection for which the authors propose solutions that are supported by good practice examples.

So, the Guide can be read in several ways: from start to end or searching for specific solutions or reading about cited examples through its three chapters:

- Chapter 1 helps to understand how to conduct **a pre-planning analysis** of the port city.
- Chapter 2 explains the options to adopt **a suitable planning approach**.
- Chapter 3 addresses aspects relating to adopt suitable **governance and funding** models.

The text is supported by illustrations from the case studies and additional text boxes, marked with if they link to websites, with for internal cross-reference, with to invite the reader to keep attention on specific topics, about the suggested actions.

And finally, at the end of the guide, the basic information about good practice cities cited in the handbook is provided in succinct tables.

KEY POLICY RECOMMENDATION 1.

Conduct a pre-planning analysis of the port city

A key element to start an integrated regeneration process is to understand existing port city relationships, using spatial analysis tools and evaluating plans and policies at national, regional and local levels. It is especially important to define realistic goals and the limits of future development. For regeneration to be successful, a detailed and stakeholder shared analysis of the current situation and projected trajectory is needed. This will contribute to establishing a baseline in economics, demographics and land-use that can be shared widely, and constitute a sound-evidence base for future decisions and development. Understanding the current situation of the port and city, and their relationship, will provide information for a common vision and highlight gaps between the current situation and the vision.

Understanding the specific context of the port and city is an obvious, necessary first step, but there is a risk that planners and policymakers will ignore this pre-planning analysis, assuming that they already have the required knowledge. The main challenges relating to the analysis of the specific context include the lack of a suitable evaluation framework, time, resources or capacity to assess, monitor and evaluate regeneration plans, and the lack of data at the necessary level.

POLICY RECOMMENDATION 1.1.

Assess the current and projected trajectory of the port and city, and their relationship

In order to identify the existing challenges and opportunities, a systematic review of the current status and the projected trajectory is required. This requires two elements:

- Understanding the current socio-economic role of the port associated with port activities, development trends, and the local, regional, national and supra-national governance frameworks;
- Undertaking a thorough spatial analysis of the city in terms of economic, social and environmental factors to provide information for policy / plan development.

Finally, it is also necessary to consider not only the roles of the port and the city separately, but also to understand the type of relationships that have developed in the evolution of the port city. This phase of assessment concludes by defining challenges and opportunities as they currently exist in the port city.

Suggested action 1.1.1.

Conduct a comprehensive, in-depth analysis of the port

A comprehensive and in-depth analysis of the port examines many elements related to local conditions. Required data are, e.g. development of port throughput, maritime connectivity, land surface of the port, port activities, port-related employment.

Moreover, it is necessary to consider, at local level, the spatial impacts of the port activities and availability of empty port spaces, and, at global level, some external macro-challenges (e.g. in global maritime transport innovations such as larger containers, changes in global shipping transport) and potential roles of the port in regional/national/international transport strategies etc. related to local conditions.

Each port is located in a highly sensitive area that is the border between land and sea, and the European Maritime Strategy underlines the relevance of risk and environmental sensitivity of the coast interface. The analysis of the port needs to pay special attention to landscape quality by an assessment of landscapes and flood risks, mainly where there is a risk of rising sea levels or in riverports, by a flooding analysis.

What are the main zones and activities at the port?

In order to analyse the port, it is necessary to draft a map that outlines zones and activities of the port. Indeed, it is possible to use some categories of land-use and coverage, such as the Corine Land Cover (CLC) classification in which the category 'port areas' (class 1.1.3 of the CLC coverages list) is composed of the infrastructure of port areas (land and water surface), including quays, dockyards and marinas. This class is applicable for all typologies of port and to all infrastructures serving it.

It is necessary to draft a map that outlines zones and activities of the port: see Toolboxes 1 and 3.

The understanding of port activities needs to be complemented with a wide range of other analyses that can include e.g.:

- **Port development phases** map and / or a summary text to detect how the shift in port activities and the adaptation of the port over time creates spaces and transformations that impact on current port status. This map needs to be very simple but clear in its evolution steps;
- **Port concessions and state property** map, recognising the private property, the public maritime domain, distinguished in public-use areas and the areas rented to third-part concessionaires;
- **Urban functions** map, conveying which typical urban activities are conducted in the port district. The map could distinguish the local neighbourhood-level functions (e.g. food shops,

Toolbox 1 | What is a port according to Corine Land Cover categories?

Corine Land Cover (CLC) is a European project for mapping the coverage of European land. It focuses mainly on natural coverage, but the categories related to anthropic coverages are inspiring to help define land-uses. The classification for the category 'port areas' (class 1.1.3 of the coverages list) relates to:

a. seaports, river ports, lake ports; commercial and military ports; shipyards; fishing ports; yacht ports, sport and recreation ports; oil terminals inside port areas. Furthermore, the port areas include all the shipping and infrastructure port facilities: the harbour stations, dock houses, buildings associated with port activities; tanks and pipelines; dockyards, wet and dry docks.

b. all the infrastructures serving the port area are included in the 'port' category: roads, railways and parking lots within the port area; sealed or non-sealed storage and loading areas; piers, quays and breakwaters; harbour basins shirted by quays if the infrastructure area of the port (firm land part); strips of industrial units adjacent and functionally connected to the harbour.

health services, or other local facilities) and metropolitan-level functions (e.g. research centres, urban and metropolitan mobility hubs, tourism, culture and sport facilities).

How is the port positioned within the wider regional, national and European spatial and socio-economic system?

To evaluate the position of the port in wider national, regional and European spatial and socio-economic system, it is possible to use some findings by international organisations' researches, finalised to evaluate the characters of the ports in urban and infrastructural contexts.

For example, the EU Commission policy for the Trans-European Transport Network (TEN-T) envisages an articulated network of roads, rails, ports and airports to connect main nodes across European regions, starting from a focused research on urban and infrastructural contexts across European Member States.

The relevance of each port within the TEN-T is based on specific criteria that define their role in the European transport network.

In the TEN-T policy each port could be part of the network on the basis of the following criteria:

- statistical criteria
  - the port is in a capital city and/or other important social economic centre;
  - volumes criteria;
  - territorial criteria;
  - the port is a gateway to third countries.
- linking criteria, i.e. the port is connected to other land transport modes e.g. rail, inland waterways and roads;
- flows criteria in terms of passengers and freight.

This is also a relevant analysis to focus which projects are realised in relation to the wider European context.

At regional and metropolitan level, a map about **flows, connections and interfaces** is necessary to describe in what way the port plays its role at the service of the regional economy.

This map could include transport line for goods and passengers, connections with urban mobility, maritime interfaces for specific types of goods (e.g. oil, cargo, ro-ro, containers, metals, etc) or passengers. The port could be specialised in some types of these activities and so it can play a specific role in e.g. a sub-regional port authority or in the local market.

It is possible to use some findings by international organisations' researches, finalised to evaluate the characters of the ports in urban and infrastructural contexts: see Toolbox 2.

Toolbox 2 | Data about port activities

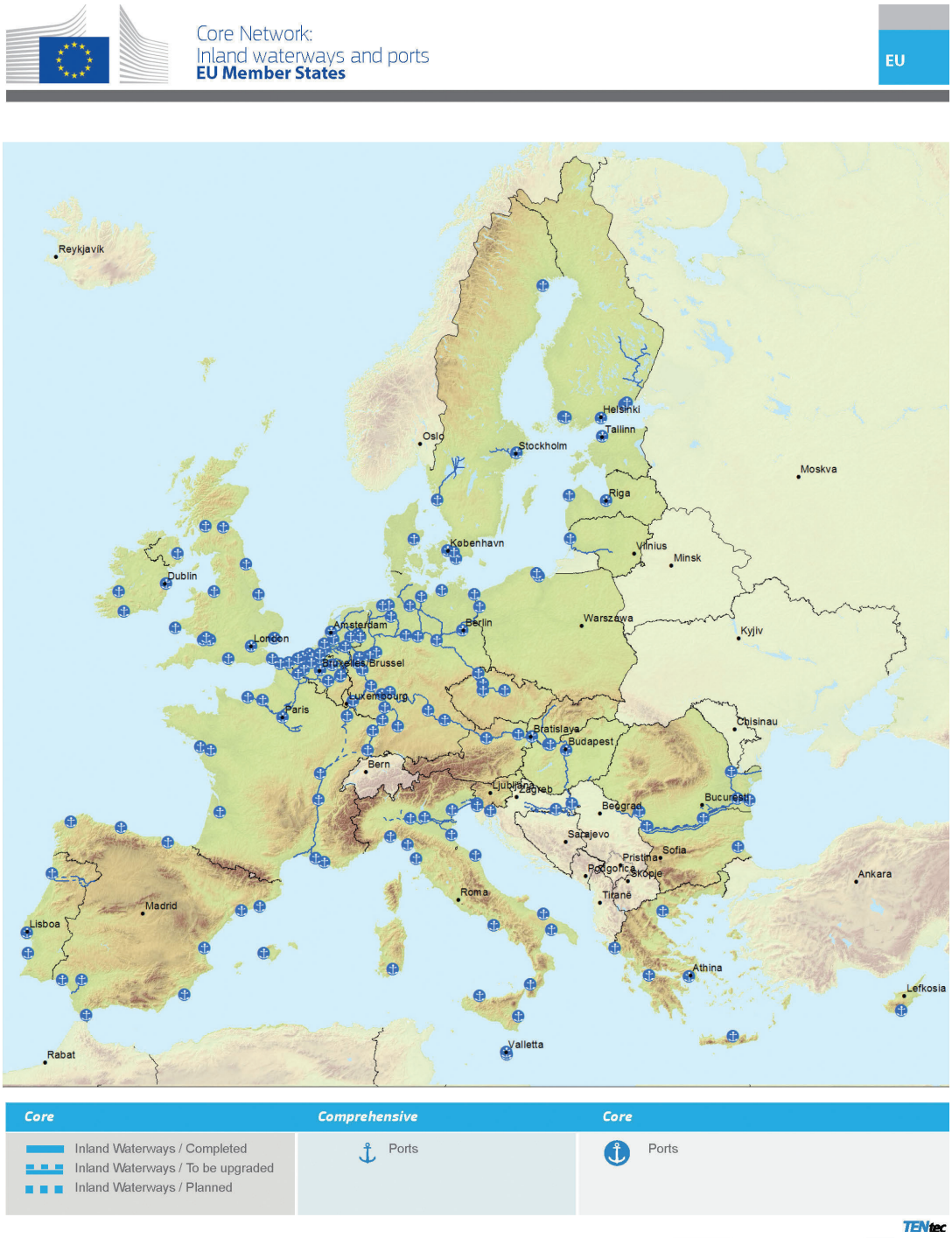
Statistical data are important to understand the current status of a port. It is possible to distinguish traffic data and dimensional data about surfaces and length of mooring: these are data to understand the capacity of the port, and to define its economic and territorial power.
The main databases about port activities are the European Sea Port Organisation (ESPO) database, the European Statistical Institute (Eurostat) database, the Organisation for Economic Co-operation and Development (OECD) studies and database, and the ESPON database.

Links to databases:
ESPO - www.espo.be/fact-and-figures
EUROSTAT - https://ec.europa.eu/eurostat/web/transport/data/main-tables
OECD - https://www.oecd.org/regional/oecdport citiesprogramme.htm
ESPON - https://www.espon.eu/tools-maps/espon-2013-database

What is the potential for developing the port activities? How will the economic and regulatory context influence the port development?

The potential for development of the port activities could be defined by analysing specific data:

- current data and historical series about:
  - trends in maritime cargo transport with an appropriate benchmarking at regional or national level;
  - trends in maritime passenger transport with an appropriate benchmarking at regional or national level;



Map 1. The inland water and seaports in the core and comprehensive networks of TEN-T (as adopted by the European Parliament and the Council in December 2013 covering the amended Commission Delegated Regulations (EU) 2019/254 from 9 November 2018 and (EU) 2017/849 from 7 December 2016. This map shows the ports that are involved in EU-level policies. Starting from the criteria described in the text above, the TEN-T policies have produced on the ground transformations, asking for e.g. new handling areas, rail and road connections. The core network policy could ask for further specific transformations, e.g. relocation of activities, or infrastructural updates that influence the port city situation.

- the supply of infrastructures for transport of goods and passengers;
- projected trajectory of goods and passenger transport and identifying required infrastructures.

To clearly understand how **the economic context** influences port development, some external macro-challenges are necessary to be considered and listed:

- the changing political, economic, social and environmental context: e.g. specific policies with implications on security and safety in ports and shipping and/or environmental protection issues;
- complex logistics and transport chains: e.g. larger containers, ships and lorries, shift in the nature of ship-based transport etc.

Consequently, local spatial impacts of trends and external macro-challenges will be listed in terms of e.g. availability of port areas, because of the shrinkage of the port or its downgrading in international networks, need of delocalisation of port activities, because of the increased traffic, or lack of new port spaces and pressure e.g traffic, noise, air pollution, on urban areas.

In Bremenhaven, for example, the global macro-challenges arising from traffic from the Far East has changed radically the necessities in handling areas, so the main activities were moved to JadeWeser Port in Wilhelmshaven.

To clearly understand how **the regulatory context** influences port development, it is necessary to describe how the port development follows the trajectories of port reform at national level. For example, some port reforms across European Member States implicate new institutional competences, possible port privatisation, a new concession regime, or a new type of port plan. Moreover, it is necessary to describe the current regulatory context so that it is clear:

- Does the law provide for a regulatory plan for the port? Or a strategic one? Or both?
- Has there been a recent port reform (e.g. in France in 2011, or in Italy in 2016)?
- How long has the law been in force?
- What are the mandatory contents of the (reformed) plan? Are there any differences from the previous one?
- Is the current port plan drawn up according to the specifications of the most recent law? (E.g. it is possible that there may be a mismatch between the port plan in force and a more recent law reform, which would thus have to be solved).

Toolbox 3 | Land-use mapping in the INSPIRE directive

In the INSPIRE directive, land-use is defined as 'Territory characterised according to its current and future planned functional dimension or socio-economic purpose (e.g. residential, industrial, commercial, agricultural, forestry, recreational)'. [Directive 2007/2/EC].
It is the description of land in terms of its socio-economic and ecological purpose. The inland water bodies as well as the coastal waters are considered within the connected piece of land and planning of the use of the sea and the seabed has been taken into consideration.
Land-use is itself split up into two different types: Existing Land-use and Planned Land-use.

Existing land-use objectively depicts the use and functions of a territory as it has been and effectively still is in real life.

The INSPIRE data specifications on land-use define many possible classification systems, but one of the most important is the Urban Atlas. It is providing pan-European comparable land-use and land cover data for Large Urban Zones with more than 100,000 inhabitants as defined by the Urban Audit. However, the same nomenclature could be used in small- and medium-sized port cities.

For INSPIRE data specifications and nomenclatures: https://inspire.ec.europa.eu/data-specifications/2892

What are the potential vulnerabilities for the port city regeneration projects?

The main potential vulnerabilities for the port city regeneration projects could be:

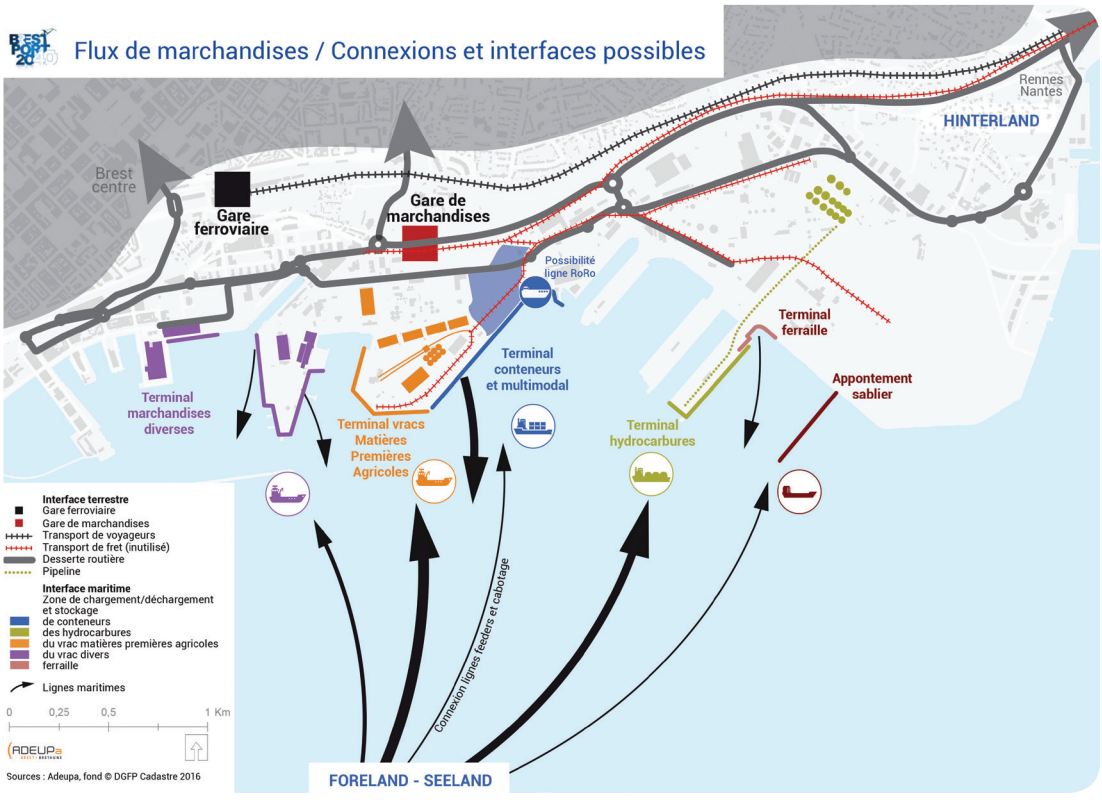
- Landscape and environment vulnerability: due to the negative impact, such as in terms of destruction and fragmentation of green/blue areas, of planned activities on natural and man-made environments. In the pre-planning phase, a map about landscape and its environmental components is needed including: e.g. Bird Conservation Areas; Geological sites, Areas of Ecological Interest; Natura 2000 sites; ecological networks, etc.
- Flooding or tide conditions: for seaports the risk of marine submersion requires a study on potential sea level rise, and for river ports hydrological analyses, flood mapping, and hydraulic modelling are critical.
- Land-use vulnerability: a map in this regard could include potentially polluted sites and soils; nuclear and chemical risk for former military areas; noise pollution e.g. assessed on the basis of numerical calculations and modelling;
- Cultural heritage vulnerability: a detailed survey and mapping of heritage are important to identify potential preservation and conservation areas because of their historical, cultural and architectural value. The map should include heritage already protected by law.

SUGGESTED ACTION 1.1.2.

Conduct a comprehensive, in-depth analysis of the city

To conduct a comprehensive, in-depth analysis of the city it is necessary to examine the position and territorial/administrative relevance, urban statistics and demographics such as population growth, GDP per capita, unemployment rate and trends, presence of international events or exhibitions, etc.

This analytic phase is supported by spatial information produced at local or regional level and then organised in geospatial and statistical databases. These databases can help the local authorities to structure and produce information for the pre-planning analysis.



Map 2. An example of flow, connection and interfaces map to explain what types of relations in supra local context are possible in Brest.In the map, the port is analysed as a land-sea interface: including rails and roads lines and hubs on land, and quay specialisations and the traffic dimensions (by thickness-scaled lines). (source: Diagnostic for the Reference Plan for the Brest Port 2040, Oct. 2018 working paper, p. 68).

The way in which this information is assessed is critical. For example, since environmental, social, and economic change is increasingly centred at the city level, the pre-planning analysis for regeneration needs to focus on these trends, combining available data or searching for 'non-conventional' ones e.g. bigdata, that help to explain urban dynamics.

What are the trends for the development of the city?

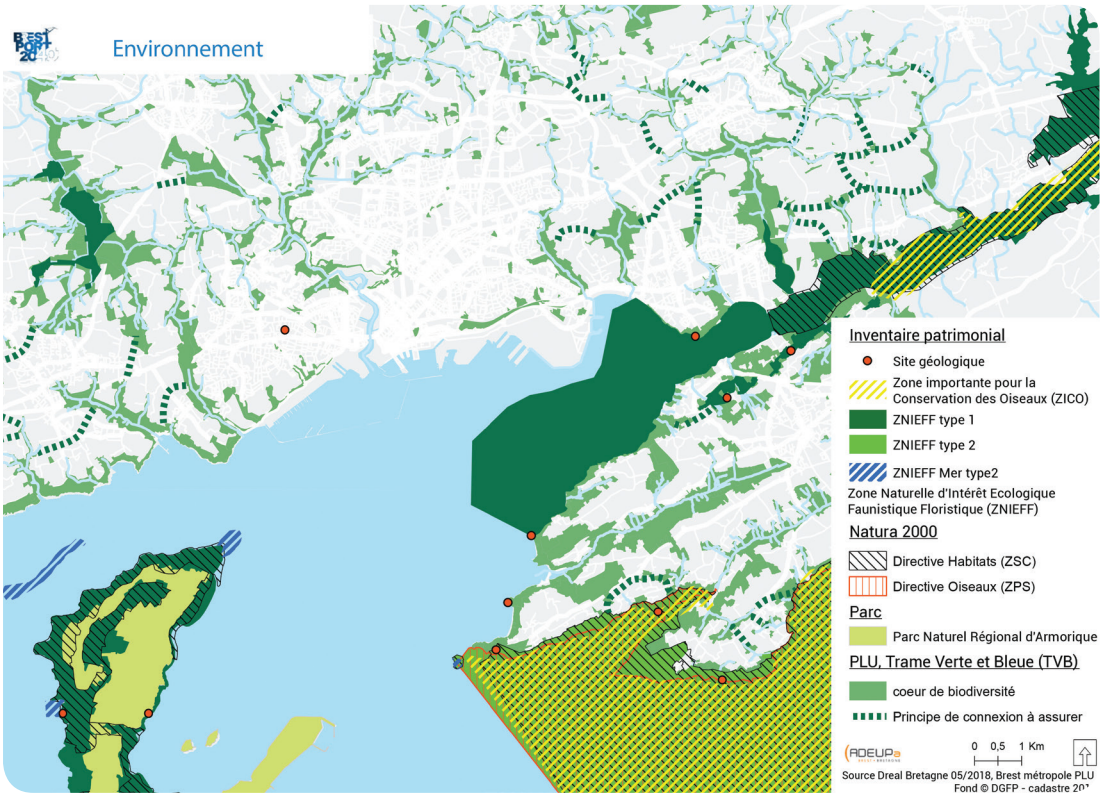
The most important exogenous drivers for urban development can be identified in various demographic aspects (overall population development in cities, but also issues like sizes of households or the floor space per capita), in the economy in general and its spatial impacts on a port city.

The statistical and geographic analysis to support the in-depth analysis of the city includes:

- Demographic change: e.g. in terms of population growth (and also in terms of migration e.g. non-EU-born population, foreign-born population, etc.);
- Urban economic development: e.g. in terms of employment/unemployment rates and trends, urban economic growth by city-income levels, GDP per capita, but also innovation, information and communication technologies, business support, tourism, culture.

Many frameworks have been drafted to include other up-to-date exogenous drivers in urban development trends and to understand the city path towards improving the environmental sustainability such as: environmental conditions (is the city achieving environmental target?), green infrastructures (is the city enhancing urban eco-systems and optimising the provision of green infrastructure?), densification (is the city moving towards higher-density neighbourhoods?), mobility (is the city adopting sustainable transport systems, car-free lifestyles and working patterns?).

The statistical information supports the in-depth analysis of the city: see Toolbox 4.



Map 3. An example of the environmental analysis map in pre-planning phase of Reference Plan for the Brest Port: it is important to emphasise that the mapped area is wider than the port district, because the plan needs to consider vulnerabilities in a wider space. (source: Diagnostic for the Reference Plan for the Brest Port 2040, Oct. 2018 working paper, p. 28).

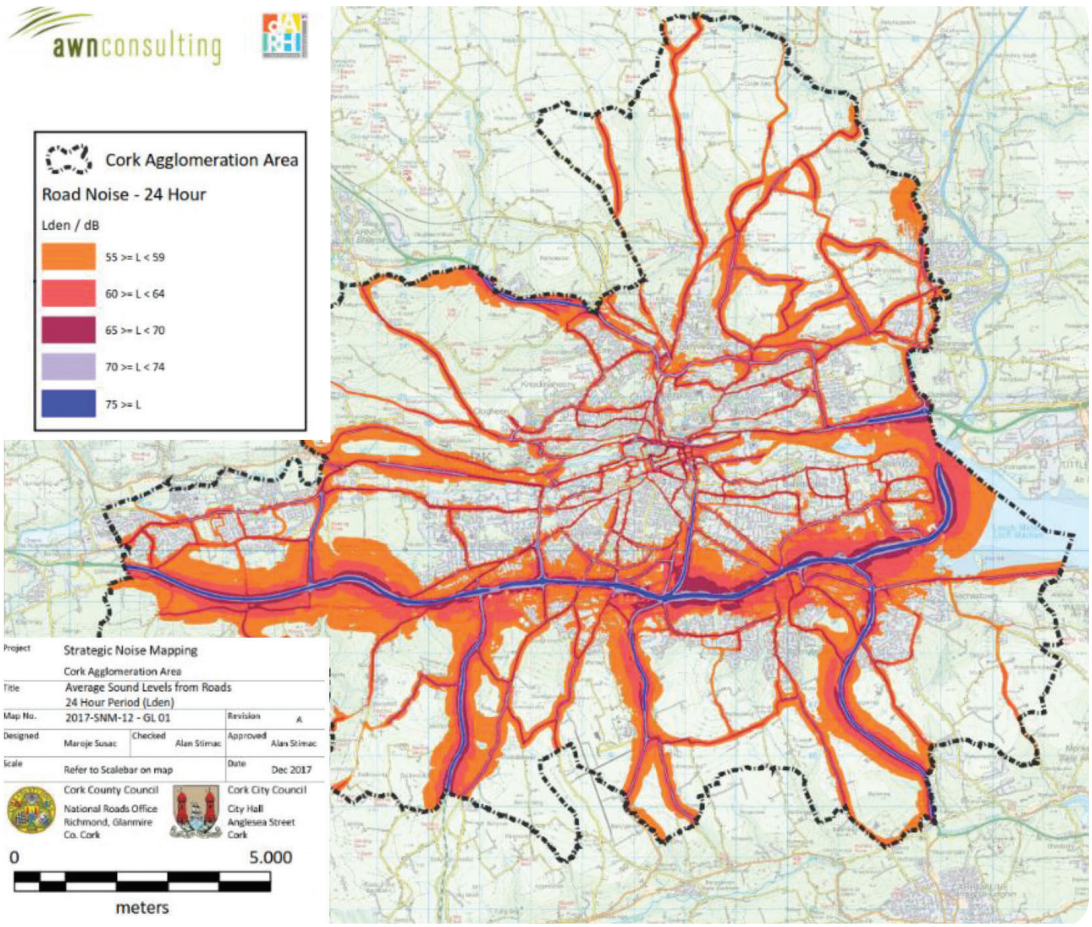
Using these as a basis, by way of example, we suggest some data which would be useful:

- to understand **trends in environmental conditions** (e.g. climate change, carbon emissions and resource use), both centralised monitoring information and widespread sensor data;
- to understand trends in **densification or sprawling**, the historical data of Corine Land Cover (CLC) and national ortho-photo coverages, or databases of permissions for buildings;
- to understand trends in **green infrastructure**, the historical data of CLC and national ortho-photo coverages;
- to understand trends in **mobility**, the local mobility management data in public mobility and sharing mobility, or some non-conventional information from Google Maps traffic services (maps.google.com), or stravalabs (labs.strava.com) runners and cyclists' shared tracks and similar bigdata analytics. This web information is user-generated and might be useful to compare the statistical information produced in mobility local plan surveys with the widespread information.

What types of spatial transformation have been undertaken in the (recent) past?

To better understand how the urban space has evolved in the recent past, it is useful to define the recent evolutionary trends in port cities.

To better understand how the urban space has evolved in the recent past, it is necessary to analyse the recent transformations. It is useful to analyse recent trends related to big scale regeneration projects or to singular projects. Were they examples of success or failure? Were they aimed at increasing the port city integration functionally and perceptually? Did they result



Map 4. Noise Level Bands for 2016 Assessment Year for Roads in Cork Noise Action Plan 2018-2023. This map is one of the 'strategic noise maps' produced in the mapping stage of the plan to identify and prioritise cluster areas which require further assessment and which may require mitigation measures to be put in place. (source: Cork City Council, Noise Action Plan 2018-2023, p. 88).

in gentrification or in social mix in the port city? In some cases, the trends in transformation could be related to some events hosted in the city that have significantly modified the port city relation.

Attracting international sport or cultural events (e.g. International Expositions, Cultural Capital of the Year, sport leagues or championships) and international attractors that establish themselves in the city (e.g. international cultural foundations and museums) could be a relevant component in pre-planning, because the assessment of the effects of past transformations is the starting point of a new possibility of regeneration.

For example, the international housing exhibition in Malmö (SE) was a catalyst for the further development of the Västra Hamnen area and it continues to be a driver of regeneration to date.

Rebranding initiatives and the development of flagship or landmark facilities – for instance, the Bilbao (ES) Guggenheim, Les Ateliers des Capucins and the realisation of the cable car in Brest (FR) or the aquarium in Tallinn (EE) – are important also to shift mindsets to ensure the port and city are connected perceptually by both potential investors and residents.

Indeed, past transformations could produce more simple outcomes like a small-scale regeneration project or an everyday management of an area: the pre-planning analysis needs to pay attention to small projects that could become a beacon for additional bigger regeneration.

Bilbao (ES)
http://www.bm30.eus/

Brest (FR)
https://www.brest.fr/culture/les-equipements-culturels/les-ateliers-des-capucins-2135.html

What are the current trends on the real estate market, land supply and demand?

Moreover, the analysis of the current trends on the real estate market, land supply and demand is important in the pre-planning phase. The real estate market in a port city needs an analysis (and mapping) of comparative local, regional and national real estate values and values of

The analysis of the current trends on the real estate market, land supply and demand is important in pre-planning phase. See Toolbox 5.

Toolbox 4 | Databases for city survey

In order to produce a good survey about the current and trend status of the city, we suggest using some data from national geostatistical organisations, and the EUROSTAT repository at EU level.

Data on European cities were collected in the Urban Audit and in the Large City Audit project by EUROSTAT. The project's ultimate goal is to contribute towards the improvement of the quality of urban life: it supports the exchange of experience among European cities; it helps to identify best practices; it facilitates benchmarking at the European level and provides information on the dynamics within the cities and with their surroundings.

At the city level, the Urban Audit contains more than 170 variables and more than 60 indicators. These indicators are derived from the variables collected by the European Statistical System.
The data are published in 20 tables within 2 main groups (i.e. the cities and the functional urban areas):

- *Cities and greater cities (urb_cgc);*
- *Functional Urban Area (urb_luz).*

In addition, Eurostat has produced data about 'perception survey results' (urb_percep): since 2007, a series of surveys was conducted to measure the local perceptions of quality of life in selected cities. The survey is organised by the Directorate-General for Regional and Urban Policy that has been collecting data on three spatial levels in the Urban Audit:

- the City according to the administrative definition, as the basic level;
- the Functional Urban Area (FUA) being an approximation of the functional urban zone centred around the city;
- a 'greater city' level because in some cases, such as some capitals and several other large cities, the urban centre stretches far beyond its boundaries.

See the last Survey on Quality of Life in European Cities by EUROSTAT at http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/urban/survey2015_en.pdf

Source: EUROSTAT City statistics (urb), available at https://ec.europa.eu/eurostat/data/database, metadata available at https://ec.europa.eu/eurostat/cache/metadata/en/urb_esms.htm

lease/sale and new/second-hand.It can contribute to define the appeal for private investors in regeneration or it can help to understand, for example, if some transformation realised in the past could have modified the real estate market e.g. generating phenomena of gentrification or commercialisation of an area. This analysis could be conducted:

- by interviews with the main local and regional investors;
- analysing trends in local real estate market;
- using specific studies or reports released by big players in real estate market, mainly to benchmark the local market to national or international levels.

Furthermore, bigdata and existing local/national online platforms and tools are able to gather up-to-date and real-time information that could help to complete urban development trends and could be compared to the official statistical and geographic information.

Toolbox 5 | Market assessment: some tips

What is it?
Market assessment is a detailed and objective evaluation of the potential of a new product, a new business idea or a new investment. It is based on an analysis of market trends, entry barriers, competition, environment forces, risks, opportunities and the supplier's resources and constraints.

In connection with a waterfront regeneration plan, the market assessment is relevant for the assessment of the need and the demand for:

- New planned residential housing;
- The planned recreative and cultural amenities;
- The planned infrastructure or the infra-structure that is considered abandoned.

The market assessment shall help planning authorities and private investors to avoid over-investments and to direct the investments along the waterfront in a direction that corresponds to the needs of the citizens.

How does it work?
As a first step of the market assessment, the 'product' must be defined. It may be done with different levels of detail, but the higher the degree of detail, the better. An apartment is not just an apartment – it is an apartment of a given size, in a certain type of location with specific surroundings and views from it.

It may be an apartment for a particular target group, and it may be provided with a certain amount of facilities and be characterised by a certain level of quality. The right level of detail depends on the concrete plans and the concrete city context. Similarly, there may be new cultural, recreative, or sports facilities or other types of facilities, which may address very different target groups.

After defining the product and the necessary level of detail, the existing market situation must be analysed. The analysis must focus on recent developments and experience: who are the (other) suppliers, and what development may be expected of the future supply?

The target group must also be defined in detail, and its size and development shall be assessed.

The data for the market assessment may be quantitative data such as general demographic, social and economic statistics. It may also be qualitative information on current and expected future trends, and it may be information on preferences and willingness to pay for selected products gathered from existing or new surveys.

Suggested action 1.1.3.

Analyse the port city relationships

The relationships between the port and the city needs to be analysed in spatial and functional terms, to identify any potential for integration and development of port city relations.

In what way does the separation between port and city manifest itself? Is it recognisable?

The spatial separation between the port and city can manifest itself in a variety of ways, e.g. through a physical barrier, customs limits, restricted access due to protected or hazardous port activities. The types of analysis that might be valuable include:

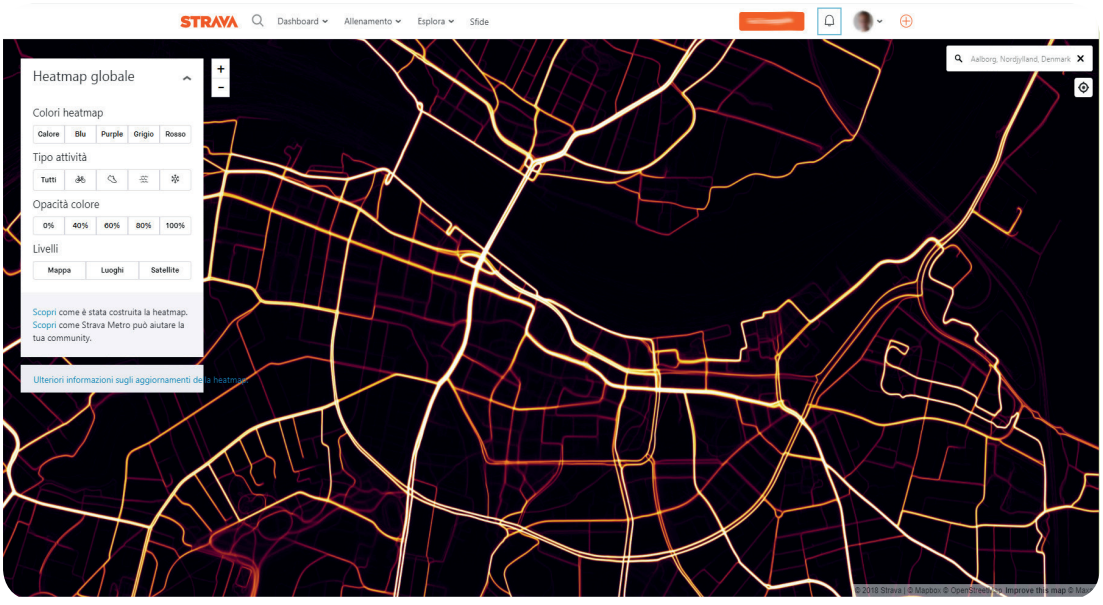
- a map of **accessibility and connections** between the city and the port;
- a map of **custom limits and restricted areas** e.g. resulting from increasing security requirements that could represent hard-to-access limits for the purpose of port city integration;
- a map of local **morphology and physical barrier** e.g. cliffs, main roads, bridges, or other infrastructures;
- a port **landscape aesthetic and visual analysis**: it will describe the harbour landscape, its aesthetics and its motives including e.g. views from the coast to the sea, view from the seaside, views at night, etc., to detect the qualitative relations between the port and the city.

The levels of city-port interaction are connected to the level of hazard and risk exerted by port activities on the port city. For example, it is possible to recognise:

- high interaction areas e.g. urban facilities, parks, recreational areas, etc.;
- medium interaction areas characterised by 'filters' e.g. the security areas for passengers and cruise liners that need to be separated to ensure the security of activities taking place within the port perimeter;
- no interaction areas e.g. Seveso or abandoned and waste areas.

Are there shared functions between the port and the city districts?

The mix of urban and port functions can reinforce the port city identity and its attractiveness to a variety of private and public stakeholders. It is necessary to identify areas with shared functions between the port and the city districts: e.g. passenger terminal with shops, convention



Map 5. Cyclists' Stava Lab Global heatmap in Aalborg. It is a visualization of two years (2015-2017) of data from Strava's global network of athletes. This map could be useful in planning to monitor city-wide changes in ridership patterns following investment in cycling infrastructure or other transportation network change (source: https://bit.ly/2QkVLPF).

halls, hotels, and cultural spaces; shopping malls that coexist with various port functions (passenger boarding areas, vehicle storage, etc.); nautical and recreational activities, fish markets, urban amenities on the water, such as floating restaurants, floating cinemas, house-boats, etc.

Some areas can be useful for the further implementation of the port city regeneration project (see recommendation 2.2).

What is the nature of relationships between the port and city?

The nature of the relationships between port and the city is closely connected with the ways in which the port authority and local authority work together or in parallel. To understand the current situation, it is necessary to:

- analyse the current regulatory framework to define the tools for the collaboration between the municipality and the port authority (e.g. a memorandum of understanding for common regeneration);
- understand who drafts, approves and implements both port and local authority plans;
- describe the management and the implementation style that is used (if applicable).

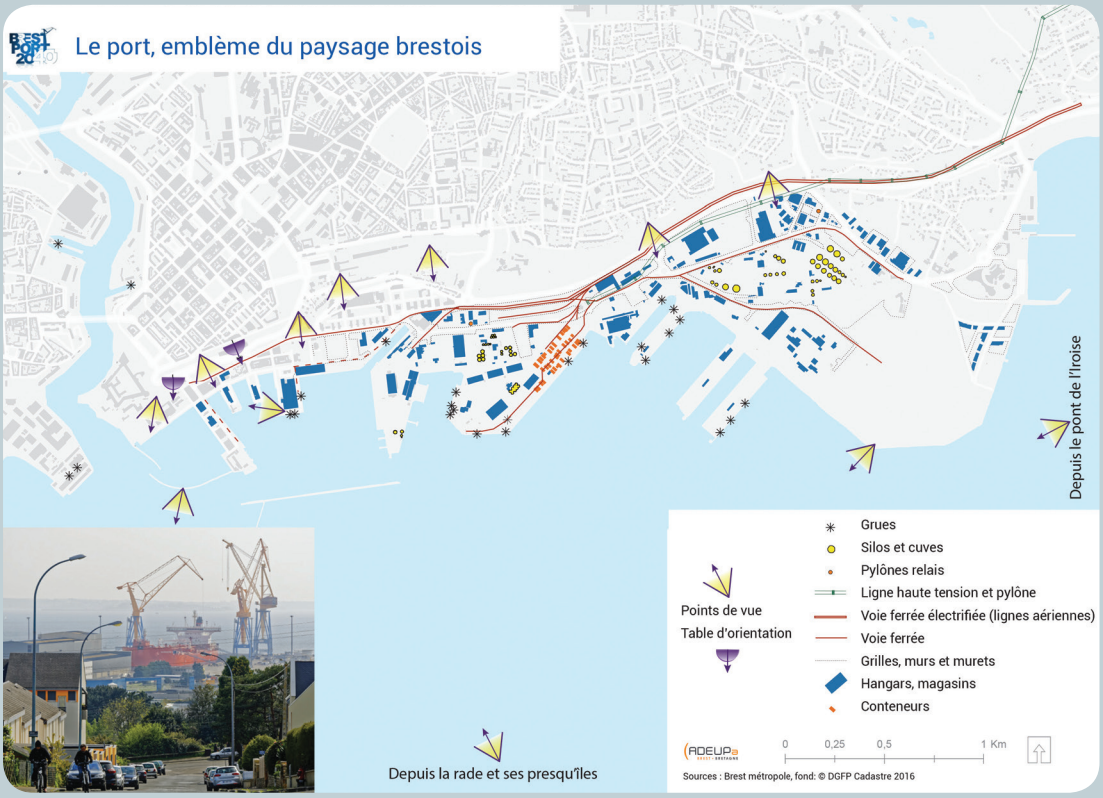
This analysis helps to define the elements shaping the port city relationships, in terms of the main actors involved, the governance model, the type of current plan, the funding currently applied, the implementation models.

Good practice box 1 | Assessment of the current and projected trajectory of the port, city and their relationship: some examples

In Tivoli (Cork), an urban framework plan was undertaken to inform a future Local Area Plan; in Catania, an in-depth land-use analysis was produced for the Municipal Regulatory Plan. In Aalborg, the Fjord Catalogue defined the areas along the fjord that had major regeneration or urban development potential. At a later stage, when local area plans were prepared, more planning-oriented expertise in terms of physical, landscape, infrastructural, cultural and visual analysis and planning was produced.

In Brest, the 1994 Reference Plan for the port of Brest was preceded by 3 years of studies to understand the situation of Brest and its commercial port from the urban and economic stand-point, which also involved architects and urban planners in workshops organised over several days. More recently, the draft Reference Plan for the Brest Port 2040 builds on an impressive pre-planning diagnosis.

In Bourgas (BG), the preliminary step of the regeneration project was an in-depth analysis of all factors related to the development of trans-European transport networks to Asia. As a result of this link to the east, the regeneration project could have been exposed to significant external shocks due to economic or geopolitical crises and thus this needed to be considered at an early stage.



Map 6. The port landscape analysis map in pre-planning phase of Reference Plan for the Brest Port. The map shows port elements with an impact on the identity of the port city landscape as a part of landscape aesthetic and visual analysis (source: Diagnostic for the Reference Plan for the Brest Port 2040, Oct. 2018 Working Paper, p. 32).

Policy recommendation 1.2.

Analyse how the port city is currently addressing identified challenges and opportunities

In order to define a more comprehensive and sustainable regeneration, it is necessary to analyse in what way previous or current plans and projects are addressing challenges and seizing opportunities. By analysing the ongoing transformations, it is possible to understand what alternative approaches might be required. Finally, this evaluation of current approaches, plans and projects will help define strengths and opportunities to be addressed, and weaknesses and threats to be mitigated. This will enable a bespoke and effective planning approach and the efficient and productive use of available funds.

Suggested action 1.2.1.

Develop an 'ongoing transformations' analysis

Is there a regeneration process ongoing? What are the objectives of the current process? What has been achieved so far, and what are challenges encountered along the way?

In the pre-planning phase, in order to know how port cities are embracing new developments and improving their infrastructures, it would be valuable to understand how challenges and opportunities are currently being addressed.

An ongoing transformation map is required, based on the 'Planned Land-use' concept, as defined in the INSPIRE Directive: it corresponds to spatial plans, defined by spatial planning authorities, depicting the possible utilisation of the land in the future.

An ongoing transformation map is required, based on the 'Planned Land-use' concept, as defined in the INSPIRE DirectivSee Toolbox 6.

On the other hand, in order to complete the planned land-use map, it is necessary to collect data on ongoing infrastructure, specific regenerations, flagship projects and new buildings to understand what are the concrete objectives and the achievements attained.

A database of ongoing transformation should include information on e.g. budget and funding schemes, coverage of functional objectives, geographical/spatial coverage, time expected for the realisation of all the ongoing projects. Information from planning authorities and available literature, planning documents and similar sources regarding large urban development projects and the transport system update programmes are required.

For INSPIRE data specification: https://inspire.ec.europa.eu/data-specifications/2892

For INSPIRE on line consultation: https://inspire-geoportal.ec.europa.eu/

Knowledge of ongoing transformations will help to capture the possible range of effects and spatial transformations (their spatial outcome in terms of area used for urbanisation, spatial distribution, mix or concentration of functions, accessibility of public transport) due to port city development policies and planning.

Knowledge on the ongoing transformations helps local authorities to understand how challenges and opportunities are currently being addressed.

Suggested action 1.2.2.

Evaluate the transformation process currently planned and achieved

The evaluation of the transformations currently planned and implemented allows to identify and exploit the positive aspects of the interventions which are already active and at the same time to assess which challenges are still open. This assessment is based on the effectiveness of the current plan; the efficiency in using resources in a reasonable way, mainly on fundings availability; relevance based on addressing current needs and challenges; description of factors of success or failure.

Suggested action 1.2.3.

Synthesise available knowledge and key challenges and opportunities identifying additional strengths and opportunities

What are strengths, weaknesses, opportunities and threats?

A well-known business strategic planning tool, SWOT analysis, could be applied to identify the strengths, weaknesses, opportunities, and threats involved in the implementation of a port city regeneration project. This involves monitoring internal and external factors that are important to achieving project objectives.With the SWOT analysis you can identify. :

- Strengths in the city and the port on which the regeneration should be built: e.g. cultural identity resources, employees, financial resources, port city location, cost advantages and competitiveness of port activities and of the economical context;
- Weaknesses that the regeneration needs to address e.g. problems to avoid that could limit or cancel the development of the project;
- Opportunities derived from an external decision context and that regeneration should seize;
- Threats that could jeapordise the systematic transformation of your port city, and of which the regeneration project should be aware.

SWOT analysis is a well-known business strategic planning tool. For tips, see Toolbox 7.

Toolbox 6 | Gathering data for building the ongoing transformation map

The configuration of the ongoing transformation map could be supported by the application scheme of planned land-use as defined in the INSPIRE Directive. It corresponds to spatial plans, defined by spatial planning authorities, depicting the possible utilisation of the land in the future. Planned land-use is regulated by spatial planning documents elaborated at various levels of administration.

The scope of the ongoing transformation map, as well as the INSPIRE Land-use Data, is to give the exact spatial dimension of all the elements which make up a spatial plan.

The Planned Land-use catalogue is defined by INSPIRE in specific types of information, that are useful for defining the ongoing transformation map:

- Level of spatial plan (e.g. from local to national level);
- Process step (e.g. adoption, elaboration, legal force, obsolete);
- Regulation nature (e.g. for developers, for authorities only, general, not binding, defined in legislation);
- Name of the type of plan that the Member State has given to the plan;
- Types of conditions and constraints in spatial plans (e.g. impact on environment, emission control area, air quality management zone, nature protection, flood risks, etc.);
- Zoning element, that is, the spatial objects which are homogeneous in regard to the permitted uses of the land, based on zoning which separates one set of land-use from another.

Detailed information on Planned Land-use is available on the INSPIRE website https://inspire.ec.europa.eu/id/document/tg/lu

Good practice box 2 |
Address identified challenges and opportunities: some examples

Aalborg (DK)
https://bit.ly/3574n1Y

Ancona (IT)
https://bit.ly/36b50gS

Some planning frameworks use the structure of a 'catalogue of opportunities' to prevent projects running the risk of missing some unaddressed opportunities. In Aalborg (DK), the overall plan, together with a map of the main regeneration projects (1989-2019), provides a good example of on-going and realised transformations. It is designed to generate a common understanding and share the development trajectory for the waterfront before new planning activities are begun, and to check the current status of implementation. Similarly, Ancona's (IT) strategic plan called 'ITI Waterfront di Ancona 3.0' included a significant part about the actual opportunities derived from on-going planning and funding activities. This framework of planning activities by local and regional authorities is built to verify the coherence of the new vision with the previous ones, and to extract challenges and opportunities for the new strategic plan.

In the 3Land project in Basel, a catalogue of the ongoing projects is provided: for each project a fiche is provided with information about localisation, client, service provider, year and programme.

01. Plan urbain Friedlingen
Localisation : Weil am Rhein
Maître d'ouvrage : ville de Weil am Rhein
Maître d'œuvre : Pesch und Partner
Date : 2013
Programme : Amélioration des espaces verts et des quartiers existants, nouvelles zones de développement, parcelle pilote 2014

01. Rahmenplan Stadtteil Friedlingen
Ort: Weil am Rhein
Auftraggeber: Stadt Weil am Rhein
Auftragnehmer: Pesch und Partner
Datum: 2013
Programm: Aufwertung von Grünräumen und bestehenden Quartieren, neue Entwicklungsflächen, Pilotparzelle 2014

02. 3Land – Vision
Localisation : Bâle, Weil am Rhein, Huningue
Maître d'ouvrage : Bâle, Weil am Rhein, Huningue
Maître d'œuvre : MVRDV
Date : 2009
Programme : Plan directeur 3Land, île, nouveaux quartiers pour vivre et travailler

02. 3 Land – Vision
Ort: Basel, Weil am Rhein, Huningue
Auftraggeber: Kanton Basel-Stadt, Weil am Rhein, Huningue
Auftragnehmer: MVRDV
Datum: 2009
Programm: Masterplan 3Land, Insel, neue Quartiere zum Wohnen und Arbeiten

03. Programme de développement du port 2020
Localisation : Bâle
Maître d'ouvrage : Ports rhénans suisses
Maître d'œuvre : Ports rhénans suisses
Date : 2010
Programme : Plan de développement du port à long terme, zoom sur le port de Kleinhüningen

03. Hafenentwicklung 2020
Ort: Basel
Auftraggeber: Schweizerische Rheinhäfen
Auftragnehmer: Schweizerische Rheinhäfen
Datum: 2010
Programm: Entwicklungsplan für langfristige Hafenentwicklung, Fokus Hafen Kleinhüningen

Figure 2. Basel, the 3Land project: an extract from the catalogue of the ongoing projects. For each project a fiche is provided with information about localisation, client, service provider, year and programme (source: https://3-land.net/start/en/medien/).

Policy recommendation 1.3.

Analyse the stakeholder landscape

Stakeholder analysis is a well-documented methodology and a good practice in project management that can be usefully deployed in the design and implementation of integrated port city regeneration plans.

Every plan and/or project in port city regeneration interacts with different stakeholders. Various actors are either directly involved or indirectly influence the plan or policy through their position or their specific resources. In general, stakeholders wish to protect their own interests. The material resources, social position and knowledge of these stakeholders make them particularly powerful, enabling them to wield significant influence over the design, planning and implementation of the regeneration project.

The analysis of the stakeholder landscape is critical to the successful implementation of recommendations 2.1, 3.1, 3.2 and 3.3.

Suggested action 1.3.1.

Identify all stakeholders

Stakeholder groups typically include the public sector, the private sector, the research and education sector, and citizens. In the case of port city regeneration, the public sector is often involved at multiple levels (local, regional, national, etc.).

The private sector is particularly relevant due to its various potential roles e.g. landowners, potential investors, port operators, local economic actors in port and non-port activities, contaminated land remediation responsibilities.

Who are the key stakeholder groups in your port city?

Groups of stakeholders need to be identified, according to their interest and influence or according to their grouping (either private sector, public sector, or civil society), and further assessing their degree of power and interest in the project.

The pre-planning assessment needs to identify and list the groups of stakeholders.
For tips, see Toolbox 8.

The pre-planning assessment needs to identify and list the groups of stakeholders, such as:

Nature of Stakeholder	Port Stakeholders	City Stakeholders
Public Sector	Port managers, board members National governments e.g. Transport Ministry, Finance Ministry, Environment Ministry and Environmental Protection Agency, legislators, government departments with coastal functions, public landowners, etc.	National or regional government, municipality and local government departments, labour unions, etc.
Private sector	Port operators e.g. inland and sea transport operators, logistics company, shipping and transport companies, landowners, local economic actors in port activities, contaminated land remediation responsibilities, etc.	Enterprises, developers, landowners, potential investors, local economic actors in urban activities, etc.
Civil society	Port users, port employees, minority shareholders, etc.	Inhabitants, civil society organisations, Non-profit organisations (NGOs) e.g. environmental groups, researchers, media, press, influencers, bloggers, etc.

For each stakeholder the analysis can identify key functions and their relevance to the port city.

The pre-planning assessment will include the break-down in various types of stakeholders:

- Secondary stakeholders are actors whose involvement in the regeneration is only indirect or temporary, as is the case – for instance – with intermediary service organizations.
- Primary stakeholders are actors who are directly affected by the regeneration project, either as designated project beneficiaries, or because they stand to gain (or lose) power, economic resources and privilege, or because they are negatively affected by the project in some other way, for instance if they have to be resettled.
- Key stakeholders are actors without whose support and participation the targeted results of a project normally cannot be achieved. They can wield significant influence over the design, planning and implementation of the regeneration project. In some cases, thay may even be able to veto the programme, in which case they are termed veto players.

Suggested action 1.3.2.

Assess stakeholders' relevance

Stakeholders' relevance needs to be considered to assess their capacity to take part in the regeneration process, their ability to self-organise and influence the process.

What interest do stakeholder groups have? Can we identify conflicting interests in port city regeneration?

The local stakeholders could have different interests in transformation. After listing all of the stakeholders in the port city, the pre-planning assessment should identify what interest/s they

Toolbox 7 | SWOT analysis applied to port city regeneration strategies

What is it?
SWOT analysis is a widely used study undertaken by an organisation to identify internal strengths (S) and weaknesses (W), as well as external opportunities (O) and threats (T).

How does it work?
SWOT analysis is not neutral because an initial pre-planning idea or intended objective for the regeneration project is required. It is divided in endogenous (above) and exogenous components (below).

S	W
O	T

Endogenous components
Strengths. The first step is to identify and list what you think are your city-port's strengths. Examples could include strengths relating to cultural identity resources, employees, financial resources, your port city location and characteristics, cost advantages and competitiveness of port activities and of economical context. Only a selection of the urban resources are considered as strengths.
Weaknesses. These are an 'absence of' or a situation in which the presence of a problem could limit or cancel the development of the project. You need to act on the weak components to reinforce them.

Exogenous components
Opportunities. The exogenous opportunities derive from an external decision context, or from using on-going funding solutions, or they derive from a third-party project that acts on your city-port. It is important to consider that a third-party project could be an opportunity for you, and a threat for your competitor.
Threats. If in the port city decision context a third party is working on a transformation process, this could be a good investment, too, but it could threaten the systematic transformation of your port city, maybe reducing the territorial resources that you are using in your strategy.

In summary, it is possible to say that the SWOT analysis focuses on strengths, to resolve weaknesses, by taking advantage of opportunities and minimising threats.

have and if/what conflicting interests there are among them. Interests can be:

- institutional interests about policy and regulations for governmental or municipal institutions but also for financial and trade groups, etc.;
- commercial and economic interests about local development in the port city and investments for cruise lines, logistic operators, road and rail operators, landowners, developers, etc.;
- community interests about inhabitants, tourists and passengers, employees, foundations, environmental groups, etc.

The pre-planning phase helps to identify stakeholders' conflicts of interest, such as environmental protection, urban development, labour, resident interests, and overall economic development. These interests may conflict with each other, mainly in the public-private interactions. Generally speaking, public interests include economic growth, local development in the port city, efficient port operation, and attraction of investments. However, the private sector usually looks for return on capital and in a manner that generates scale economies.

Toolbox 8 | Stakeholder mapping: some tips

What is it?

Stakeholder analysis consists in the identification of key stakeholders (people, groups and organisations), their interests and their influence in order to anticipate potential areas of conflict and trade-off. Complex strategies for engaging and gaining buy-in of the stakeholders can be developed based on the results of the analysis.

How does it work?

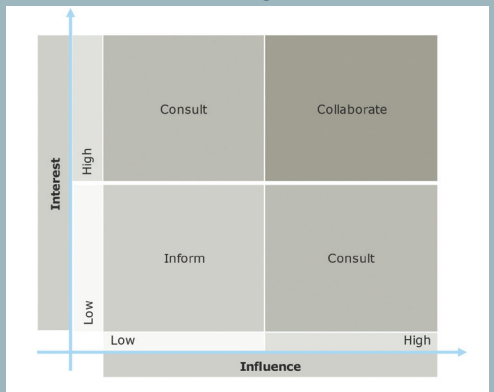
Stakeholder analysis can start from a listing of stakeholders for the project followed by grids and maps that serve as visualisation tools to cluster different stakeholders.

A grid of stakeholders according to their interest and influence is used to decide whether stakeholders should be informed, consulted, or involved for active collaboration. Other approaches exist which focus more specifically on the stakeholders' legitimacy, resources, and networks (which can also be represented by drawing links between stakeholders).

A different representation of a project's stakeholder landscape consists in mapping stakeholders according to their grouping as either private sector, public sector, or civil society, and further assessing their degree of proximity to the project.

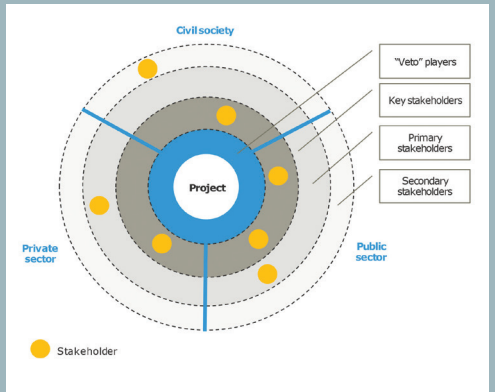
Stakeholder maps can be used to identify commonalities between the stakeholders; possibilities for further strategic options of reforms; enable planners to address and work through the conflict of objectives; anticipate possible tensions and conflicts among stakeholders in a timely manner; build up and strengthen compliance with change objectives and the commitment of the stakeholders.

Stakeholder interest/influence grid



Source: Authors, based on Eden and Ackermann (1998, p122).

Stakeholder map



Source: Authors, based on Swiss Agency for Development and Cooperation, 2019.

What influence do stakeholders have in the process? How is this used or managed?

As mentioned above, in a port city the stakeholders are characterised by different levels of influence and more or less impact on transformation. Different techniques are available to help focus on the stakeholders' influence. One of the most used techniques is the 'power versus interest grid'. It is a matrix showing the grouping of the stakeholders based on their level of authority ('power') and their level of concern ('interest') regarding the port city regeneration project outcomes. Four categories of stakeholders emerge: players, who have both an interest as well as significant power; subjects, who have an interest, but little power; context setters who have power, but little direct interest; and the crowd, which consists of stakeholders with little interest or power.

Are there groups that might have difficulties expressing themselves?

For strategy of involvement, it is useful to read mainly the recommendation 3.2, about engagement and participation and as cross reference to other recommendations, the analysis of the stakeholder landscape is particularly useful in the context of recommendation 2.1 and in recommendations 3.1, 3.2 and 3.3.

Socio-economic vulnerabilities are a major challenge to port city sustainable regeneration and so your stakeholder analysis should include vulnerable groups that might have difficulties expressing themselves. These groups could include: low-income groups, ethnic groups/minorities or refugees (due to limitations of income, or representation), children, women, elderly people (due to limitations of income, health, mobility and adaptability), persons with disabilities (due to limitations of health and mobility), etc. You need to help them to express their needs and to expand their opportunities to reach their full potential, and overcome barriers to access services in the regeneration project. Special attention should be given to identify vulnerable groups that are present in the regeneration area to avoid their risk of being expelled due to the regeneration and gentrification processes.

What stakeholder involvement strategy should be implemented?

The involvement strategy needs to use tools such as workshops, focus groups, interviews and public meetings, considering that:

- Stakeholders that have both an interest and significant power should be directly engaged;
- Stakeholders that have an interest, but little power or stakeholders with little interest or power should be involved to help them to express their needs.

KEY POLICY RECOMMENDATION 2.

Adopt a suitable planning approach

Port development has important socio-economic and environmental impacts on cities and significant impacts on the urban landscape and identity, mental maps and capacity for urban expansion. Conversely, a city with various activities such as cultural events and flagship projects on the waterfront, could limit or prevent port activities. **Shared strategic plans, integrated master plans and aligned land-use** for the port and the city hold the key to resolve the port city mismatch caused by the absence of, or competing, port city relationships, and to help address port city regeneration as part of a wider urban development strategy.

The outcome of the ENSURE research suggests that the re-integration of the port in the city has been a key desire of planning and policy, but fostering a link between the port and the city remains a major challenge. This is caused by the absence of, or competing relationships between, for example, local authorities and the port authority. The main challenge is to ensure that a strategic planning process is used to involve stakeholders and build a shared vision, and to facilitate alignment between the port and the city development strategies.

POLICY RECOMMENDATION 2.1.

Develop a strategy for regeneration based on shared vision and actions

More emphasis needs to be placed on strengthening the alignment between port and city spatial planning. Strategic planning can support the integration of a port city regeneration plan into a wider urban development strategy. A strategic planning process recommends the involvement of stakeholders (public and private actors and citizens) at all stages. It develops a long list of development **options**, considers **project alternatives**, establishes **priorities for implementation**, and selects port city **joint actions**.

A strategic planning process recommends the involvement of stakeholders (public and private actors and citizens) at all stages: see recommendation 3.2.

Suggested action 2.1.1.

Identify a suitable strategic planning approach and planning techniques

Does the city have a clear vision and what does it look like? Is it a conservative or a radical approach? Is this picture of a desirable future shared among stakeholders?

Some features need to be considered setting up a clear vision, mainly:

- Does the vision derive from a radical idea?
- Does it consider the medium- and long-term horizon?
- Is it inspiring?
- Is it simple to communicate?
- Is it shared by stakeholders?

See recommendation 3.2 for tips about the communication strategy.

Firstly: what is a radical idea? It isn't conservative and it is not based on what you can see today.

To draft a radical path, the port city vision will progress to a system innovation perspective.

Indeed, a long-term horizon avoids falling into obvious thought patterns and becoming ensnared by existing structures. If the approach is mainly 'conservative' and not radical, maintaining the status quo, then it stems from a wrong temporal approach: short-term vision is interrelated to a conservative approach.

Another feature is that the vision is credible, practical and feasible enough so as to be useful.

A fuzzy but inspiring vision could be admissible as long as it should be specific enough to allow for actionable plans and events.

See Toolbox 9.

Finally, a vision should inspire others to follow and adopt it as their own vision. To improve the number of followers, the communication strategy plays an important role.

A wider participatory approach should be used to ensure that the vision is the picture of a shared desirable future among stakeholders. Since stakeholders have radically different world views and different frames for understanding the problem, the vision should incorporate their perspectives, even if they are wildly different to your own. They all have their own priorities and agendas. By involving them in the visioning process, more than one plan can be drawn out from the same process.

The ongoing transformation map recommended in 1.2 is relevant to understand the current trend consistence.

Is the envisioned future consistent with current trends and ongoing land-use transformation or is it necessary to take on a new path?

If the envisioned future is not consistent with current trends and/or ongoing transformations, the regeneration needs to look beyond what you see today and to combine the current trends and ongoing transformations with a more radical approach but anyway realistic.

Taking into account the challenge of funding when you are envisioning the transformation path (see recommendation 3.3).

The current trend of transformation may be part of a new radical path only if the projects are consistent with the vision and they contribute to answer the question: "How shall we get there?", and so balancing objectives and means.

For example, a new strategy could take on board the ongoing land-use transformation, if a previous financing process can be integrated with a new funding model.

Is the planning process adopting a bottom-up approach or is it top-down and tightly controlled?

A top-down process is based on an institutional tightly-controlled approach, on the contrary a bottom-up process is based on community participation: an effective planning process requires a combination of top-down and bottom-up approaches.

There is no ultimate solution for this. Combining top-down and bottom-up approaches depends on institutional context, on the specific stakeholders' landscape, and level and type of community engagement.

However, considering that the strategic plan needs to be widely shared the approach needs to be as wide, participatory and open as possible.

For more tips see recommendations 1.3 and 3.2.

Toolbox 9 | Backcasting and visioning techniques for strategic planning: two examples

Future Radars

What are they?

Future Radars are a backcasting method which uses time travel and a little imagination. First, travel forward in time to your ideal future. Then look back on your path to success. How did you get here? Next, return to the present day. Use your new understanding of the future to plan your path to success. These different perspectives can help you to evaluate the feasibility of your ideal future and the actions needed to get there.

It is useful when the pathway is full of uncertainties and possibilities as a consequence of the systemic context. It helps to take into account e.g. competitors, unexpected risks or changes that are not happening.

How do they work?

They define a pathway of milestones that allows you to elaborate a more reliable plan including alternatives in case of unforeseen events.

Socio-Technical roadmap (STRM)

What is it?

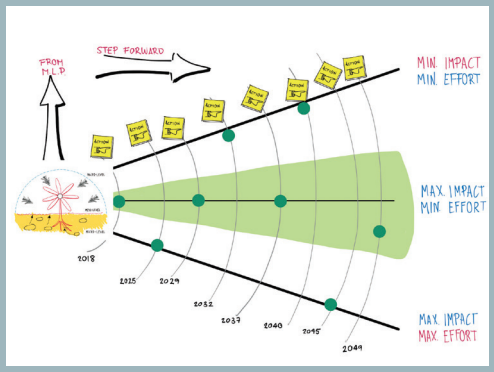
A Socio-Technical Roadmap (STRM) is a collaborative backcasting tool for multiple stakeholders to plan together. After envisioning the desired future, stakeholders can jointly set out different pathways to bridge the gap between such a future and the present time. The STRM is to be applied whenever you are working with complex problems which also entail long-term goals and a high degree of uncertainty throughout the process.

Through the STRM, you should identify and analyse alternative pathways from the present time to the future, before getting into your action plan.

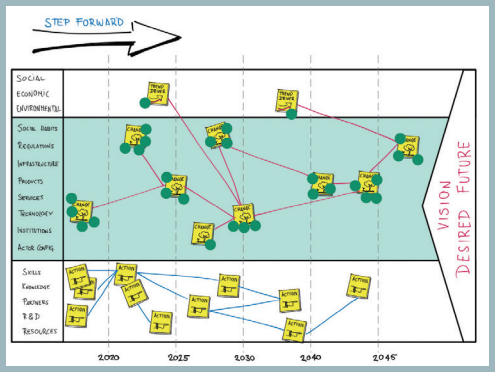
How does it work?

Ultimately, STRM produces a set of pathways from the future to the present time and vice-versa, made up of changes and actions. Subsequently, you can end up with a strategy for different stakeholders.

An example of assessing the future actions in Future radars technique



An example of socio-technical roadmap in the looking forward phase



Source: De Vicente Lopez, Javier and Matti, Cristian (2016). Visual toolbox for system innovation. A resource book for practitioners to map, analyse and facilitate sustainability transitions. Transitions Hub Series. Climate-KIC, Brussels.

Suggested action 2.1.2.

Draft the general strategy, shared by port and city

What type of 'depiction' of the strategy is being developed?

Each possible solution to be used to draft the strategy needs to answer to the question 'where will we be in the future?'.

The vision statement is a very synthetic document that depicts the long-term horizon, the inspiration, and calls for engaging stakeholders and citizens. This 'vision statement' is important to synthesise the strategy in a simple way.

The strategic questions 'where do we stand today?' and 'where will we be in the future?' are relevant as well as the current recommendation and the recommendations 1.1, 1.2 and 1.3.

The overarching high-level masterplan describes the strategy both visually and textually and it is more suited for experts who know how to read maps and technical documents.

For a deeper comprehension of the depicted strategy, both in the vision statement and in the overall masterplan, it is necessary to deliver the pre-planning analysis to answer the question 'where do we stand today?' before answering the question 'where will we be in the future?'

It is recommended to combine the visual and text depiction of the strategy in order to have a complete documentation helpful to widen the audience of the stakeholders.

Does the strategic plan propose urban planning phases?

If a high-level masterplan is envisioned in the strategic plan, an urban planning phase could be forecast.

It is strongly recommended that the strategic plan proposes the urban planning phases, regardless of whether it is mandatory or not, composed of preparatory works, and that segments the port city regeneration process into phases in space (per district) or in time (short-, medium-, long-term etc).

Suggested action 2.1.3.

Develop and share an action plan for implementation

What would be a reasonable timeline to achieve the proposed phases of development?

The action plan is connected to stakeholder analysis in recommendation 1.3, governance challenge in recommendation 3.1, engaging in recommendation 3.2, funding models in recommendation 3.3.

The action plan is the document that translates the vision to achieve the transformations by unpacking the strategies in more simple and feasible activities.

While the envisioned strategy is a long-term document, the action plan works in the medium- and short-term and it should be:

- Complete - Does it list all the action steps or changes to be sought in all relevant parts of the port city?
- Clear - Is it apparent who will do what and by when?
- Current - Does it anticipate newly emerging opportunities and challenges?

The action plan is the document that translates the vision to achieve the transformations by breaking down the strategies into more simple and feasible activities.

Since it is the last link in the 'vision-strategy-action' chain, it needs to consider:

- The actions or changes that will occur;
- The key stakeholders who will carry out the specific transformations;
- By when actions will take place and for how long;
- What resources (i.e., money, staff) are needed to carry out the changes;
- Sharing activity and communication for implementing the actions.

What urban development catalysts could be used to trigger and accelerate the port city regeneration and integration?

The choice of urban development catalyst is one of the main questions in port city regeneration, and should be defined in light of the clear vision and in the context of an action plan.

Many good practice examples seem to consider the relevance of a catalyst project to shift mind-sets and ensure that the port and city are connected perceptually by both potential investors and residents.

Some examples of urban development catalysts are e.g. hosting of events, mixed functions buildings, the development of flagship or landmark facilities (e.g. a cultural landmark such as a museum), new infrastructure provision (e.g. new transport infrastructure like road and rail links to facilitate port city connections).

Catalysts should be selected according to the following:

- They are included in the action plan;
- They are able to work as a short-term output;
- They produce the pump-priming process in regeneration.

Map 7. The overall strategy map of the strategic plan of Ancona (IT) is a significant example of how a multi-level vision by authorities and stakeholders can be connected, and desired outcomes translated into a shared strategy map. (source: Comune di Ancona, Strategia di sviluppo urbano sostenibile 'Waterfront di Ancona', 2016, p. 5).

Good practice box 3 |
Develop strategies based on a shared vision and actions: some examples

The Reference Plan for the port of Brest, approved in 1994, is a typical strategic top-down approach. It was a short document resulting from inter-institutional collaboration between public authorities and port authorities. The preparation of the document involved architects, urban planners and economists in workshops organised over several days, as well as consultations with institutional stakeholders to develop the vision for urban regeneration in synergy with the port's economic development.

Another example is the 'parallel assignment' that was launched in Aalborg (DK) in 2016, where the city invited groups of advisors, including architects and market development experts, to present their ideas. Three groups were then selected to propose a more concrete spatial, economic, and strategic plan for the development of the Stigsborg Harbourfront. In 2017, on the basis of inputs from the winning proposal and from some hundred participants in public meetings in the area, an overall development strategy for the Stigsborg Harbourfront was prepared.

The strategic plan of Aberdeen (UK) is one of the most complete and articulated available. It was developed through a dedicated authority (the Strategic Development Target Authority) that drafted and updated the general map of strategies and monitored each step from visions, periodical updates, participation, and local area plans.

Similarly, the development of the strategic plan of Ancona (IT) is a significant example of how a multi-level vision of authorities and stakeholders can be connected, and desired outcomes translated into a shared strategy map. The regeneration of Bilbao (ES) also provides an example of strategic planning: after the realisation of the significant tourism catalyst development – the Guggenheim Museum – the strategic plan provided a good sense of place in the Abandoibarra district after the relocation of the riverport.

Bilbao (ES)
https://www.bm30.eus/en/

Liepaja (LV)
https://liepaja-sez.lv/en/kartes/liepajas-sez

In some eastern European cities, there is the extra challenge of dealing with the legacies of the Soviet era: adopting a strategic approach can be useful for re-branding the city identity. In Liepaja (LV), a major focus of the Special Economic Zoning, using a strategic approach, has been to promote the city as a place of growth and job creation.

Figure 3. The logo for Metropolitan Bilbao 2035 strategy. The graphic element can help to synthesize the vision statement (source: https://www.bm30.eus/en/new-paradigm/vision/).

Policy recommendation 2.2.

Strengthen land-use compatibility and integration of port and city through urban planning and zoning

Stakeholders and planners need to identify ways in which the city and port interact. In some cases, cities need an interface area of the port and the city, in other cases they need a connection with the port. In some cases, the port authority completes the port plan and the local authority does the city plan, but they need to apply mechanisms for consultation, cooperation and planning alignment. The port and the city plans should define ways to realise the joint evolution of the city and port. In relatively few cases, the city authority produces the statutory plans for both, city and port areas.

In all cases, it is important to evaluate the pressures and interactions that proposed land-use changes may generate. Three discrete aspects should be considered:

- **Functional zoning of the most sensitive areas,** for example where port and industrial activities take place, zoning must guarantee safety and protection for all activities.
- **Zoning of multi-functional areas,** for example for cruise passengers and tourists, in which the plan can envisage some form of co-location. In these areas the regeneration project focuses on the safety of travellers and on the construction of secure restricted areas between the port and the city.
- **Zoning of areas integrated with the city,** for example by public open spaces, with reference to the urban planning/ building rules and parameters (e.g. in a local area plan or an urban regulatory plan) in force in the urban district and outside the port district, so as to avoid conflict. The zoning of these areas will describe functions capable of adapting to the changing needs of the city.

Suggested action 2.2.1.

Use urban planning techniques

The urban planning techniques might consider the different conditions and challenges in both port and city, answering the following questions.

How are the future spatial functions defined? Is the local plan suitable for addressing challenges in both port and city or is a special development zone needed?

Detailed urban masterplans and local plans, in both port and city districts, need to define planned land-uses, at least composed by:

- spatial functions of the areas and buildings;
- building rules and parameters for development in each area.

Taken separately, the local plan and the port plan are not able to entirely address the challenges in a port city. This means that the local authority and the port authority, if different entities, together need to set the boundaries of areas that are either sensitive, or multi-functional, or integrated with the city, as described above.

For an example, see Toolbox 10.

In other words, it is necessary to avoid mismatches in port city planning by a set of land-use rules, shared by the local authority plan and the port authority plan.

A possible solution for avoiding any mismatches is a special development zone in which, starting by a memorandum of understanding (MoU) among key stakeholders, mainly between the local authority and the port authority, a common plan is envisaged to compile the zoning in the planning activity.

A Memorandum of Understanding might be signed among key stakeholders of the project to engage them and avoid the 'veto' effect (see recommendation 1.3).

The main contents of this planning activity are related to the strategic vision and consistent with the action plan (as defined in recommendation 2.1), and concern:

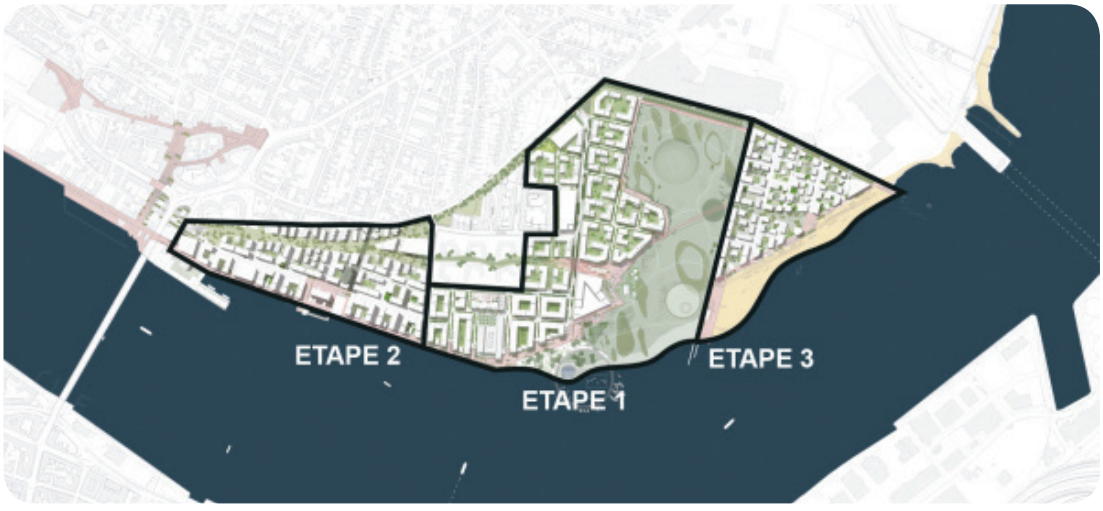
- the general definition of the specific sites and areas that are homogeneous for type of use;
- placemaking principles and the general criteria for actions;

- development requirements, i.e. what is requested for obtaining the complete transformation of the area;
- building rules and parameters for development in the area.

Do the regeneration challenges require specific plans or an integration of some aspects in one plan?

The most common challenges in port city regeneration are connected to changing mobility, preserving the sensitive environmental context, protecting the local community from gentrification and requiring specific plans when, in the local plan, there are no appropriate by-law contents for these challenges. Some examples:

- The mobility challenge could require a strategic mobility plan if the regeneration envisages a full change from strict port activities to new urban facilities and users' flows;
- The landscape quality challenge could require a map of local objectives of landscape quality in the regeneration plan, if the regeneration envisages a full transformation of a natural area, or a transformation in an anthropic area near a high-quality landscape;
- The social housing challenge could require a link with national or local housing strategies, because the regeneration could be an opportunity for new social housing or could be a challenge in terms of gentrification e.g. if the regeneration drives out the former inhabitants;
- The cultural heritage could require a preservation plan if the regeneration endangers the local heritage.



Map 8. Stigsborg Harbourfront in Aalborg: a 'parallel assignment' was launched in 2016: it was a sort of competition to present ideas for future development. Three groups were selected to propose a more concrete spatial, economic, and strategic plan for development. (source: https://stigsborghavnefront.dk/om-stigsborg-havnefront/beskrivelse-af-omraadet).

Suggested action 2.2.2.

Apply the zoning

The zoning needs to consider the port city relationship to ensure interaction and symbiosis, but also to preserve and distinguish between competing functions.

Does the regeneration require a clear separation of port and city activities?

The clear separation of port and city activities is required for the protection of sensitive industrial areas such as Seveso sites or security areas for passengers or freight traffic.
In many EU member state, the port reform also requires a strict separation. The zoning is a comparatively simple urban planning tool to describe effectively which areas are separated and why.

Does the regeneration plan include an area which is entirely or partially open to port city interaction?

Areas of interaction between the port and the city are strongly fostered to change the relationships between the port and the city and for this area to become attractive for people. These areas are mainly urban and port mixed-use areas and they include new commercial enterprises, high-end housing developments, public open spaces and buildings.

Toolbox 10 | Concerted development zones in France

What is it?
A Concerted Development Zone (*Zone d'aménagement concerté*, ZAC) is a development operation resulting from a public initiative, defined by law to solve conflict situations in urban planning, using a collaborative way among local authorities and private stakeholders.

How does it work?
A public authority (e.g. a Municipality or a Metropolitan City) decides to carry out the development and endowment of a land.
A development zone is established in several stages: 1. define a perimeter; 2. write the 'creation dossier'; and 3. write the act, a specific type of Memorandum of Understanding, creating the ZAC.

The **perimeter** must be approved by deliberation of the municipal council or by the territorial council that promotes the ZAC.
Due to urban, financial and political issues, preliminary studies are conducted to carry out the ZAC project.
These studies help to define the needs and the goals, and bring a better knowledge of the various constraints to the public (community or other public body) which took the initiative of the ZAC project.
These studies relate to various themes: demography, economy, landscape and architectural components, strengths and weaknesses of the site, environment, transport.
They thus make it possible to write an analysis which becomes the basis for the future development project.
Throughout the duration of the project, citizens, local associations and other stakeholders are involved in the **consultation framework** and organization of public meetings.
The public body must also constitute a **creation dossier** that includes the technical, economic and financial feasibility and the procedure chosen for the realisation. It states the reasons why the project was selected. It is approved by the municipal or territorial council.

The **Memorandum of Understanding creating the ZAC** makes it possible to delimit the perimeter, indicates the overall forecast programme of the constructions to be built within the zone, and mentions the applicable regime of the local equipment tax.

Many port cities in France applied a ZAC in order to address a solution to challenges in port city interfaces, among others:

- ZAC des Capucins in Brest;
- ZAC des Bassins in Cherbourg;
- ZAC du Nouveau Bassin in Caen.

However, the presence of these areas derives from the localisation of new functions, and it is related to the already realised transformations, the trends in relocation of the functional port, usually involving infrastructural upgrades far from city areas, and the active regeneration scenario as envisioned.

Suggested action 2.2.3.

Activate catalysts

Some projects such as a new flagship building or the restoration of historical buildings in waterfront areas, may enhance the existing physical and environmental quality.

If the plan envisages a flagship project, could a world wide famous architect help the creation of a new urban identity? Is there a need for an architecture competition?

The flagship projects produce a morphological and image transformation of the place. The main goals of a flagship project are to offer a high-level (often cultural) service and public spaces, to increase the visibility and attractiveness of the city and to attract new investments.

Their localisation could be either in a symbolic central place of the port city or in a socio-economic depressed central area with an unattractive image, e.g. an empty port area after relocation of former activities.

They constitute veritable landmarks and hubs of new urban activities and contribute to improve accessibility. There are also some challenges in choosing a flagship project and how to accomplish this:

- The flagship project needs to be a clear and consistent component of the 'vision-strategy-actions' chain and it needs to be fostered in the action plan;
- The world wide famous architect required for designing a flagship project may not be sufficient to ensure the creation of a new urban identity: you should always evaluate the project effectiveness;
- The architecture competition connected to the design step might not provide the desirable solution.

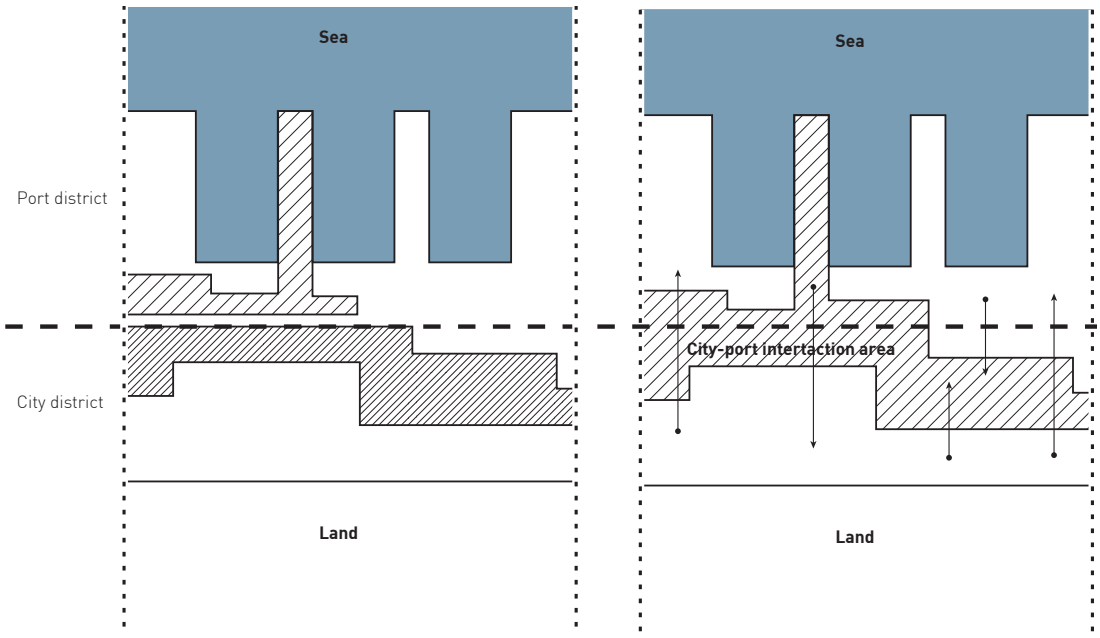


Figure 4. Potential effects of a Memorandum of Understanding (MoU) between local authority and port authority in defining a cross-district common plan. On the left the separated plannig activities in port and city districts could cause a mismatch. On the right, thanks to a MoU, urban functions in both city and port districts can be designed in a coherent way, applying joint placemaking principles, building rules and parameters.

If the area includes historical buildings, can a restoration project improve the urban quality? Could the restoration project contribute to supporting a modern identity, enable competitiveness but also retain a sense of the past?

The restoration of a historic building, as a particular type of flagship project, might play a specific role to improve the emotional attachment to the ancient port, to put it in a historical perspective, to preserve the port city 'living heritage'.

If historical buildings are protected by law or are covered by a protection decree, a Memorandum of Understanding with the competent Cultural Heritage authority is suggested to integrate both transformation and preservation issues.

Map 9. Proposed suburban rail lines in the Cork Metropolitan Area Draft Transport Study (CMATS) 2040 (2019) by the National Transport Authority (NTA) in collaboration with Transport Infrstructure Ireland (TII), Cork City Council and Cork County Council. The map shows the coordinated approach to put infrastructure in place to support future development of Tivoli thanks to a new Train station (source: CMATS 2019, Public consultation document p. 19).

Figure 5. 'Le Ciminiere' exibit centre in Catania: the restoration of former sulphur refineries has played a specific role to improve the emotional attachment to the places (source: ph. Ronsivalle, 2019).

Good practice box 4 | Planned land-use compatibility and integration: some examples

Cork (EI)
https://www.corkchamber.ie/cmats-cork-metropolitan-area-draft-transport-strategy-2040/

Considering the different conditions and challenges in both the port and city, different tools are applied for land-use compatibility and integration. For example, Cork has developed the Cork Metropolitan Area Strategic Plan and Cork Metropolitan Area Transport Strategy as a strategic way to underpin all of the proposed development at the city-regional level and provide a framework for thinking about how development might unfold in City Docklands, Tivoli Docks and other regeneration sites throughout the city.

In Brest, a Concerted Planning Zone (in French, Zone d'Aménagement Concerté or ZAC) was created in the commercial port area within which different sectors and objectives were envisaged. This planning tool directly serves to implement the Reference Plan by supporting the functioning of the commercial port's activities, but also managing brownfield regeneration.

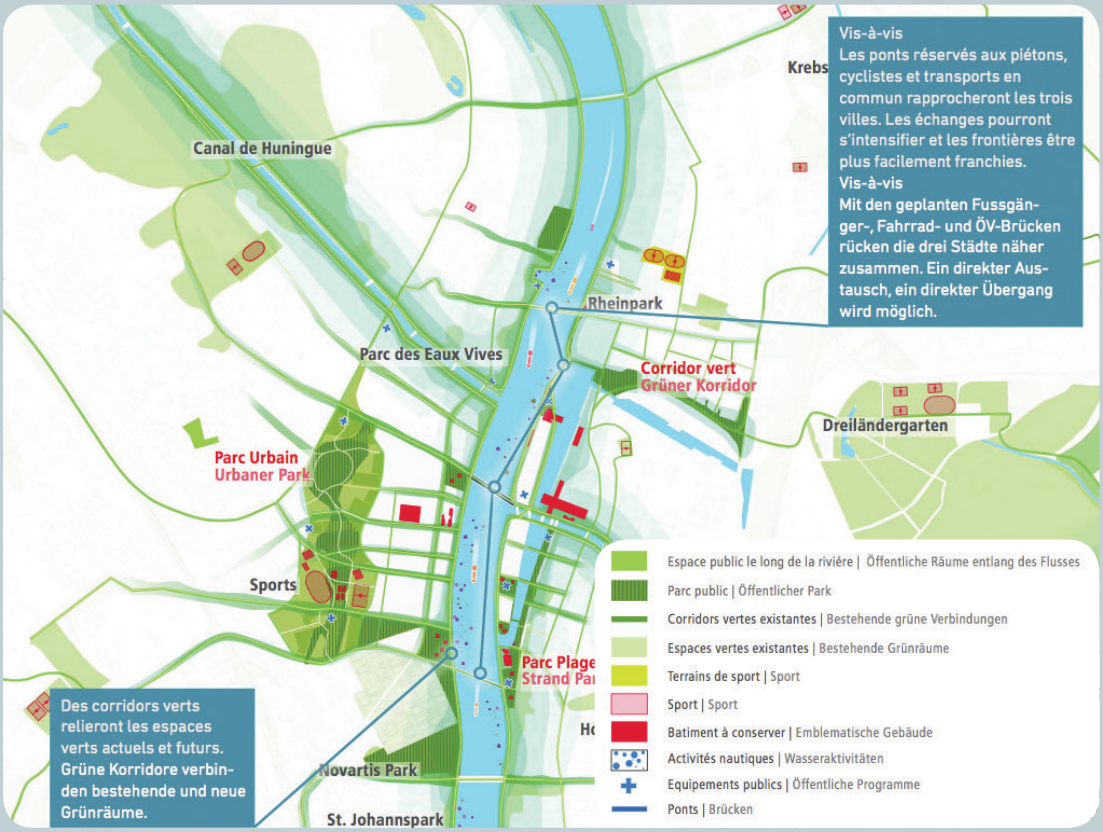
Bremerhaven (DE)
https://bit.ly/37mrCGF

In the city of Bremerhaven (DE), starting with the SEAPORT project (Stimulating Economic Regeneration and Attractiveness of Port Towns) the state of Bremen contributed to the planning for 'the transformation of its older port at the interface with the active port'. In order to start the regeneration of the old port after the relocation of port activities, and taking into account that the space between the old and the new ports was an 'industrial wasteland', the adopted solution was a common operative masterplan and zoning for both, old and new ports. In addition, the German Emigration Centre by Andreas Heller in the older port was the catalyst of the regeneration.

Dunkirk (FR)
http://www.ville-dunkerque.fr/fileadmin/user_upload/Grands-projets/2011/2011-GdLarge.pdf

In Dunkirk (FR) many programmes and strategies have been used to regenerate a very wide interface between the city and the port. The municipality and local communities have incorporated the partial plan and solutions in the Local Plan for Economic Development, in order to improve interaction between redevelopment projects, the port (the third largest in Europe) and the new renewable energy platforms (one of Europe's largest). This solution links the strategic framework to an economic development plan, changing the way of thinking about regeneration.

Figure 6. The Contemporary Art Centre in Dunkirk. The French Regional Fund for Contemporary Art funded the realisation of the Centre as a relevant part of Grand Large regeneration project, and as a new asset of economic development (source: https://bit.ly/2t8t4xo).



Map 10. Basel, the 3Land space use is the ultimate example of cross-boundary applications. In this case it allows to solve the inconsistency of the plans in three different states: Germany, Switzerland and France. (source: https://3-land.net/start/en/medien/).

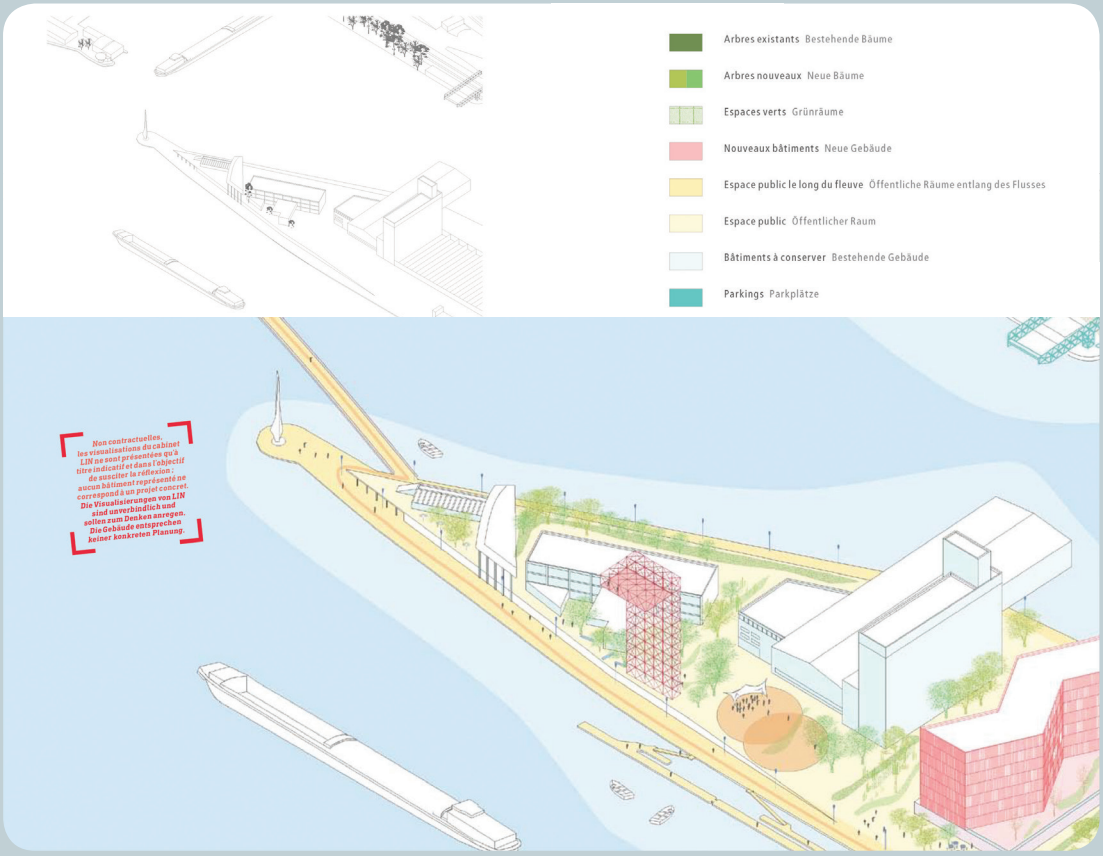


Figure 7. Basel, a detailed solution for one of the focus areas in the 3Land project: functions of the areas and buildings and building rules and parameters for development are shown in axonometric maps. (source: https://3-land.net/start/en/medien/).

Policy recommendation 2.3.

Address sustainability challenges in the regeneration planning

It is becoming increasingly clear for citizens, companies, planners and politicians that their behaviour and actions must be sustainable in relation to the climate challenge as well as to the Sustainable Development Goals (SDGs). Addressing sustainability challenges is, however, a multi-faceted demand, covering several aspects such as decontamination of old industrial areas, zero emission construction, impacts on the risk of flooding, health impacts, infrastructure and impacts on transport patterns, social equity impacts and many others as required by the SDGs.

Suggested action 2.3.1.

Review the proposed plans and their outcomes and impacts

It is necessary to compare expected outcomes and impacts of the most likely alternative development, whether this would be 'business-as-usual' or an alternative approach.

Starting from the analysis of the existing environment, ESIA can describe the potential impacts and characterise them in magnitude, significance, reversibility/potential for mitigation, extent, duration. For tips, see Toolbox 11.

What are the main economic impacts of the project or the plan?

To assess the main economic impacts, it is necessary to consider, e.g.:

- Will the regeneration contribute to creating new jobs, revenues or increase spending?
- Will it create new commercial activities?
- Will the real estate market change?
- Will it contributed to economic growth at regional and national levels?

Toolbox 11 | Environmental and Social Impact Assessment (ESIA)

What is it?
The Environmental and Social Impact Assessment consists of a multidisciplinary approach, which combines the evaluation of the socio-economic aspects of a project with the environmental consequences of undertaking the project.

Why is it useful?
Environmental and Social Impact Assessments are generally required for investments involving a new, 'greenfield' development or a significant expansion or modification of an existing facility before the proposed development may be authorised. National ESIA laws may cover a few social aspects but typically do not require a full consideration of social impacts.

How does it work?
Starting from the analysis of the existing environment, it describes the potential impacts and characterises them in magnitude, significance, reversibility/potential for mitigation, extent, duration.
Environmental and social impacts should be explicitly linked to relevant stages of the project cycle, such as: pre-construction phase, construction, operation & maintenance, decommissioning or closure and reinstatement.
Key environmental impacts and issues can include: pollution, biodiversity and sustainable natural resource management, regional and trans-boundary impacts, greenhouse gas emissions, climate change and adaptation.

Key social impacts and issues can include: labour and working conditions, population, economics, community health, safety and security, education, social conflict, gender, indigenous populations, cultural heritage, involuntary resettlement.

The ESIA would consider and address:

- Mitigation and management of impacts and issues;
- Residual impacts and risks;
- Environmental and social opportunities for project enhancement;
- Action plans and management systems for addressing the impacts;
- Analysis of alternatives.

The technical sheet of the ESIA is available at: https://www.iucn.org/files/esms-environmental-and-social-impact-assessment-esia-guidance-note

We suggest to set up a socio-economic impact assessment that is a structured way of showing a proposal's advantages and disadvantages for society as a whole. It needs to include the socio-economic indicators assessed in pre-planning phase, to evaluate the difference between the pre-plan and post-plan conditions.

What are the main social impacts of the regeneration plan?

To assess the main social impacts, the following aspects should be considered:

- Does the regeneration contribute to the resettlement of jobs and people?
- Does the plan raise social equity issues? What about gentrification?
- Have the regeneration areas been suitably serviced meeting education needs, health needs, needs for open space, sport and recreation, shops, etc.?

We suggest conducting a Social Impact Assessment (SIA) regarding the processes of managing the social issues associated with planned interventions. It works by using analytical, consultation and observation tools. It can use many outputs from the pre-planning assessment and from engagement activities.

What are the main environmental impacts of the project or the plan?

Impacts on land-use, mobility, energy consumption, building materials, and the lifetime of the construction are only some of the possible impacts that could occur in the medium and long term. To evaluate these impacts, Environmental Impact Assessments (EIA) are obligatory for projects which are considered as having significant effects on the environment, listed in Annex I of Directive 97/11/EC and successive amendments and integrations.

Annex I of Directive 97/11/EC is available at https://bit.ly/2RlbIr6

This assessment is called a 'mandatory EIA' and needs to be conducted for port-related projects, like:

- inland waterways and ports for inland-waterway, which permit the passage of vessels of over 1,350 tonnes;
- trading ports, piers for loading and unloading connected to land and outside ports which can take vessels of over 1,350 tonnes, excluding ferry piers.

But it is also relevant for other infrastructure projects that can occur in the framework of port city regeneration.

However, in all other cases in which EIA is not mandatory, the regeneration project needs to take into account the impacts on sensitive components e.g.:

- Does the project contribute to reduce the landscape and environment vulnerability? In what way? What are the outcomes?

Figure 8. In Malmö the environmental challenge was the focus for the regeneration project in Västra Hamnen International Housing Expo. (source: https://bit.ly/2shnpp0).

Good practice box 5 |
Sustainability challenges in the regeneration planning: some examples

As demonstrated in Catania (IT), waterfront regeneration provides an opportunity to protect natural structures such as cliffs and beaches, as well as to manage Seveso-like sites. The management and decontamination of Seveso sites is also an excellent opportunity for regeneration within Cork (IE), which also wishes to drive more compact development across the city-region and create innovative nature-based solutions to deal with flooding risks in the South Docks. The sustainability challenge is increasingly integrated in regeneration strategies as a main goal. For instance, the Plan Strategy in Aalborg (DK) in 2011 focused on growth and sustainability.

The 100RC methodology provides an innovative model for the local authority to develop a holistic city strategy in collaboration with adjacent municipalities, local academic institutions, the non-profit sector, private stakeholders, citizens, and communities of the city. See https://www.100resilientcities.org/

Beyond the mandatory environmental assessment and mitigation for plans, programmes and projects (see the EIA Directive 2011/92/EU and subsequent amendments, and the SEA Directive 2001/42/EC and subsequent amendments), port city regeneration needs to focus on the environment: green infrastructure, biodiversity and marine life are beneficial components for the water-land interface and for port cities.

Only a few cities point at the environmental challenges as positive leverage for the regeneration of the waterfronts. In Malmö (SE), the environmental challenge was the focus for the regeneration project in Västra Hamnen International Housing Expo. The Expo 'Quality Programme Bo01' final master plan outlines sustainability requirements for the development of individual plots.

In some other cities, such as Aberdeen (UK), specific measures have been introduced to protect areas of biodiversity from the impacts of redevelopment. Environmental solutions have been applied in Thessaloniki (GR) through its involvement in the 100 Resilient Cities (100RC) programme. One of the four goals of the Resilience Strategy in Thessaloniki is to 'Re-discover the city's relationship with the sea and integrate the economic and urban development of Thermaikos Bay by investing in the cultural and natural capital of the Bay for improved city life, restoring the ecosystem, monitoring environmental resilience, and designing a new governance system for managing these activities'.

The actions put in place to achieve this ambition were: the mapping of relevant players and roles; the decentralisation of authority from Athens to stakeholders in Thessaloniki; forming consensus on a vision around a Memorandum of Understanding with a long-term goal; and the creation of a new entity to manage the bay's activities.

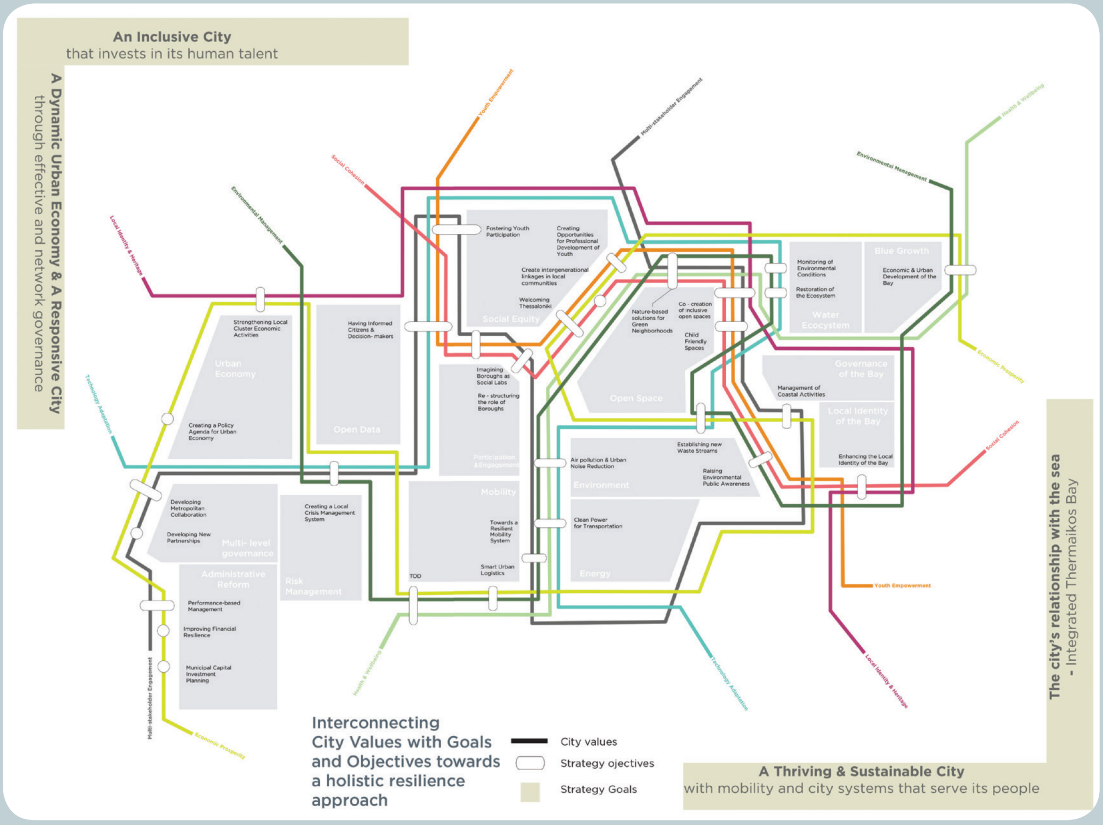


Figure 10. The Environmental solutions in Thessaloniki (GR) are defined in a plan in which the adaptation strategies are cross-sectoral and interconnected as in a Metro map. (source: Resilient Thessaloniki. A strategy for 2030, https://bit.ly/37eWAQZ).

Figure 9. Thessaloniki (GR), the synthesis of Marina Impact Study in Thermaikos bay. The New Marina Development in the Bay significant social, economic and environmental impacts on the city and the Bay are assessed through a resilience lens (source: Resilient Thessaloniki. A strategy for 2030, p.121, https://bit.ly/37eWAQZ).

- Does the project address the problem of flooding or tide conditions? Does the new port infrastructure help the resolution of this problem?
- Does the project include land-uses that potentially increase land-use vulnerability?
- Is the cultural heritage preserved in the project outcomes?
- Did the project produce urban densification and a better use of anthropic soils or did it envisage new anthropic transformations?
- Did the project attain new green infrastructure and a new eco-sustainable mobility?

To set a benchmark for these effects, it is suggested to refer to the analysis in pre-planning phase.

In the Green Infrastructure Strategy (COM/2013/0249), emphasis is placed on the ecosystem services provided and on purposeful land designation and management, with the scope of delivering a range of environmental benefits, including maintaining and improving ecological functions. (source: European Commission https://bit.ly/2ya52Vf).

Suggested action 2.3.2.

Enhance environmental sustainability in the proposed regeneration strategy

Is there a provision for green infrastructure in the planning area?

A port city regeneration process may address impacts of urban sprawl and fragmentation, could contribute to connectivity in ecological networks and promote green spaces in the urban environment, in line with the EU Green Infrastructure (GI) Strategy.

We suggest including functions that are able to increase the positive effects of GI integration on areas such as rocks, sand dunes, sand pits, wetlands, all blue spaces, riverbanks, green areas.

Green Infrastructures are capable of addressing a broad range of urban challenges, such as conserving biodiversity, adapting to climate change, supporting the green economy and improving social cohesion.

A Green Infrastructure planning approach in a port city is able to:

- combine green and grey infrastructures, e.g. waterfront parks to mitigate the effects of a new port infrastructure or tidal power production systems integrated in the outer dams;
- create green space networks, e.g. connecting the waterfront natural areas with urban gardens, or using floodplains as gardens in absence of risk conditions;
- support the delivery and enhancement of multiple functions and services, integrated in waterfront urban functions, e.g. sustainable energy plant;
- draw attention to collaborative and participatory planning.

About Green Infrastructures see Hansen, R., Rall, E., Chapman, E., Rolf, W., Pauleit, S. (eds., 2017). *Urban Green Infrastructure Planning: A Guide for Practitioners. GREEN SURGE project.* (source: https://greensurge.eu/working-packages/wp5).

In what way does the project contribute to global sustainability and climate action agendas?

While mitigation strategies often focus on specific sectors such as housing, transport or industries, the adaptation strategies are cross-sectoral. This creates a particular imperative for collaborative strategy development and implementation processes that actively include relevant stakeholders in global sustainability.

Furthermore, port cities could promote net zero emissions construction programmes, assess their alignment and contribution to the SDGs.

In order to cooperate and exchange good practices, we suggest participating in stakeholder platforms established at European and worldwide level, such as the Global Network for Urban Resilience. These networks can contribute to increasing the relevance of port cities in tackling the global climate change.

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. (source: https://sustainabledevelopment.un.org/?menu=1300).

KEY POLICY RECOMMENDATION 3.

Adopt suitable governance and funding models

Establishing suitable governance models and funding arrangements for each of the regeneration projects or plans is critical to successful implementation of the port city regeneration vision. Engaging all stakeholders, including national, regional and local government, civil society organisations, citizens, landowners, and local businesses is essential to ensure that all relevant perspectives are taken into consideration and that a planned regeneration receives widespread support and benefits everyone. **Cooperation** between the port entity and the municipality takes on a key role, while the other dimensions of cooperation (with entities at other levels and the citizens) are also very important. Managing public sector relationships appropriately is key to enabling change and to realise **good governance**, particularly when governance structures require one of the bodies, typically the port authority, to operate in a commercial manner to sustain their core operations. Successful port city regeneration requires sufficient **public or private funding**. Different **types of funding** depend on the location and attractiveness of the planned projects and are temporally contingent and dependent on economic and development cycles and the broader institutional and financial context. Joint developments, negotiations with investors, property or land value taxes, tax increment financing, betterment levies and development agreements are some examples to grant a viable regeneration process.

The choice of suitable governance and funding models is one of the most pressing issues in port city regeneration processes. Port city regeneration requires involvement from an array of stakeholders (detailed above), but managing multiple interests is challenging in a dynamic setting. The diversity of experiences in relation to, for instance, multi-level governance frameworks in different countries, ownership structures in terms of land and port functions, and the role of private sector actors are significant factors. Sometimes the lack of a suitable governance framework presents challenges in managing the overall coherence and design of the regeneration process.

Alongside governance and funding, public participation is also a management and implemen-

tation challenge of port city regeneration. The experience of waterfront regeneration in many port cities across Europe highlights the limited role of the public and citizen engagement in not only the development of regeneration plans but also in their implementation.

Policy recommendation 3.1.

Establish governance structures aligned with the specific purpose of the regeneration plan

The recommendation concerns two interrelated challenges: to strengthen public leadership, which must always be clear within the governance models that are used, and to involve key stakeholders in the project who could influence the process. In order to address these challenges, it is appropriate to establish a governance model based on clear relationships between public and private actors.

Suggested action 3.1.1.

Demonstrate public sector leadership

Strong public sector leadership can be a catalyst to facilitate the preparation and management of regeneration projects and provide the necessary conditions to attract private sector investment, especially in circumstances where the private sector may be reluctant to invest in urban regeneration. A strong and cohesive public sector with a strong vision and speaking with one voice in communicating and negotiating with private stakeholders can leverage investments and ensure an appropriate and desirable urban development. Specialised development agencies or satellite organisations managing real estate development processes can therefore help to drive more sustainable large-scale regeneration programmes.

What are the competent public institutions for urban regeneration? Who should lead the regeneration process and operational implementation plan?

The public institutions that are competent for the regeneration of the port city are mainly the municipality, the metropolitan authority, and the port authority, depending on the institutional set-up.

Taking into consideration that the regulatory framework in management of the waterfront regeneration projects differs from country to country, it is very important to define the competences of all public institutions and actors who have a relevant competence in port city regeneration.

These could have different structures and competences, and they can be autonomous, dependent on other authorities or have the form of a public-private syndicate.

The leader of the process could be either the municipality/metropolitan authority or the port authority. Some types of public authority with competences on port city regeneration that could lead the strategic regeneration process are:

- City-state authority (e.g. city-canton authority in Switzerland, or German Lander authority, Central Authority in Malta, etc...);
- National port authority (for example, in Italy, Spain, Lithuania, etc...);
- Metropolitan city (or other metropolitan authority);
- Municipality with direct competence on the port;
- Local port authority as syndicate structures (for example, PNA in Normandy ports – France).

In general, port city regeneration processes require powerful, responsible and capable leadership, ensuring that all relevant parties are on board, that things are moving forward, and that there is interaction between actors.

What are the regulatory and/or financial tools that the local authorities can use to steer, influence and accelerate the process?

The available tools are different, depending on the legal and institutional set-up.

Examples could be combining local area plans, direct public investments in regeneration, public investments in infrastructure, land value capture. However, it is very important to have an active private sector to invest and a strong local authority to steer in the direction of the visions for the city.

The local authority has the institutional duty to recover and reinvest land value increases resulting from public investment and other government actions. The core issue is that public action should generate public benefit. As challenges increase, this funding source has increasingly become more important to the future of municipalities.

Betterment contributions, charges for building rights, inclusionary housing and zoning, linkage or impact fees special assessments, transferable development rights, and property tax are only some examples of what a local authority could do to influence the process, and to take advantage in order to deal with some main challenges such as rapid urbanisation, deteriorating infrastructure, climate change.

The local authority has the institutional duty to recover and reinvest land value increases resulting from public investment and other government actions.

However, it is very important to have an active private sector to invest.

Is there a need for additional competence and dedicated organisation and resources, e.g. in the form of specialised agencies?

In the case of a multi-level public authority concerning port city regeneration, some additional competences could be required. A dedicated organisation, e.g. a specialised agency, may be established to steer the management and operational activities in regeneration processes using the typical leadership of the public authority, together with the business capacity of a private company. Such an authority might have all the roles of a dedicated local authority, including activities for investing, planning, tendering, and controlling. In some cases, as in mixed economy companies in France (Brest, Cherbourg, and others) , the local agency focuses on:

- Steering the implementation of comprehensive strategies and long-term visions;
- Managing the tension between short- and long-term horizons in the regeneration process;
- Providing the confidence that the costs (risks in terms of investment of public funds, and hardships such as residential and business displacement) and benefits of regeneration processes are in line with the economic sustainability and in the best interests of the port city at the same time;
- Leveraging public and private resources and sharing of risks. This usually entails securing multiple sources of funding from a broad range of sectors;
- Promoting opportunities in a faster way than a public authority;
- Preparing the land for new projects;
- Preparing the tenders for regeneration.

These agencies offer a certain flexibility which normally doesn't exist in statutory planning and have been associated with the provision of specific tax incentives, deregulated planning processes. They can thus be attractive to a range of sectors operating in a market-driven manner.

For tips about the role of the Agency in French Concerted Development Zone management, see Toolbox 10.

Suggested action 3.1.2.

Involve the key stakeholders who have an interest and/or could influence the process

A good understanding of the stakeholders, their interest and influence on the process, is the basis for an appropriate engagement strategy. It is necessary to define the moment in which stakeholders' involvement is effective and in what role.

In many cases, port cities have a formal governance system with a digital consultation platform (e.g. in Aalborg and Cork). On the other hand, Catania organised ad hoc consultations with selected groups of stakeholders.

A good understanding of the stakeholders, their interest and influence on the process, is the basis for an appropriate engagement strategy.

To define the groups of stakeholders, please refer to recommendation 1.3.

Suggested action 3.1.3.

Develop a cohesive and inclusive governance model

Port city regeneration processes require responsible leadership, ensuring that all relevant parties are onboard and that development is moving forward.

Toolbox 12 | Cost Benefit Analysis: some tips

What is it?

As part of the planning process, the Cost Benefit Analysis (CBA) is a useful tool for comparing alternative variations of a plan or for an overall assessment of individual regeneration projects.

It helps to prioritise and assess the welfare impact or the economic value of alternative projects. CBA is mainly applied in connection with all types of public investments, such as infrastructural improvements.
The CBA consists of a comparative assessment of all the project economic costs and benefits; the project with the highest (positive) net present value or benefit-cost ratio (over 1.0) is the most advantageous.
A CBA may often be a useful tool to assess the value of marginal changes to a plan. In such a case, only the marginal costs and benefits would have to be estimated.

How does it work?

The CBA consists of a comparative assessment of all the project economic costs and benefits. Economic costs and benefits bear consequences for all national stakeholders that are affected by a project over its lifetime, whether they are public or private investors or users, or just part of the general public, that may be affected by it.
The costs and benefits are estimated for the implementation period and per year for the subsequent years over the expected lifetime.

The 'Present Values' of the expected flows of costs and benefits are then determined to obtain comparative values for each component and for the project as a whole.

The main challenge in relation to a CBA is the estimation of intangible costs and benefits in monetary terms. Project intangibles in an urban development and a regeneration project may include:

- Intangible costs and benefits to the residents and owners of housing in the affected area, which may be new facilities and amenities, better access and an improved/reduced (sea) view etc;
- Consumer surpluses that arise e.g. when new dwellings are available at prices that are lower than what some of the new residents would be prepared to pay;
- The value of amenities to residents in neighbouring areas and to visitors in the area, which may also be assumed to be reflected in the market prices and market rent of such dwellings;
- Externalities, such as traffic congestion, affecting the traffic flows and hence the car-kms and time spent in the traffic in and around the area;
- Traffic congestions and changes in the traffic in general may also affect the environment in parts of the city, positively or negatively.

What type of governance model is suitable for this specific context?

Considering the local institutional framework, different governance models could work differently for port city re-integration and waterfront development. The main governance models could be:

- Local authorities who lead and have the competence to plan and implement (as in Aalborg);
- A multilevel government structure with a specialised, dedicated agency with full responsibility (as in Brest);
- A multilevel government structure without one dedicated, specialised agency (as in Cork and Catania);
- State agencies, national port agencies, or regional agencies, if relevant.

In some good practices, public-private partnerships tend to be a recurring governance arrangement with waterfront and port city regeneration projects.

In some good practices, **public-private partnerships** tend to be a recurring governance arrangement with waterfront and port city regeneration projects. In Aarhus (DK), the city has taken a strong lead in experimenting with new forms of cooperation between public and private actors to ensure a mix of functions and types of residents.

The governance model, on the other hand, is connected to the implementation: in the planning experiences in Aalborg (DK), Brest (FR), Catania (IT) and Cork (EI), you may find four implementation models from which you can select some solutions for your political, administrative and managerial context that could be chosen in your governance framework. The four models (or a combination of these) are:

- **The local authority as sole developer**. The first model is a simple model, where the city is the owner, planner, developer, and investor, with or without assistance from external experts, private consultants, advisors, and/or construction companies, but without sharing the responsibility with private actors (e.g. Brest and Catania).
- **Private developer driven development**. This is the model where a private developer, which may be a company or a person, solely or with private partners, owns the land, prepares a development plan, and makes the investments in the area. The only role of the local authorities is to assess, negotiate, and approve the plans, subject to the national planning system (e.g. Aalborg and Cork).
- **Public authority plans, private actors develop and invest**. In this model, the local authorities are planning an area, where the land is publicly owned, after which it is sold to a private developer and investor for further detailed planning and implementation, typically along with continued negotiations with the authorities during the construction period (e.g. Aalborg, Brest and Catania).
- **Development in partnership**. A variant of the above model is the partnership development model, which implies the close partnership between the local authority and one or more private partners (e.g. Aalborg).

It may be possible that you would be unable to consider the above four models as potential solutions, however, there are obviously also a wide range of hybrid models.

Are models of public-private partnership appropriate and/or desirable?

Public-private partnership could be appropriate in specific situation. Mainly, you will have to consider the relevance of private stakeholders for the improvement of the quality of the project, but this must be achieved in accordance with regulatory framework of your state and region.

The first question here is, if the public authority that is leading the planning and implementation processes is sufficiently strong to enforce its plans, when private investors are involved. In particular, when land is primarily owned by the private sector, waterfront regeneration can become more speculative in the sense that the owner, whether private or public, is choosing to

wait for better times. In such a case, there is not much the public authority can do except tax undeveloped land, offering tax incentives to build, or to nationalise. In this case, it is necessary that the public authority operates in terms of guaranteeing the outcomes and assessing the impacts and that the private entity recognises the public relevance of the intervention on the port city.

Toolbox 13 | Open Space Technology: a sample technique of citizens' involvement

What is it?
Many different types of workshops and meetings might be used in the idea generation phase.
Indeed, OST (Open Space Technology) is a participation method of involvement widely used on an international scale by public and private organisations just in this phase.

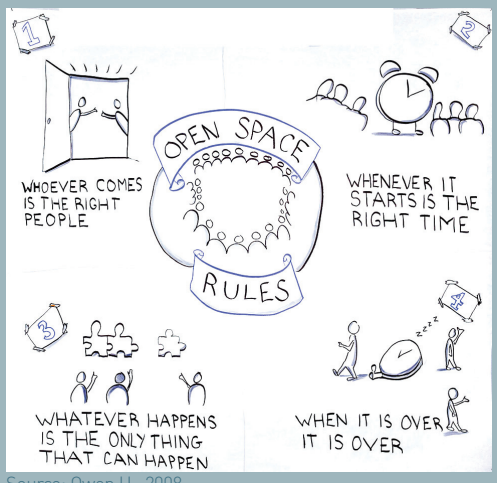
The OST allows you to create a participation meeting/workshop guided by a theme and a proposed question in order to 'open' the conversation: it is an alternative to the classical discussion that tries to solve a problem. The method takes the form of the creation of thematic work and discussion groups of varying dimensions, during the event itself.
This method makes it possible to deal with new themes (e.g. environmental challenges in waterfront regeneration), or classic themes with a new approach (e.g. urban mobility, considering the real demand of the inhabitants): the typical informality of the conference coffee-break is taken as a model, to recreate a series of micro-environments favourable to the free creative debate in a peer-to-peer perspective.

OST facilitates spontaneous group cohesion, which is very effective in achieving goals. It does not require many specialised personnel because the groups can facilitate themselves. Discussions can also lead to a progressive selection of ideas and concrete and clear action plans.

How does it work?
Prior to the meeting, the organisation that promotes the OST chooses the general theme of the day. The organisers, in the initial plenary phase, have the task of carefully explaining the OST working methods to all participants. There are 4 simple rules or principles:

- whoever comes is the right person;
- whatever happens is the only thing that could have;
- whenever it starts is the right time;
- when it is over, it is over.

The OST starts with a circular plenary session, during which each participant can propose a specific sub-theme they want to deal with, taking responsibility for being the speaker and facilitator of the proposed 'conference'. This first phase is commonly called the 'ideas market'.
Subsequently, the other participants choose the conversation groups in which they are interested, forming the working groups.
All the working groups try to find solutions to the problems or issues they have to deal with and summarise their results. At the end of the meeting, in a final plenary session, all the proposed solutions are copied in a single document that will be distributed to each participant.



Source: Owen H., 2008

Good practice box 6 |
Relevant governance structure examples in port cities

The city of Aalborg (DK) has entered into a partnership development company with 49% partnership with a developer, a construction company and an institutional investor, where the partnership is responsible for the development of a major, new neighbourhood, Stigsborg Harbourfront. The city has contributed land to the partnership, including bearing the considerable costs of decontamination in the area, where chemical enterprises were previously located. Public funding from the city has covered the decontamination and encouraged private investors who were invited to give their bid for 51% of the partnership company.

For details about Stigsborg Waterfront Area Development Company (AUS) (see https://propertyeu.info/documents/StigsborgTeaser.pdf).

In Cork (EI), the Land Development Agency has an immediate focus on managing the state's own lands to develop new homes, and regenerate under-utilised sites. In the longer term, it will assemble strategic land banks from a mix of public and private lands, making these available for housing development in a phased manner that aims to bring essential long-term stability to the Irish housing market.

For details about Irish Land Development Agency (see https://lda.ie/).

In Brest (FR), important public sector involvement in the initial acquisition projects, decontamination and promotion of land parcels in the commercial port of Brest have successfully attracted private sector interest thanks to the action of the Metropolitan City of Brest by a semi-public satellite organisation such as mixed economy companies, where investment was previously believed to be unfeasible. Their pivotal role was in carrying the risks of their operations, thus alleviating the burden of risk on the City and the private sector. Indeed, the private sector was not a driver of change but rather reacting to the supply of development opportunities created by the mixed company.

For details about the Brest Agency for Development, (see https://adeupa-brest.fr/).

In Catania (IT), the adopted governance model is a 'permanent session' where a steering group is formed and works until the draft of the final solution. The involved stakeholders are public authorities with specific competences (e.g. port authority, municipality, heritage protection board, etc.) that worked on a suitable solution for the new railway project in front of the port area.

In Basel (CH) the Hafen-Stadt project started from a local and multinational challenge based on the three borders along the Rhine River. The cities of Weil am Rhein (DE), Huningue (FR) and Basel (CH) form a single territorial area that all benefit from the growth of industry on the Rhine. 3Land was launched as a planning agreement for developing a tri-national inter-city regeneration.

About the Eurodistrict Basel (see https://www.eurodistrictbasel.eu/fr/home.html).

In Cherbourg (FR), there has been a strategy of continuity since 2006 between the ZAC intervention, the Port Masterplan and future development strategies. This is possible thanks to joint planning and development activities that are the most important achievement in the Cherbourg experience, activated by a mixed company called SHEMA (Société Havraise d'Économie Mixte pour l'Aménagment). The new governance structure is able to attract more funds and realise urban facilities thanks to a strong public leadership.

About SHEMA mixed company (see http://www.shema.fr/le-groupe-shema/la-shema/).

Gdynia (PL) is the example of a liberal approach by the public authority: the Port of Gdynia, in fact, is owned by Port Gdynia Holding S.A and it is independent of the Municipality. The municipality of Gdynia released a 'Local Spatial Development Plan' in 2010 for the part of the Śródmieście district in Gdynia, the area of the central waterfront. A private landowner developer, Vastint Holding BV Poland, produced two development plans called Gdynia Waterfront I and Gdynia Waterfront II for a full free-trade port. The municipality works as guarantor and controller of the outcomes.

Policy recommendation 3.2.

Incorporate public participation processes in the planning and implementation as a broader engagement activity

Participation is a transversal activity, so it refers to both the planning side (see recommendation 2) and to the delivery side (see current recommendation).

Engagement of citizen groups should be harnessed to ensure that projects are fit for purpose and have the necessary support to ensure effective implementation. The public authority should not only select and implement appropriate options and solutions, but also ensure transparency and citizen engagement and active involvement in the planning process. The active involvement of citizens along the entire planning process is important as support in idea generation, possibly based on different perspectives.

Suggested action 3.2.1.

Define the extent, scope and form of citizen engagement

Citizen engagement is a critical aspect of the regeneration processes: communicating during the entire regeneration process (including the pre-planning stage), ensuring transparency of the processes, promoting social cohesion within regenerated areas, and gathering public support and ownership.

Who should be involved and how? What models and tools of citizen involvement should be applied? Who in the team is involved in ensuring citizen involvement?

Different citizens or organised groups of people can support the waterfront regeneration process, and they can be generally divided in:

- citizens or organised groups directly involved and interested in the regeneration area: residents in the involved neighbourhoods, the local community directly involved in the regeneration and planning process, community-based groups, but also environmentalists that campaign for a specified area reclamation/protection, neighbourhood committees that represent more than an individual opinion;
- citizens or organised groups indirectly interested: they are not expected to have any direct financial cost or profit from the regeneration, but they can contribute other resources to regeneration, or they can be indirectly interested in present or future port city conditions (e.g. environment or cultural associations, Non-Governmental Organisations

Figure 11. An aerial view of Hafen-Stadt Basel: the regeneration programme is based on the 3Land, launched as a planning agreement for developing a tri-national inter-city regeneration (source: https://bit.ly/2shnpp0).

(NGOs) and 'quasi-governmental organisations' ('quangos'), etc.).

In a top–down participation model, the managing authority uses participation to invite citizens to have a say, like in a town hall meeting or public round tables starting from the idea generation phase. The main value of the involvement, however, lies in its importance of a broader and deeper background for the planning and final decisions for the regeneration process.

In the bottom-up approach, the participation is initiated and managed by the community (and, in this sense, the managing authority cannot direct it or plan it), and in a partnership or a cooperative approach, the community works together with government agencies, as in the activities led by NGOs and local associations in Cork.

The catch-phrase for citizens' involvement should be: 'Public participation is for real'.

Considering the huge differences among European countries in citizens' involvement, in all cases, the results of involvement activities need to help ensuring an in-depth, well-timed assessment of the needs and preferences of the citizens and users for potential planning elements. There are numerous examples of citizens' involvement, but it is not obvious that involvement is granted: mobilising citizens' participation is not only a law requirement to be respected; involvement is a potential opportunity as a precious resource that is crucial to effective territorial governance.

Many examples of citizens' involvement techniques and tools exist, each having specific expected outputs and impacts in regeneration processes. Some examples are:

- 'BarCamp' in which participants provide the contents according to a codified model of user-generated conferences;
- 'Brainstorming' as animated discussions that explore opportunities and produce ideas or suggestions;
- 'Focus groups' as meetings committed to specific issues;
- 'Laboratory of participatory design' to contribute to the final preparation of a project;
- 'Planning for Real' that uses large-scale maps and three-dimensional models to promote discussions of planning and community development;
- 'OST – Open Space Technology', where participants create and manage their own agenda in parallel working sessions about a central theme of strategic importance (see Technical Box about Open Space Technology).

For tips on sample cases of citizens' involvement techniques and tools, see Toolbox 13.

Could temporary uses and cultural events help to create ownership?

It is possible to generate more engagement, a shared sense of belonging, and a feeling of a sense of responsibility for shared issues through cultural events, temporary uses, or permanent pilot activities. E.g. temporary uses can often be seen as vectors for placemaking and certain examples of temporary uses can be intended as a bottom-up and open tools for port city regeneration. Temporary activities, e.g. on brownfield sites or other vacant spaces, as short-term alternatives, can provide a platform for more creative actions around flexible modes of urban placemaking. Temporary activities can be an opportunity to start opening up new areas to the public with open arrangements and guided tours (e.g. temporary uses in Aalborg) or occasional accommodation of cultural and artistic initiatives. Temporary or permanent pilot projects or cultural events could also help to do an early assessment of the preferences and demands of the potential users and a new identity through a clear community vision for the regeneration project.

Suggested action 3.2.2.

Prepare a communication strategy, suitable for citizen engagement

A communication strategy is a single, coherent narrative that describes a solution to a problem or a bundle of problems. Working at a strategic level, it sets out the main components of the

Good practice box 8 | Examples of incorporating participation processes in planning and implementation

For details, see the ESPON Final Report, annexes 2 and 3 at **https://www.espon.eu/ENSURE**

In Aalborg (DK), a phased approach to regeneration and the use of various numbers of communication lines throughout the port regeneration process, including temporary pilot projects to open up port areas to the public have contributed to a successful regeneration process.

In Brest (FR), citizen participation was initially not well integrated in the regeneration process but this improved over time as awareness of the importance of public support and participation grew over the years. For the latest regeneration project, Les Capucins, public engagement took place at the planning stage and in the early stages of works in the form of public debates and information sessions or online surveys to inform citizens and learn about their expectations, and direct citizen participation to facilitate ownership of the new public space.

In Cork (IE), the Public Participation Network (PPN), made up of independent groups and non-governmental organisations (NGOs), has grown significantly in recent years and sits in the majority of City Council Strategic Policy Committees. This is an important channel of communication between policy-makers and urban citizens.

In Aarhus (DK) processes of consultation were integrated into the project planning from the outset. A similar approach was taken in Reykjavik (IS) where the public was engaged at the earliest stages to generate ideas. Even where the public is involved and supports an idea, success is not guaranteed. In Turku (FI), a test project to co-locate urban and port activities is underway but while broadly supported, it is proving challenging to convince citizens to relocate to the area.

Figure 12. Brest (FR), Open day activities in the Capucins Workshops before the regeneration (15th and 16th October 2011, http://www.wiki-brest.net/index.php/Portes_ouvertes_du_Plateau_des_Capucins).

communication (nature of the problem, key elements, possible choices, required resources, stages to undertake and evaluation criteria).

The communication strategy is not the communication plan, because it considers a wider context and a longer-term view, and it doesn't consider the individual activities.

The communication strategy for port city regeneration needs to provide a link between the goals of the regeneration and communication planning and delivery, e.g. building a common understanding of audiences and priorities, creating a continuity in communication activities along the planning process.

The most relevant component in a communication strategy is the interdependence, e.g. if the strategy addresses only a part of the regeneration plan/project, it is necessary to verify if there are some activities planned to complete the rest of the work.

Policy recommendation 3.3.

Develop suitable funding/financing models for the regeneration projects

Successful waterfront and port city regeneration require the availability of sufficien public and/or private sector funding. Funding, among other things, depends on the location and attractiveness of the planned project and is temporally contingent and dependent on economic and development cycles and the broader institutional and financial context.

The applied funding arrangements may vary from project to project along the same waterfront. Funding may be sought from a range of public sources (local, regional, national, EU) and private direct investment or other financing initiatives (e.g. tax increment financing, land value capture, equity financing etc) and then combined to the best effect.

Joint developments, property or land value taxes, tax increment financing, betterment levies, and negotiated development agreements are some examples of value capture mechanisms. The choice of a specific mechanism entails risks and opportunities that are contingent in the context-specific social, economic, legislative, and fiscal framework.

Land value capture is relevant in cases of projects with a high profitability, particularly where this is due to public investments, for example in the area's infrastructure or in decontamination of the site. In cases when the project is not considered commercially viable, private investors may be attracted by mechanisms that improve the project viability, for example by allowing higher building rates or by improving the infrastructure in the area.

The funding arrangements may need to be adapted to the specific project, depending on land ownership and financial viability, but also on potential investors' interests. A high financial viability may attract private investors, but on the other hand, funding will often require some influence on the project, and if the public authorities want to avoid investor influence on a project, they may prefer to do the investment with public money.

Suggested action 3.3.1.

Identify land ownership and potential investors' interest

A first step is to take into consideration that the investment challenges depend very much on the ownership of the land. If the land is owned by other parties, than the local authorities, the land's availability to the authorities needs to be assessed.

Who is the owner of the land?

Taking into consideration that land ownership may differ from place to place in the same port, it is crucial to define investment challenges and to choose implementation models on the background of the ownership pattern. We may distinguish between the situation, where the public authority, which is responsible for the regeneration of the land, is the owner, and other situations.

Where the land is owned by the local authorities which are responsible for the regeneration, they have a greater degree of freedom to implement the plan as desired and planned. If the necessary funds are available, it is a question of allocating the budgets and making the investments. But if this is not the case, the local authority must attract the funds from private investors or from higher administrative levels, from semi-public and charity foundations. The most attractive available options depend on the nature of the planned investment project, the available funds and their terms and conditions.

If the land is owned by other parties than the public authority which is responsible for the regeneration, and if it is not for sale, the implementation of a regeneration plan may be more difficult. The landowner(s), whether private or public actor(s), may happen to find the investment interesting as planned, if it complies with the investment policy of the owner(s), but they may also find it more interesting to take a wait-and-see approach, either because there are better investment options at present, or because the business case is expected to improve over time. In this case, the responsible public authority has little control over the timing and the contents of the implementation of the regeneration plan. The planning and implementation authority may still be able to affect the decision by the owners, e.g. by improving the business case, through negotiations, or just by making the overall plans more transparent.

Is the land for sale or in other ways available to the local authorities? Are there other models available through partnerships with public and private investment, etc.?

If the land is for sale, the case may seem to be similar to the situation, where the responsible public authority owns the land, but everything depends on the price and the conditions set for

Toolbox 14 | Joint development

What is it?

In the context of funding sources for infrastructure investments, **Joint Development (joint venture)** is a mechanism of cooperation and cost sharing between public sector and private operator or developer. Various examples of joint development have been applied in many transport investments, particularly in mass transit systems.

How does it work?

Joint Development generally refers to the partnership between the public and private sectors in a collaboration of financing, construction, operation or maintenance of projects.

An advantage of using joint development is that it is not necessary to identify the direct and indirect impacts of the investment, as must be done in the betterment tax or with tax increment financing, since there is cooperation between the public agency and the private developers who share construction costs. Joint development promotes efficiency and benefit equity among participants, by creating a win-win situation. Private developers benefit from better accessibility and more potential customers, and the public sector benefits through the sharing of construction costs. Among the mechanisms presented here, joint development is the most easily applicable instrument, for example, in a PPP agreement, because it is technically straightforward to implement in the contractual framework.

By not using taxes, joint development does not raise equity issues. However, it should be noted that the success of this investment partnership depends on the correct forecasting of the demand for the facility in question as well as the stability of the real estate market. Moreover, what decides the success or failure of a joint development mechanism is the macro and micro economic environment and the structure of the considered urban area.

its sale, and on the ability of the public authority to buy according to these conditions. If this is not feasible, the situation is still as described above where the land is owned by others with limited control by the authority over the timing and the contents of the implementation of the regeneration plan.

Suggested action 3.3.2.

Selecting funding solutions

For a balanced regeneration, funding is required from the private and/or the public sector. It is possible to search for different solutions as local authority budgets, other public sources (such as the sale of publicly owned land, local or national), private commercial investments, private non-commercial funding, e.g. charitable funding, international funding e.g. European Union (EU), European Bank for Reconstruction and Development (EBRD), etc.. In particular, public money could be invested at the outset to 'pump-prime' development and act as a catalyst for regeneration to lever in private sector funding. Publicly funded regeneration and flagship developments could be important in terms of generating profit for re-investment but also boosting investor confidence.

What public and private sources of funding are available?

The responsible authority may choose to make use of its own budgets, or it may attract other national or international public funding, private investments or a combination of these. The concrete availability of funding must be mapped for the specific local and national context. Both public, semi-public and private money may be given as grants, loans, guarantees, and subsidies.

Private funds can in most cases be attracted by offering a good business case, but if the planned project is not considered a profitable investment, it may be improved by revising the plans or by contributing with better infrastructure, funded by public money. Public and semi-public funds will often be available subject to the fulfilment of certain criteria, and in most cases, they will require less in terms of a financial return. The final solution will therefore depend on an assessment of the available options and their terms and conditions vis-a-vis the planned project and its financial viability.

Is 100% private funding considered an acceptable solution? What is considered an appropriate public-private investment ratio?

Within a context of weak or absent public urban planning and regulation systems, a 100% private funding solution would not be an acceptable funding and implementation model. The stronger the public planning and regulation systems are, the more it is possible to involve private investors without losing control over the urban development. On the other hand, if the political, economic, planning, and financial context mean that access to public funding is limited, the port city regeneration project may need an increased involvement of the private sector. This may be attracted through public investment in key enabling infrastructure or by other ways of improving the financial viability of the planned project. While there are potentially a range of funding models that can be used to drive regeneration and redevelopment, the public sector must be prepared to frontload significant infrastructural investments. Passing the costs of strategic infrastructure and decontamination of land on to developers only creates disincentives to development and delay.

For tips on complex financial model solutions, see Toolbox 14.

In most projects, public and private sectors collaborate, and complex financial models are put in place to support regeneration, e.g. through combining funds (Aalborg), distributing financial risks to satellite organisations (Brest), providing public funding for setting up key infrastructure (Cork).

Is the project considered financially viable? If yes, is it possible and relevant to make use of land value capture? If not viable, what is the support needed in terms of investments or otherwise to make it viable?

If private investments are wanted for a regeneration project, it is important to make sure that there is an expected future demand for the planned new facilities and buildings and that the project is financially viable.

When projects are considered financially viable, it is usually possible to attract private investors. If the expected rate of return is higher than required by private investors as a result of the development plans and public infrastructure investments in the area, it may be possible to make use of land value capture (LVC) that can potentially deliver significant contributions to the public investments. Land value capture is a model to enable the public sector to capture part of land value increases that result from public investments and interventions in an area. There are a number of ways in which this can be achieved such as the transfer of development rights or a betterment tax.

For tips on Land Value Capture and Tax Increment Financing, see Toolboxes 15 and 16.

When the projects are not financially viable, it will be difficult to attract private investors unless actions are taken to improve the rate of return. This may be done for example by changing the plans by increasing the permitted capacity of buildings in the area, by securing better operational budgets for the buildings, e.g. by entering rent agreements with the investor, or, if relevant, by improving the public infrastructure investments in the area.

When such changes are considered, it will make sense to make a Cost Benefit analysis of the planned changes to see if the additional public expenses and other economic costs are covered by the expected additional benefits for the city.

Toolbox 15 | Land Value Capture: some models

What is it?
Land Value Capture enables communities to recover and reinvest land value increases resulting from public investment and other government actions.
Land Value Capture is based on a simple core premise: public action should generate public benefit.

How does it work?
Land Value Capture instruments include many technical solutions, some are listed here.

Impact Fees (Linkage Fees)
Developers pay the municipality a one-time charge or development levy designed to cover the costs associated with a development's impact on certain public services and infrastructure, and the municipality invests this revenue in public services and infrastructure.

Inclusionary Housing or Inclusionary Zoning
Developers provide the municipality with a certain amount of lower moderate-income housing, either on the same site or in an alternative location, in exchange for the right to construct market-rate residential or commercial properties.

Rail Plus Property (R+P) Co-Development
In the area where a new rail line (or another infrastructure) will be built, the government transfers land development rights to a transit authority at the pre-transit development price. The authority then partners with private developers to further develop properties near the new transit route, shares the profits, and uses the funds to reinvest in the same rail system and other public improvements.

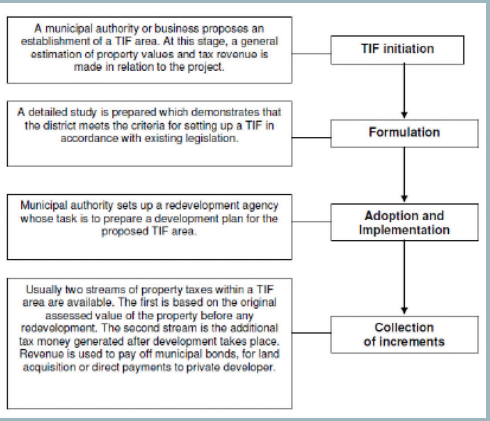
Transfer of Development Rights
Landowners pay a fee to a government entity to transfer the allowed density (as established in the local zoning plan) of one tract of land to a non-contiguous parcel of land that is better suited to greater densities. The transferring fee generates revenue for public investment.

Toolbox 16 | Tax Increment Financing (TIF)

What is it?
It is a mechanism based on using anticipated future increases in tax revenue to finance current infrastructure improvements which are thereafter expected to generate the increased revenues (The British Property Federation, 2008). TIF is able to finance part of the public and private costs associated with a designated redevelopment area (often called TIF area) by capturing increased tax revenues. Widely used in the United States and increasingly in the UK, TIF is traditionally implemented to fund urban renewal projects, affordable housing and public infrastructure.

How does it work?
It aims at promoting efficiency of public investment in infrastructure by creating an incentive to locate where there is infrastructure capacity. TIF projects must not only generate a level of tax revenue at least equal to the cost of the project, but they must also be incisive for economically efficiency or for equitability.
Projects with a positive net present value are more beneficial when the municipal tax rate is higher, even when the state contribution for the realization of the project is minimal or absent.

Tax increment finance schemes operate through fiscal incentives as tax relief, tax breaks or through tax disincentives in order to encourage urban development in an area. What should be emphasised when proposing a TIF is that this funding method does not create a tax burden for businesses. It is a flexible instrument in which the generated revenue can be used either to secure a loan, encourage an up-front investment, or a pay-as-you-go development initiative in the area.



Source: The British Property Federation, 2008

Good practice box 7 | Relevant funding/financing examples in port cities

For details, see the ENSURE Final Report, at https://www.espon.eu/ENSURE

In Aalborg (DK), different sources of funding have been used for the various regeneration projects, with different combinations of national and local foundations' contributions or with other private ones, public investment in youth housing, and recreational and public spaces generating private investment at the central harbourfront.

In Brest (FR), funding for the regeneration process has been managed with agility thanks to a governance set-up involving satellite organisations (organisations in the mixed economy) with dedicated finances and being able to take financial risks where private investors were less inclined, thus mitigating these risks for Brest Métropole's budget.

In Cork (IE), key infrastructure is based on public funding controlled by central government through the Irish Strategic Infrastructure Fund (ISIF), borrowing from the European Investment Bank (EIB), with other elements of the project potentially funded through the new Urban Regeneration and Development Fund.

In Malmö (SE), public sector funding supported the development of a successful housing expo, which was then used to lever private funding for the second phase of the regeneration project.

In Norrköping (SE), funding is both public and private, including EU funding, while a small part of the regeneration was conducted through the Interreg and the Baltic Urban Lab programmes.

Public and private sectors collaborate in many cities and this kind of partnership is the emerging norm in European port city regeneration. In Swansea (UK), the City Council is both the developer and funder, in partnership with a private sector development team. Funding sources are project-specific, such as the transport capital infrastructure grants system, private developers and investors, as well as existing council and national government funding schemes.

In Rijeka (HR), funding through an international bank loan to redevelop the port, has been leveraged to also obtain other economic and social benefits. In particular regions of Europe, the availability of EU structural funding has been of major importance. For example, in Bourgas (BG), the positioning of the city as a European gateway to Asia on the eastern border of the EU has been critical in attracting European funding through infrastructural funding mechanisms. In other places such as Brest (FR), it is the combination of supranational, national and regional funding that has been a key catalyst for regeneration.

It is seen in many cases that public investments in an area, whether this has been in infrastructure, urban spaces, green areas or housing, has encouraged private investors to invest. This may be due to an improved business case or an increased confidence in the overall regeneration plan. In Malmö (SE), public sector funding supported the development of a successful

housing expo which then was used to lever private funding for the second phase of the regeneration project. Investment in cultural projects and events can also be used as a way to justify public spending during a regeneration project.

For example, in Bilbao (ES), and Reykjavik (IS), the state played the driving role in funding large-scale catalytic projects. The risks and challenges associated with this approach include the possibility that the regeneration will not have the envisioned pay-offs and the difficulty in accessing impact data suggests that this is often not well monitored.

EU funding, particularly from the 1990s, has encouraged urban regeneration across Europe and continues to be a significant funding stream for some countries and regions. However, very often this comes with strict eligibility criteria and obtaining it can often be a fraught process. For example, when Belfast (UK) applied for EU funding, their application was investigated due to a perceived lack of competition between construction companies for the Titanic Quarter project. Belfast offers an unusual example of the importance of timing in attracting different types of funding, and how the availability of funding is temporally contingent and dependent on economic cycles and the health of the public purse.

Sample cities across European regions

The repository of good practice cities

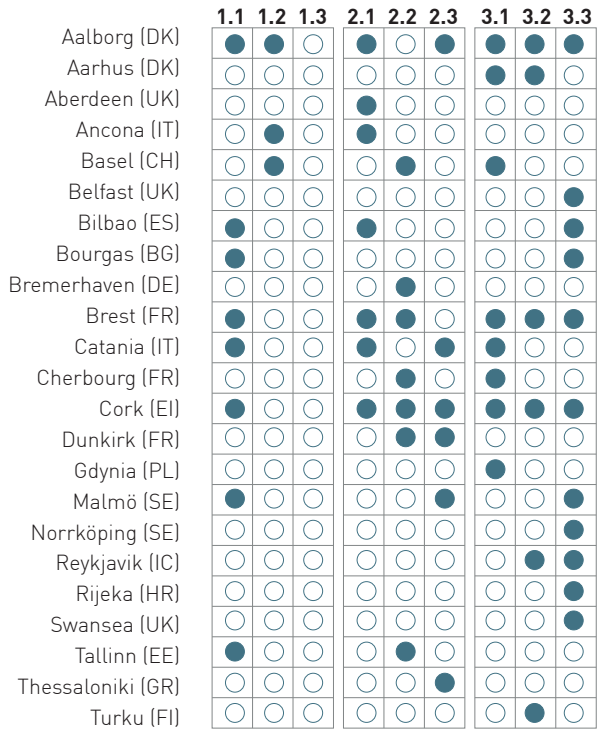
Aalborg (DK)
Aarhus (DK)
Aberdeen (UK)
Ancona (IT)
Basel (CH)
Belfast (UK)
Bilbao (ES)
Bourgas (BG)
Bremerhaven (DE)
Brest (FR)
Catania (IT)
Cherbourg (FR)
Cork (EI)
Dunkirk (FR)
Gdynia (PL)
Malmö (SE)
Norrköping (SE)
Reykjavik (IC)
Rijeka (HR)
Swansea (UK)
Tallinn (EE)
Thessaloniki (GR)
Turku (FI)

Geographical, functional, economical, institutional and social contexts differ greatly across European countries, regions and cities. Several differences are found among port cities in terms of governance structures, degrees of separation of port and urban functions, land ownership, paces of the phasing out of port and industrial activities along the harbourfront, all of which influence the approaches to and implementation of urban regeneration.

Faced challenges, seized opportunities and adopted practices in port cities are used in the guide to explain and provide examples to the guide contents.

The below table shows what cities are quoted in the guide as good practice examples. The next pages provide synthetic informations and web references to port city regeneration projects.

See the complete documentation about the cities at https://www.espon.eu/ENSURE



Aalborg (DK)

Type Seaport

Function
Industrial, cargo, passenger traffic, and brownfield land

Scale of regeneration
There are plans for regeneration of all the harbourfront in the city

Main project
Redevelopment for urban uses. Development of a new East Harbour

Stage
Ongoing

Other info about project at
Harbourfront
https://bit.ly/2QUrKGL

The East Port
https://bit.ly/38sh9Kk
https://bit.ly/36s4hDr

Stigsborg Harbourfront
https://bit.ly/37JnVLi

Aberdeen (UK)

Type Riverport

Function Cargo, oil and gas, passenger

Scale of regeneration
City harbour.

Main project
Expansion of Port at Nigg Bay and new infrastructures in the old Harbour

Stage
Ongoing

Other info about project at
http://www.aberdeencityandshire-sdpa.gov.uk/

Aarhus (DK)

Type Seaport

Function
International shipping, local and international maritime traffic

Scale of regeneration
Interval redevelopment on a long period of time

Main project
Bassin 7 and Aarhus residential redevelopment

Stage
Ongoing

Other info about project at
https://bit.ly/2Q0EZ9y

Ancona (IT)

Type Seaport

Function
Cargo and activities related to handling, passengers and activities related to serving them, shipping, former military port

Scale of regeneration
City harbour

Main project
Development strategy by Territorial Integrated Investment (in Italian Investimenti Integrati Territoriali 'I.T.I.') 'Waterfront di Ancona 3.0' (2017)

Stage
Planning (2017)

Other info about project at
https://bit.ly/2SyL66K

Basel (CH)

Type Riverport

Function
Cargo and shipping

Scale of regeneration
Trinational City harbour (Germany, Switzerland and France)

Main project
Harbour-city masterplan

Stage
Implementation (2018)

Other info about project at
https://3-land.net/start/en/projekte/

Bilbao (ES)

Type Seaport

Function
Cargo, Container and Cruise

Scale of regeneration
Full city regeneration (1980s-2000s)

Main project
Abandoibarra waterfront regeneration

Stage
Completed

Other info about project at
http://www.bm30.eus/en/goals-and-objectives/strategic-planning/

Belfast (UK)

Type Seaport

Function
Bulk cargo, cruise, passenger, renewables, towage, boating and marina

Scale of regeneration
Laganside and Titanic Quarte

Main project
Laganside and Titanic Quarter

Stage
Almost completed

Other info about project at
http://www.titanic-quarter.com/

Bourgas (BG)

Type Seaport

Function
cargo and activities related to handling it; passengers and activities related to serving them; shipping

Scale of regeneration
City harbour

Main project
port Bourgas masterplan (2015)

Stage
Implementation

Other info about project at
https://port-burgas.bg/

Bremerhaven (DE)

Type Seaport

Function
Container, importer and exporter of cars and bulk

Scale of regeneration
SEAPORT project was 2003-2006 while terminal expansion continued until 2008

Main project
Terminal expansion and redevelopment of old port

Stage
Completed

Other info about project at
https://www.bremerhaven.de/de/bean.65798.html

https://bit.ly/39eQAtv

Catania (IT)

Type Seaport

Function Cargo, containers, passenger

Scale of regeneration
Series of projects since the 1990s

Main project
Ongoing regeneration of the harbourside

Stage
Ongoing

Other info about project at
https://www.comune.catania.it/il-comune/uffici/urbanistica/

Brest (FR)

Type Seaport

Function
Trade including multimodal container transport, passengers, naval repair, fishing, maritime safety, scientific research, marine technologies, leisure boating

Scale of regeneration
Initiated in the mid-1980's with multiples studies and redevelopment plans

Main project
Re-development for urban uses of the commercial port area and ex-military areas; new cultural and leisure functions

Stage
Ongoing

Other info about project at
https://bit.ly/2T1o6xq
https://bit.ly/2MXzZ3N

Cherbourg (FR)

Type Seaport

Function
Cargo, passengers, shipping and a military port

Scale of regeneration
City harbour

Main project
ZAC (Zone d'Aménagement Concerté) Bassin du Commerce (port city area)

Stage
Almost completed

Other info about project at
https://bit.ly/2Mw9F0k

Cork (EI)

Type Seaport

Function
Cargo, industrial, passenger and significant brownfield land

Scale of regeneration
Dedicated redevelopment strategy in 2002 and varied ongoing plans for both current port and former port lands

Main project
Redevelopment for urban uses of the north and south docks; proposed relocation of port from Tivoli docks; new port terminals at Ringaskiddy

Stage
Ongoing

Other info about project at
Cork City Planning
https://bit.ly/2ZZZgiR
New Ringaskiddy terminals
https://bit.ly/2MXBhvF

Gdynia (PL)

Type Seaport

Function
Cargo, passenger ferry and related activities

Scale of regeneration
City harbour

Main project
Vastint Holding BV Development activities in Gdynia waterfront (two phases)

Stage
Implementation

Other info about project at
https://vastint.eu/pl/projects/gdynia-waterfront-i-2/?lang=pl

Dunkirk (FR)

Type Seaport

Function
Liquid, dry and breakbulk, RO-RO (Roll On- Roll Off), containers and ferry

Scale of regeneration
Regeneration of harbour and pier

Main project
Pier 1

Stage
Started in 1991 to the present

Other info about project at
https://www.ville-dunkerque.fr/

Malmö (SE)

Type Seaport

Function
Cars, containers, cruise, dry and liquid bulk, passengers and RO-RO

Scale of regeneration
Major project started in 1997

Main project
Regeneration of the Västra Hamnen waterfront area

Stage
Implementation

Other info about project at
https://bit.ly/2SwPFi4

Norrköping (SE)

Type Riverport

Function
International shipping of various goods

Scale of regeneration
Interval redevelopment over a long period of time

Main project
Extended rail connections to outer harbour (2010 onwards) opening up brownfield land for residential redevelopment

Stage
Transitioning from stage 1 to stage 2 (2019)

Other info about project at
http://www.norrkopingshamn.se/en/

Rijeka (HR)

Type Seaport

Function
Cargo, Container, RO-RO, livestock, dry and liquid bulk, passenger

Scale of regeneration
Incremental: initial gateway project being followed up by city-based regeneration phase

Main project
Gateway project 2004-2012

Stage
Completed Gateway. Waterfront regeneration in planning

Other info about project at
https://www.portauthority.hr/rijeka-gateway-projekt/

Reykjavik (IC)

Type Seaport

Function
Cargo and Cruise

Scale of regeneration
Regeneration on the peninsula using old port and harbour land

Main project
Regeneration of entire city as 'city by the sea'

Stage
Implementation

Other info about project at
https://reykjavik.is/sites/default/files/reykjavik-municipal-plan-2010-2030.pdf

Swansea (UK)

Type Seaport

Function
Dry Bulk, passengers, offshore, cargo, RO-RO

Scale of regeneration
City scale regeneration

Main project
Maritime Quarter and Waterfront

Stage
Ongoing

Other info about project at
https://www.swansea.gov.uk/ldp

Tallinn (EE)

Type Seaport

Function
Cargo, passenger and related activities; shipping

Scale of regeneration
Old City harbour

Main project
Masterplan for the Old City Harbour in Tallinn by Zaha Hadid Architects (2017)

Stage
Ongoing construction site (2018)

Other info about project at
http://www.portoftallinn.com/

Thessaloniki (GR)

Type Seaport

Function
International shipping of various goods, local and international maritime traffic

Scale of regeneration
Interval redevelopment on a long period of time

Main project
Pier 1 and 2 development

Stage
Almost completed

Other info about project at
https://www.thpa.gr/index.php/en

Turku (FI)

Type Seaport

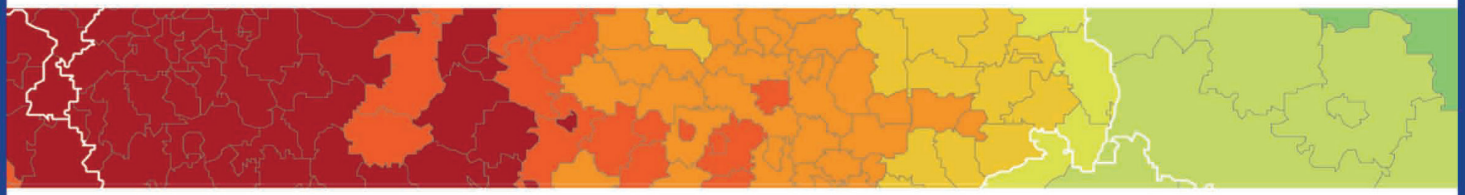
Function
International shipping of various goods, local and international maritime traffic

Scale of regeneration
Interval redevelopment on a long period of time

Main project
Linnakaupunki district

Stage
Planning

Other info about project at
https://aboard.portofturku.fi/en/2016/10/turku-and-the-port-are-being-developed-side-by-side/



ISBN: 978-99959-55-35-9

ESPON 2020 – More information

ESPON EGTC

4 rue Erasme, L-1468 Luxembourg - Grand Duchy of Luxembourg

Phone: +352 20 600 280

Email: info@espon.eu

www.espon.eu, Twitter, LinkedIn, YouTube

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme.

The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.