

ENSURE – European Sustainable Urbanisation through port city Regeneration

Targeted Analysis

Annex 1: Sample port city regeneration cities

Annex

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.

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Contact: info@espon.eu

ISBN: 978-99959-55-35-9

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Version 29/04/2020

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The final version of the report will be published as soon as approved.

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Abbreviations

100RC	100 Resilient Cities
ANRU	Agence Nationale pour la Rénovation Urbaine
CBA	Benefit-Cost Analysis
CUD	Dunkerque Urban Community
DLI	Dunkirk International Logistics Area
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ESPON	European Spatial Observation Network for Territorial Development and Cohesion
EGTC	European Grouping of Territorial Cooperation
EU	European Union
GDP	Gross Domestic Product
GIZ	Large Industries Zone
HRADF	Hellenic Republic Asset Development Fund S.A
ICT	Information Communication Technology
IRR	Internal Rate of Return
ITI	Investimenti Integrati Territoriali
LPED	Local Plan for Economic Development
MEPA	Malta Environment and Planning Authority
MUDR	Ministry for Urban Development and Roads
NPV	Net Present Value
NUTS	Nomenclature of Territorial Units for Statistics
PBP	Payment Time
RO-RO	Roll On- Roll Off
SDAP	Schema Directeur d'Amangement Portuaire
SEAPORT	Stimulating Economic Regeneration and Attractiveness of Port Towns
SHEMA	Societe Havraise d'Economie Mixte pour l'Amangement
ThPASA	Thessaloniki Port Authority S.A
TRACECA	Transport Corridor Europe - Caucasus - Asia
UDC	Urban Development Corporation
ULCO	Universite du Littoral Côte d'Opale
VISET	Valletta Cruise Port Plc
ZAC	Zone d'Aménagement Concerté

1 Introduction

This research focused on identifying trends, patterns, and challenges of port city regeneration in Europe to provide an evidence-base for the production of a handbook of good practice and inform policymaking on small and medium sized port-cities in Europe. The EU-OECD harmonised definitions of small cities (population of 50,000-200,000) and medium-sized cities (population of 200,000-500,000) was used. Through EUROSTAT population and port data, we identified 144 small and medium-sized European port-cities in Europe. A desktop analysis, based on available online documentation in English, French or Italian, was undertaken to identify whether there was evidence of port city regeneration in these cities. It demonstrates that 96 cities have undergone or are undergoing some form of port city regeneration. Short, summary reports on regeneration history, governance, implementation and challenges were produced for 44 cities. This was a convenience sample based on the cities for which most data were publicly accessible online. The list of cities is provided in Table 1.1.

Table 1.1 : List of 44 cities subject to a high-level review

City	Country
Aalborg	Denmark
Aarhus	Denmark
Aberdeen	United Kingdom
Ancona	Italy
Aviles	Spain
Bari Vecchia	Italy
Barletta	Italy
Basel	Switzerland
Belfast	United Kingdom
Bilbao	Spain
Burgas	Bulgaria
Bremerhaven	Germany
Brest	France
Brindisi	Italy
Bristol	United Kingdom
Caen, France	France
Calais, France	France
Castellon	Spain
Catania	Italy
Cherbourg	France
Cork	Ireland
Creil	France
Dundee	United Kingdom
Dunkerque	France
Gdansk	Poland
Gdynia	Poland

City	Country
Klaipeda	Lithuania
Koper	Slovenia
Le Havre	France
Liepaja	Latvia
Limerick	Ireland
Linz	Austria
Malmö	Sweden
Norrköping	Sweden
Reykjavik	Iceland
Rijeka	Croatia
Santander	Spain
Split	Croatia
Swansea	United Kingdom
Tallinn	Estonia
Thessaloniki	Greece
Trieste	Italy
Turku	Finland
Valetta	Malta

This list of cities was then classified by regeneration activity based on different approaches:

- **Planned as a unitary project:** Cities where there was a single vision (either masterplan or local area plan) for port city regeneration implemented through one project.
- **More fragmented regeneration:** Cities where port city regeneration has been discontinuous, occurring in different phases over time, or where regeneration has been on a project basis rather than working to one specific plan
- **Nascent:** Cities where there are regeneration plans in place or evidence of proposals for a regeneration project have been found. In these cities, regeneration has not yet been implemented.

Through conversations with research and policy partners, 17 of the 44 cities discussed in the main report were selected as sample cities for further analysis (see Map 1.1 and Table 1.2). These were chosen based on the availability of secondary data, and aimed to include cities with different geographic locations, development experiences and challenges as well as those that could provide learning based on both what worked and what did not work. We invited local stakeholders from the cities to comment on the sample fiches and have incorporated comments received. Not all cities contacted provided a response. The volume and quality of data on the other 27 cities was limited and unverified, and for quality reasons has not been included here.

Map 1.1 Small and medium sized port-cities in Europe represented as sample cities

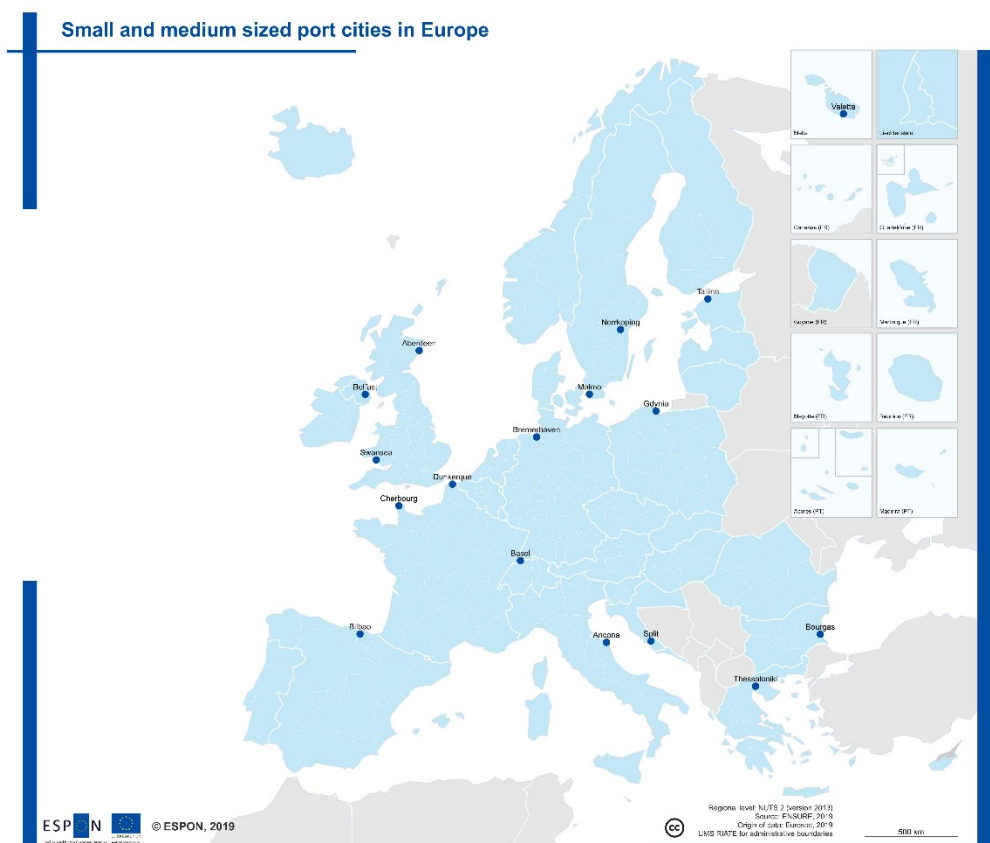


Table 1.2: Sample of 17 small and medium sized port-cities in Europe subject to a in-depth assessment and fiche

Small to medium-sized port-cities	Country	Corroboration form city/expert
Aberdeen	Great Britain	Yes
Ancona	Italy	No
Basel	Switzerland	No
Belfast	Great Britain	Yes
Bilbao	Spain	No
Bourgas	Bulgaria	No
Bremerhaven	Germany	Yes
Cherbourg	France	No
Dunkerque	France	Yes
Gdynia	Poland	Yes
Malmö	Sweden	No
Norrköping	Sweden	Yes
Split	Croatia	No
Swansea	Great Britain	Yes
Tallinn	Estonia	Yes
Thessaloniki	Greece	Yes
Valletta	Malta	Yes

2 Aberdeen (GB)

Name of Port: Aberdeen Harbour

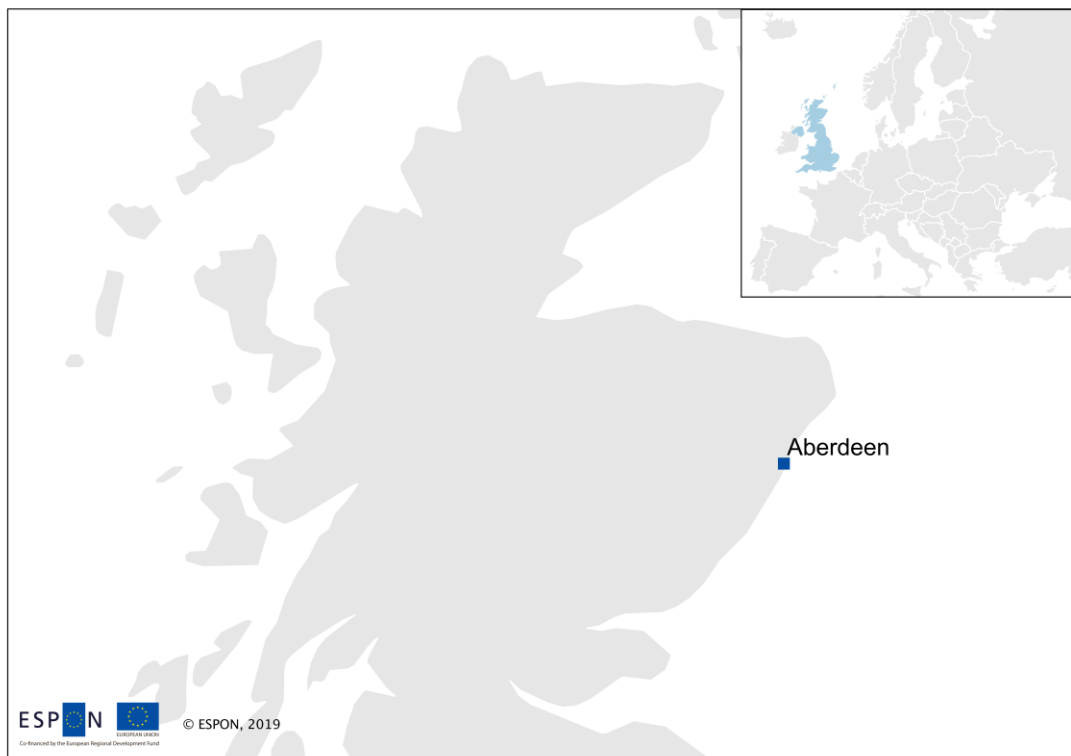
Type: Riverport

Function: Cargo, oil and gas, passenger

Scale of regeneration: Major project started in 2017

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

Map 2.1: Location of Aberdeen



2.1 History of the Port

Aberdeen has been shaped by the harbour since 1136 when King David I of Scotland granted the Bishops of Aberdeen the right to place levies on trading ships. During Tudor times trade links with Scandinavia and Baltic ports resulted in further improvements to Aberdeen harbour. Aberdeen's first "cargo-handling crane" was enacted in 1582 followed by the deepening of the harbour in 1596. In 1860, Tory Battery was fortified enhancing the strategic importance of the harbour. During World War Two, the harbour was a major target for the Nazis and experienced extensive damage. The Harbour has always supported the fishing industry and grew significantly during the 1880s due to the invention of the steam trawler. At this time and until the 1990s, Aberdeen also became a site for the shipbuilding industry. The harbour underwent intense modernisation from the mid-1960s due to the development of the offshore

oil and gas industry. This resulted in the harbour becoming one of the most modern ports in Europe. The port is continuing to grow and develop as a site for offshore renewable energy.

2.2 Public Policy and Governance

The most recent Strategic Development Plan for Aberdeen City and the Shire was published in 2014, with an update due to be published in 2019. The 2014 strategy indicated the significance of the Harbour and its need to be recognised in national and regional policy as a site of economic importance. The 2009 National Planning Framework recognised Aberdeen Harbour as key to the National Renewables Infrastructure Plan. This sets the context for the symbiotic growth of the port and city. The harbour is of significant importance to the energy industry, tourism and lifeline ferry services with a growing focus on the renewable energy sector. Expansion and relocation are problematic as the location of the harbour offers limited land for expansion. These factors are compounded by the River Dee Special Area of Conservation. Any potentially available land is zoned for mixed-use development, which is not compatible with port activities. Three sites were assessed as potential sites for relocation or partial relocation of port activities. In 2016, Nigg Bay was identified as offering the greatest scope to accommodate a new deep-water facility with the least impact.

2.3 Outcomes and Impacts

The Pre-Feasibility Study carried out during the early stages of planning identified four potential impacts and outcomes. Firstly, any expansion or relocation of the harbour would require improved transport links both by road and rail. In 2018 rail improvements were announced between Aberdeen and Inverness. Secondly, communities could benefit from regeneration projects. Thirdly, there may be environmental impacts in relation to ecology, habitats, heritage and geological features but it is emphasised that all measures will be taken to minimise these impacts. Fourthly, the scale of development will likely influence the landscape and viewing sites helping to develop a new city-regional image and identity.

The port expansion will allow cruise vessels of over 250m to dock in the city for the first time, opening the region to potentially 3,500 visitors for each ship. This is likely to have an enormous impact on the local tourism sector which is tiny compared to other Scottish regions and cities. Cruise Aberdeenshire is a stakeholder group which includes the Harbour Board, Visit Aberdeenshire, Scottish Enterprise and the City & Shire Councils with workstreams to help ensure that local transport companies, retail outlets and visitor attractions are able to capitalise on the opportunity the harbour is making.

Another key impact of the regeneration is that the port continues to grow and develop as a site for the burgeoning offshore renewable and decommissioning sectors. This includes Aberdeen's advanced work on the development of a hydrogen economy, with a potential outcome being a possible hydrogen hub for bulk hydrogen production. As a result, the

harbour could play a pivotal role in the city achieving its carbon-neutral goals, especially as the South Harbour was specifically designed to future proof the requirements for energy transition by making it possible to work with varying energy needs and alternative energy sources as the sectors develop.

2.4 Implementation

To date, several improvements have been made or are planned to meet the expanding needs of the port. These outcomes include construction of:

- Commercial Quay East Operational Torry Quay - Phase One
- Operational Delivery of Torry Quay - Phase Two
- Deepening and widening of the Navigation Channel - Complete
- Aberdeen South Harbour – which follows six years of engagement with the public and wider stakeholders.

The rest of the planned port relocation and expansion is detailed in Table 2.1.

Table 2.1: Implementation of projects and deadlines

Date of construction/completion	Activities
May-October 2017	Preconstruction Activities
May 2017-December 2019	North Breakwater
October-November 2017	Coast Road/St Fitticks Road re-alignment
June 2018-April 2020	Closed Quays (with caissons)
July 2018-October 2019	Open Quays (pile construction)
August 2018-November 2019	South Breakwater
January 2019-April 2020	Superstructure Works (buildings, etc)
March 2019-April 2020	M&E Works (including commissioning)
May 2020	Delivery of Project

2.5 Drivers and Catalysts for Change

The 'Case for Growth' report (2016) indicated the catalysts for harbour regeneration included, but are not limited to:

- The harbour has continued annual growth requiring plans to ensure capacity.
- Aberdeen Harbour Board recognises its unique position as Europe's leading marine support centre for the offshore energy sector.
- It is Scotland's gateway for trade linking with more than 40 countries.
- Certain industries may cease or relocate due to the restrictions in the oil and gas industry. Therefore, the replacement of these industries with offshore renewables is being anticipated.
- Due to certain industries potentially ceasing or relocating due to the eventual wind-down of oil and gas, stakeholders throughout the city are already investing heavily in technological change for both oil and gas and energy transition to ensure local businesses and workers can use their transferable skills to help those sectors develop here rather than elsewhere. Aberdeen City and Harbour are the natural hub

for that transitional focus. Further, the regeneration of the city waterfront area has been facilitated by the relocation of the functional port to develop infrastructure and encourage new economic growth. This has significantly changed the relationship between Aberdeen City and Port as its identity and culture is transforming during this relocation of functions and the addition of new functions for the old port areas.

3 Ancona (IT)

Name of Port: Ancona, Italy

Type: Seaport

Function: cargo, passengers, containers, shipping and a former military port

Scale of regeneration: City harbour

Main project: Sustainable urban development strategy by Territorial Integrated Investment (in Italian Investimenti Integrati Territoriali "ITI") "Waterfront di Ancona 3.0" (2017)

Map 3.1: Location of Ancona



3.1 History of the Port

The Gulf of Ancona, between two hills, has been a safe shelter for sailors since the 16th century BC. In the ninth century, the Saracens repeatedly besieged the city, which was almost totally destroyed, along with its port. The Anconetani people, before rebuilding the city, fortified the port providing it with defensive walls with tall square towers. Between the 13th and 14th centuries, Ancona reached its maximum splendour and became one of the most important ports on the Adriatic. Around the 18th century, Ancona and its port began to decline due to the importance of traffic and the value of the entire city. It was Pope Clement XII who entrusted to the Architect Luigi Vanvitelli the reconstruction of the degraded piers and the construction of the lazaretto. This gave new impetus to the port and to the city. The aerial bombardments of WWII razed entire neighbourhoods to the ground and heavily damaged the

port structures but architectural jewels like the Arch of Trajan, the Lazzaretto of Vanvitelli and a portion of the ancient protective walls were saved. After the war, the restoration of the docks and quays began. The shipyards were rebuilt and the maritime traffic - given the central position in the Adriatic of the port of Ancona - had a gradual recovery.

3.2 Public Policy and Governance

The structure of the governance system of the Municipality of Ancona is indicated within the 2013-2018 Ancona government guidelines approved in 2013 by the City Council. The system provides for the drafting of 3 highly innovative instruments, which correspond to as many levels of territorial programming:

- The development plan of the medium Adriatic metropolitan area;
- Ancona strategic plan; and
- Ancona city agenda

The I.T.I. (Investimenti Integrati Territoriali) offers the Municipality of Ancona the opportunity to enhance, for the purpose of constructing the Urban Development strategy "WATERFRONT DI ANCONA 3.0", the themes and operating methods developed for the three territorial planning tools/processes.

The I.T.I. Waterfront of Ancona 3.0 is defined and implemented through a set of guiding principles contained in the Program Document approved by the City Council in 2010:

- The "green cometa" from the Conero to the historic city
- A seafront of "excellence"
- The linear city of new centralities
- The reticular park of agricultural landscapes
- In particular, the area considered in the project called "Il Fronte-Mare Delle Eccellenze" extends from the historic port bordering Falconara, an urban space characterized by diversified parts:
 - the seafront of Falconara Marittima, old and new Palombina, Collemarino and Torrette
 - the Posatora side strip at the foot of the landslide, the tourist port and the railway park;
 - the sector consisting of the Archi district, Mole Vanvitelliana and the Polo of urban services of the Port; and
 - the historic port and the seafront of the historic city.

The waterfront project reinforces the relationship between the two seas of Ancona: The Western one that laps the historical city and the port, and the Eastern one that overlooks the cliff, connecting it to the extraordinary landscape and environmental resource of the Conero.

The "AnconARcheologica" project intends to increase the perception of Ancona as a tourist city, to enhance the visibility of Ancona's history, to allow the tourist enjoyment of outdoor archaeological sites and to return them to the citizen/tourist. To this end, it is planned to improve the conditions and standards of supply and use of the natural and cultural (material and immaterial) heritage thanks to which the city of Ancona can express a strong brand, that

is its Picena and Greco-Roman identity, and to become recognizable as a tourist destination among the main ones in Adriatic region. Other drivers are the integrated use of cultural and natural resources through the use of Information and Communication Technologies (ICTs). Fundamental steps are the enhancement, digitization and networking of cultural heritage in the areas of strategic importance. It is planned to create an interactive, virtual and increased/immersive Centre, inside "Palazzo degli Anziani", where the traditional information and tourist reception system can become a cutting-edge point of technological interaction with the archaeological reality of the city, in which immersive experiences and interactions of augmented reality will be possible. Overall it is planned to carry out the following two Actions, divided into Realization Objectives:

- Arceo3D digital data
- Centro HS + AnconARcheologica

3.3 Outcomes and Impacts

The intervention foreseen by the strategic project "Waterfront Ancona 3.0" produces two main impacts:

- concrete improvement of the services offered;
- increased social cohesion and satisfaction of residents and the overall image of the city.

First of all, the project envisages intangible impacts connected to aesthetic aspects and the improvement of the usability and liveability of the areas concerned, which are especially noticeable by the resident population. This will happen thanks to the redevelopment of large areas of the historic city and the improvement of the quality of life. The project also includes economic impacts:

- increase in the value of the areas and buildings, due to the planned redevelopment;
- a new "tourist product" capable of intercepting new visitor flows.

After 10 years from the full implementation of the entire project, due to the effects of the increase in tourist flows, the project foresees an increase in Gross Domestic Product (GDP) of over €36 million, with an employment impact of over 1,000 additional jobs.

3.4 Implementation

The strategy's implementation program indicates a timeline of 3 years from the date of signing of the convention between the Managing Authority and the Urban Authority. The implementation times are harmonized in such a way as to reduce as far as possible deviations and thus reach the complete conclusion within the pre-established 36 months. In order to define differentiated grades of construction sites, the months necessary for carrying out the operations according to the following scheme have been taken into consideration:

- high viability: implementation of interventions in the very short-term (<20 months)

- medium viability: realization of interventions in medium-term (between 20-26 months)
- low viability: implementation of interventions in the long-term (between 26-36 months)

3.5 Drivers and Catalysts for Change

The catalyst component of the project is the cultural heritage and innovative systems to offer touristic experiences about relations between Ancona and the sea. The ICT solutions activated by the "Waterfront of Ancona 3.0" project are essentially gathered around the idea of transition from a concept of "Information and Tourist Reception" to an "Immersive experiences and Augmented reality" for the archaeological heritage of Ancona, incorporated into the design project of "AnconARcheologica". Further, a driver for the regeneration of Ancona has been the ability to develop alongside the active port with waterfront areas being infilled around existing port functions alongside the expansion and deepening of the container terminal.

4 Basel (CH)

Name of Port: Hafen-Stadt, Switzerland

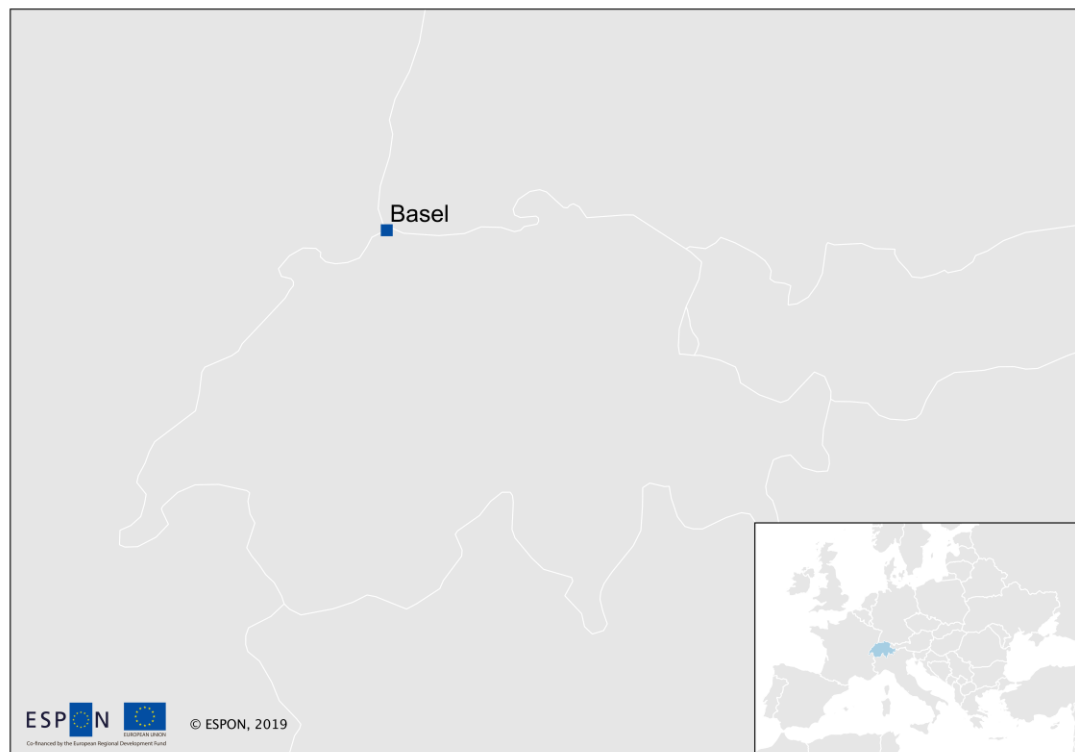
Type: Riverport

Function: Cargo and shipping

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

Main project: Harbour-city masterplan

Map 4.1: Location of Basel



4.1 History of the Port

The Kleinhüningen district developed from a fishing village into an industrial and residential space where the port was key to the development of the city. The coordinated development between the port (the most important in Switzerland) and the city has generated significant economic development. In the early 1900s, the port of St. Johan was constructed, and this was a catalyst for the development of more infrastructure in and around the port. For instance, in 1926 the Maritime Station opened and in 1946, a second port basin was inaugurated. Continued industrial and transport expansion occurred and pharmaceutical and chemical industries began to cluster in this area. During the early 2000s, a new period of transformation began, with the development of the Novartis Campus, later extended and linked to a walk on the Rhine. However, the real regeneration process began in 2006, when a

coordinated planning process began between the port and the city, to enhance and develop the port city interface.

4.2 Public Policy and Governance

The project of Hafen-Stadt Basel started from a local and multinational challenge based on the Rhine River. The cities of Weil am Rhein in Germany, Huningue in France and Basel in Switzerland form a single territorial area that all benefit from the growth of industry on the Rhine river. 3Land was launched as a development project for a tri-national inter-city regeneration. This project facilitates joint planning and development goals for the area. A key aim of the plan is the sustainable development of the River Rhine area.

The project envisages port reorganization to optimise incoming and outgoing trade and integrate each city through different transport modes. There is a focus on ensuring pedestrians and cyclists will be able to move along the river through new bridges creating connections and enabling cultural exchange between the cities. Further, the project aims to re-integrate the port and the city, creating spaces for leisure and living, and regenerating industrial areas to attract research and development companies.

The project explicitly includes citizen engagement in the development processes. A participation process was launched in January 2012 in collaboration with the Kleinbasel District Secretariat and with local associations (lower NQV Kleinbasel, Village Club Pro Club Kleinhüningen Neubasel, Wohngenossenschaft Klybeck). Through it, the desires and needs of residents were communicated to the administration, and a representative group formed. This group has about 25 members, representing a range of stakeholders. Through regular meetings with the administration, requests and concerns about port and city development are handled. The group develops in-depth proposals on various topics such as urban planning, neighbourhood development, sustainability and transport. Although the proposals of the monitoring group are not binding, the administration is obliged to examine and evaluate them and provide responses. The key partners in this project are Swiss Rhine Ports District Secretariat Kleinbasel, IBA Basel 2020, Haur-Rhin Department, The Communauté de Communes des Trois Frontières, Huningue City, Weil am Rhein City and Canton of Basel. This project was partially funded by the European Union with the balance funded publicly.

4.3 Outcomes and Impacts

Statistical analysis using Eurostat datasets demonstrate some significant outcomes such as a positive upwards trend for population growth between 2012 and 2018 in the functional urban area (Figure 4.1), after a significant drop in population in 2011. The same pattern can be observed in the metropolitan area (Figure 4.2).

Figure 4.1: Basel - population change 2009-2016

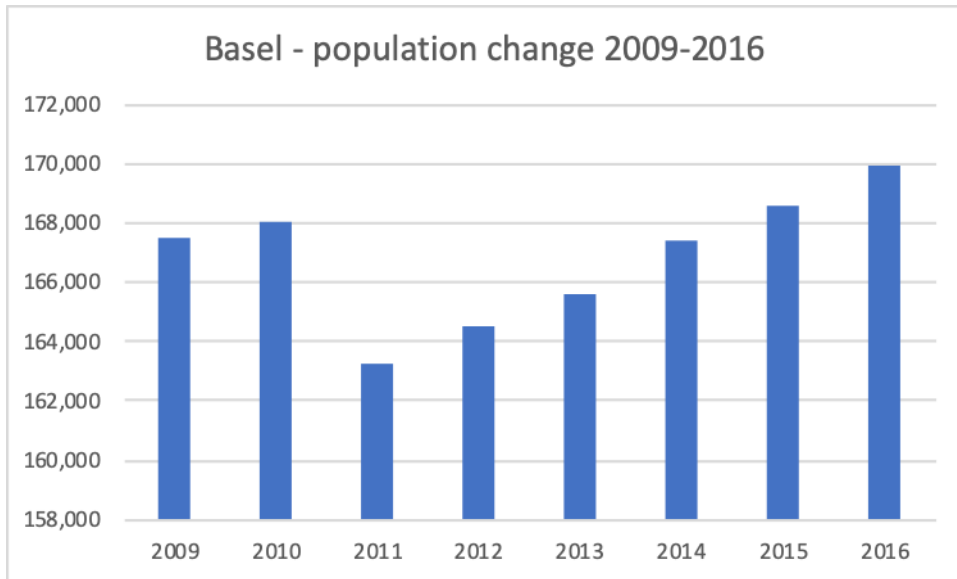
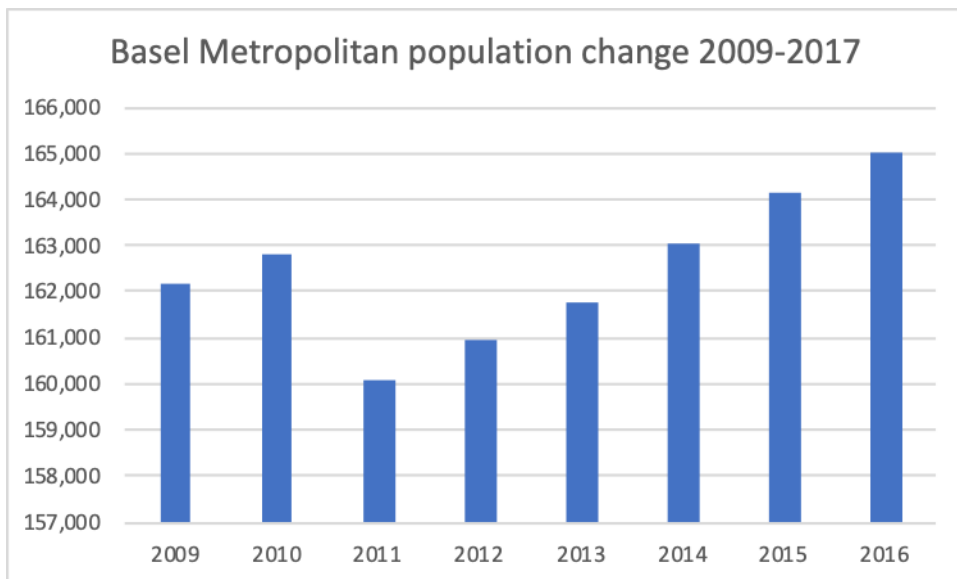


Figure 4.2: Basel Metropolitan population change 2009-2017



EUROSTAT data illustrates a positive upward trajectory of employment between 2008 and 2013. This could be based on the workforce required for the regeneration project and also the resulting new employment created by the regeneration project. However, Basel already has pharmaceutical and chemical industrial clusters so we cannot conclusively link port regeneration and workforce growth.

4.4 Implementation

Implementation steps are depicted in Table 4.1.

Table 4.1: Implementation steps

Year	Activity
2012	The signing of the 3Land design contract and joint planning of a tri-national vision connected by the Rhine.
2012-2013	Start of temporary use of the ExEsso sector and the waterfront.
2013-2015	Development and approval of the Kleinhüningen-Klybeck development plan and the tri-national general plan.
2015-2016	Train Terminal Construction: first construction project on the Klybeckquai and start of a gradual transformation of the area.
2016-2018	Construction of container terminals and port Basin 3.
2016-2020	Transfer of recycling logistics from Westquai to the northern port of Weil am Rhein and silos logistics at Ostquai, followed by the conversion of existing port facilities.
2018	Commissioning of the "Basel Nord" trimodal container terminal (container terminal, port Basin 3, new port station); Pedestrian bridge in Weil am Rhein.
2020 (proposed)	Opening of a bridge over the Rhine; Relocation / Klybeck railway harbour/yard optimization.
2025 (proposed)	Gradual development and opening of the old barrel of the Rhine.

4.5 Drivers and Catalysts for Change

The key catalyst for regeneration was the recognition of the economic, social and cultural value of the three locations between the bridges of Dreirosen and Palmrain along the River Rhine. While a driver was the aim of re-integrating the port and the city. Thus, most of the development has occurred around existing port functions with a drive to ensure that the regeneration opened up the port to the city via cycle and walkways etc. This combined with EU funding enabled the 3land project to support regional economic development, sustainable economic opportunities and develop a cultural exchange.

5 Belfast (GB)

Name of Port: Belfast Harbour

Type: Seaport

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

Scale of regeneration: Laganside and Titanic Quarter

Main project: Laganside and Titanic Quarter

Map 5.1: Location of Belfast



5.1 History of the Port

The development of Belfast Port can be traced to 1613 when under James I, Belfast was brought under royal charter and a quay was developed at the confluence of the Rivers Fearset and Lagan. By 1663, the port was growing with 1,100 tonnes passing through regularly. As the century progressed, trade grew, and the port was expanded to accommodate more ships.

By the early 18th century, Belfast had surpassed Carrickfergus as the most important port in Ulster and thus, private wharves were constructed on reclaimed land. Trade continued to grow and in 1785 “The Corporation for Preserving and Improving the Port and Harbour of Belfast”, commonly called ‘the Ballast Board’ was created to deal with the growing port. By 1837, due to natural barriers to expansion such as shallow waters, the board was given new

16

powers to create a new channel - the Victoria Channel. In 1847, the Belfast Harbour Act repealed previous acts and created the Belfast Harbour Commissioners who had much more power. The channel was completed in 1849. Since then, they have reclaimed land, improved the port, added new quays, new trades and changed shipping and cargo technology and today's port is still governed by the commissioners.

However, like many waterfront cities, Belfast suffered from deindustrialization and with the decline of shipbuilding and the closure of the Gasworks in 1985, large areas of former port lands or associated industrial lands became derelict, requiring waterfront regeneration.

5.2 Public Policy and Governance

The governance of both the Laganside and Titanic Quarter redevelopment was a public/private partnership: public subsidies were provided, and a development company was established while the private sector had a role in decision-making. This governance model excluded the local community due to the over-involvement of the public sector and the rationale that not enough residents resided in the regenerating spaces.

In the Laganside regeneration, "The Laganside Urban Development Corporation (UDC)" operated from 1989 until 2007. Initially, it had authority over 140ha which was later extended by another 60ha. The key role of the UDC was to pump-prime regeneration, attract private investment and over time reduce the demands on the public sector. Private investment was slow to arrive but grew after the 1994 ceasefire and the Good Friday Agreement, indicating the importance of the political environment in the delivery of regeneration. The UDC ceased in 2007 and the area has been managed by the Department for Social Development since 2007.

The Titanic Quarter represented a second phase of regeneration. The development agency is a private company, TQ Ltd., a subsidiary of Harcourt Developments. The land is owned by a Trust Port arms-length agency, the Belfast Harbour Commission. The flagship building 'Titanic Belfast' is owned by a registered charity, the Titanic Foundation, and operated by TQ Ltd. Other key partners include Belfast City Council, which contributed funds to Titanic Belfast, and other government departments that have contributed funding plus influence the project through planning and regulation. This governance structure has created some problems in terms of eligibility for European funding because of the close relationship between Harcourt Construction and TQ Ltd.

Part of the regeneration process was a flagship development attempting to harness the 'Guggenheim effect'. The Titanic Experience is the central feature and has brought in tourism and boosted the local economy. The Titanic Experience building looms over the area and is designed as an open public non-sectarian space. It emphasises a piece of history not related to the Troubles and capitalises on it as a way to change the city's identity to embrace the maritime past – albeit a tragic one.

Funding for Lagan side came from the regional government, the European Regional Development Fund and from the Lottery and EU PEACE funds. Other regeneration funding came from Belfast City Council, Urban Development Grant and the European Regional Development Fund, the Millennium Commission, Department of Culture, Arts and Leisure, Sports Council Northern Ireland, Sheridan Group (private) and Northern Ireland Tourist Board.

5.3 Outcomes and Impacts

There are several outcomes and impacts of the Belfast waterfront regeneration.

Mixed-use and residential development are a key outcome of the Belfast Waterfront regeneration. In Lagan side, over 700 housing units have been completed and 213,000m² of office space with the creation of 14,200 new jobs. In the Titanic Quarter, 475 apartments were built and in the first year of Titanic Belfast, there were 800,000 visitors with the creation of 25,000 new jobs in the area

Waterfront amenities such as the Titanic Quarter and Game of Thrones studios impacted tourism and promoted Belfast as a film location. Economic development, job growth and educational facilities developed. Open public spaces such as walkways and green spaces are public benefit outcomes. Further, an interesting impact is the role that the Titanic Quarter has in creating a post-conflict space where all communities are welcome to occupy the same area.

Even so, a disappointing outcome has been the limited housing and infrastructure development that has occurred. The road and public transport network leading from the city centre to the Titanic Quarter is difficult to navigate and of limited capacity. Some argue that the project has been exclusionary as the local population have not been broadly supported, other than through the creation of some employment.

5.4 Implementation

Table 5.1: Implementation stages 1989 onwards

Year	Agency/Location	Action
1989-2007	Lagan side UDC	200ha of offices and apartments.
1994	Lagan side	Lagan Weir opened.
1994 Est	Lagan side/Cathedral Quarter/Gasworks	UDC extends remit to Gasworks and Cathedral Quarter.
2001	Titanic Quarter	Masterplan development and site preparation.
2005	Titanic Quarter	Harcourt developments lease the land from the Harbour

Year	Agency/Location	Action
		Commissioners and purchased development rights.
2005	Titanic Quarter	Northern Ireland Science Park opens.
2007 onwards	Laganside	Area managed by Department of Social Development with the implementation of public spaces, weirs, Waterfront Hall, Odyssey Arena.
2009	Titanic Quarter Est	Gateway offices with key tenant Citibank open.
2010	Titanic Quarter	Hotel and 475 apartments open.
2012	Titanic Quarter	Titanic Museum, Titanic and Olympic slipways become a public space.
2014	Titanic Quarter	Titanic Studios granted planning permission. 145,000 sq. ft developed 90 companies on-site, around 5,000 people living and working there with a plan to provide homes and employment for up to 50,000.

Source: Muir & Boland (2015).

5.5 Drivers and Catalysts for Change

The key catalyst for waterfront regeneration was the scale of deindustrialised space, which could be used to replace former port functions resulting in the creation of the Laganside Development Corporation. The aim was to boost Belfast by enhancing its competitiveness and re-branding it as 'open for business' by using the neutral waterfront regeneration to alter its identity. The potential of new employment opportunities in both Laganside and the Titanic Quarter acted as a key driver, yet it is unclear whether these jobs were for the locals or obtained by an incoming creative class of educated professionals.

6 Bilbao (ES)

Name of Port: Bilbao Port

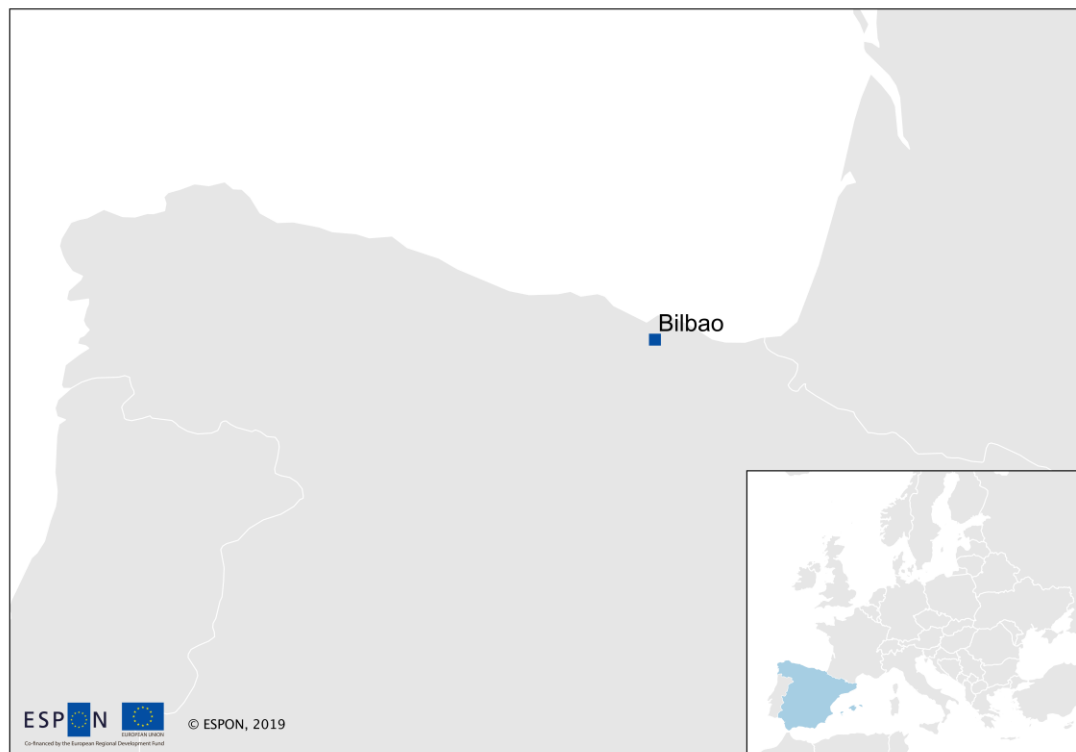
Type: Seaport

Function: Cargo, Container and Cruise

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

Main project: Abandoibarra waterfront regeneration

Map 6.1: Location of Bilbao



6.1 History of the Port

Bilbao emerged as a small trading and fishing village but was officially founded as a city in 1300. It became a successful trading port in the Middle Ages, encouraging the growth of the first iron industry in Bilbao. In 1857, industrial development was boosted by the development of the “Tudela-Bilbao Railway Company and Banco de Bilbao” and Bilbao enjoyed the first major phase of industrialisation. By the 1950s, Bilbao was enjoying the benefits of the second phase of industrialisation, which saw immigration rates soar and new manufacturing and industrial developments benefit the economy. However, by the 1970s, Bilbao was at the beginning of an economic recession and deindustrialisation. Between 1970 and 1980, Bilbao received regional autonomy and benefitted from Spain’s admittance to the EU, but also

reached its peak of unemployment and population decline. In the 1980s, Bilbao began a significant regeneration project to turn the city's fortunes around.

6.2 Public Policy and Governance

During the 1980s, Bilbao developed a strategic approach to recovery that involved all scales of government (central, regional and city). A key phase in regeneration was the development of the 'Strategic Plan for the Revitalization of Metropolitan Bilbao'. This plan was governed by the Autonomous Basque Government, the Territorial Council of Biscay and the Bilbao Town Council. It aimed to promote the tertiary sector, a cultural and creative city and tourist destination. A concern raised by the Basque Government concerning how to actually deal with the urban crisis stalled the plan until 1991 when it was officially agreed. A special urban development agency Bilbao Metr3poli-30 was created to act as the authority for the regeneration process.

'Bilbao Metr3poli-30' was a "think-tank [...] based on a partnership model with public and private sector shareholders". Its key aim was to ensure interaction and mediation between the public and private sector. It also had a boosterist agenda branding Bilbao in the international market and funding research on Bilbao's urban spaces. 'Bilbao Metr3poli-30' focused on four priority areas: attraction of a knowledge-based high-tech sector; urban revitalisation especially of the Old Quarter; environmental intervention to enhance water, air and land quality; and the strengthening of cultural identity through culture-led regeneration.

In the 1990s, a new 'Territorial Masterplan' was developed to address the urban decline. This plan identified key spaces for regeneration, worked with key architects such as Norman Foster and invested in major infrastructural projects around transport and other utilities. On the back of this plan, Bilbao Ría 2000 was founded as another development agency. It had a mandate of ensuring the delivery of the newly identified key spaces. As a non-profit organisation operating as a private sector company, it was led by a range of institutions representing all scales of government. The Basque and Spanish Governments owned 50% each. Initially, it was financed by the central and regional government, but has since become self-financing. One of the key aims of Bilbao Ría (2000) was to take control of vacant land. This included land from both port and railway authorities. Bilbao Ría has become the major planning and regeneration body in Bilbao. One of its major achievements has been the "urban development of Abandoibarra". Further, Bilbao Metr3poli-30 has launched its 'Strategic Reflection 2035' document. The aim of this is to analyse future development projects, challenges and new approaches.

6.3 Outcomes and Impacts

Abandoibarra (35ha) was a brownfield redevelopment site cut off from the city by harbour and railway infrastructure. The aim was to create a new urban centre for Bilbao and €560 million

funding was allocated for the regeneration of the key spaces. Bilbao Ría invested €184 million in the site between the 1990s and 2004. Private-sector reluctance meant public-sector funding acted as a catalyst to create confidence. The Guggenheim Museum was the flagship development and was fully funded by the public sector.

Some of the outcomes of the large-scale regeneration Bilbao Ría are:

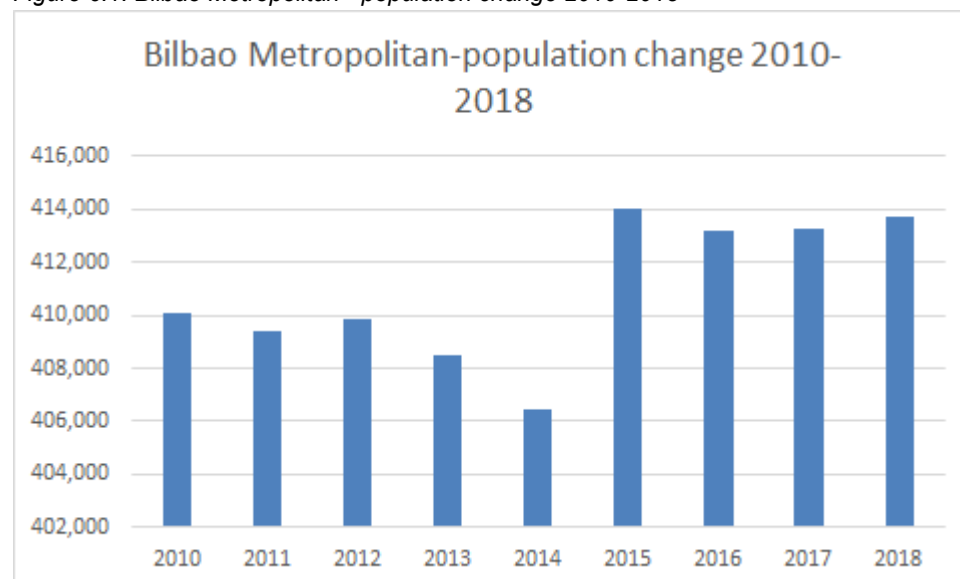
- Bilbao Ría became self-funding through the “revaluation of land as a result of the rezoning of its land-use designation and the subsequent sale to developers.”
- Abandoibarra is now attracting private-sector funding.

Key impacts include:

- Increased employment from 267000 to 380000 jobs (1995-2005).
- Decreased unemployment from 25% in the mid-1980s to 10.4% in 2004.
- Since 2000, there has been a small growth in population and a 5.5% growth in the foreign population (2006) reversing three decades of decline.
- The ‘Guggenheim effect’ - the museum attracts 1 million tourists annually. Air passengers increased from 1.4 million (1994) to 3.8 million (2005). Bilbao receives more tourists than San Sebastian, traditionally the leading Basque tourist destination.
- Business visitors and conference delegates have increased tenfold (1997-2005).

Further, statistical analysis using Eurostat datasets shows a positive and stabilising population trend between 2010 and 2018 in the metropolitan region, despite population decline in the wider functional urban area, perhaps indicative of the attractiveness of the inner urban and wider metropolitan area.

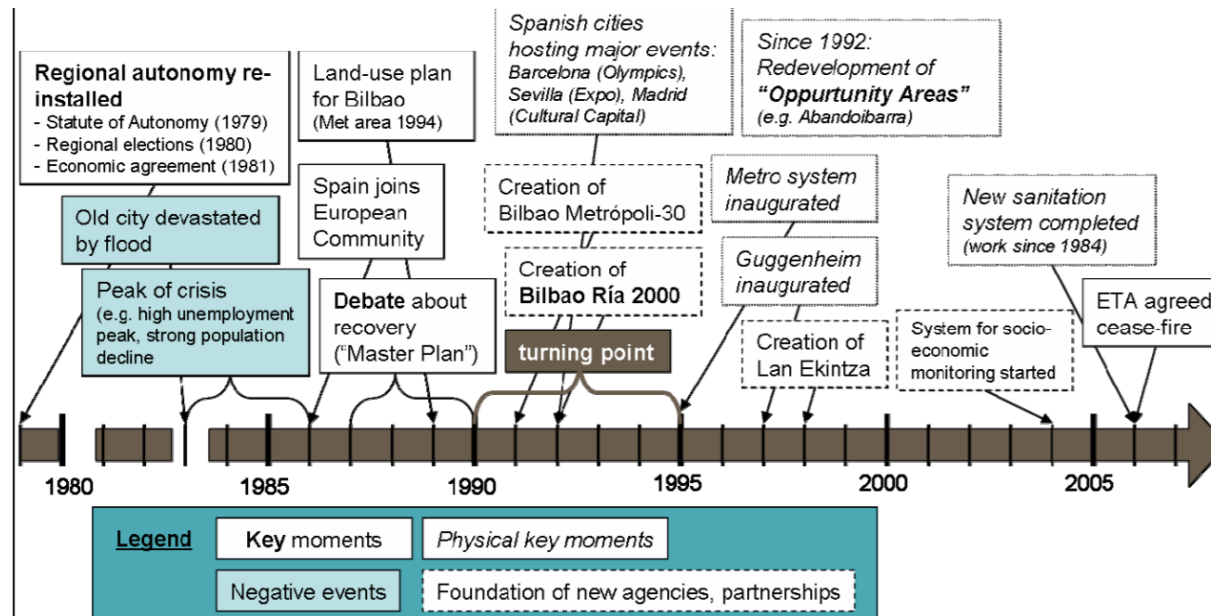
Figure 6.1: Bilbao Metropolitan - population change 2010-2018



6.4 Implementation

Implementation of this project began in 1980 when regional autonomy was re-instated, and Bilbao reached the peak of the industrial crisis. The significant milestones can be seen in Figure 6.2.

Figure 6.2: Implementation timeline



Source: Plöger, J. (ND)

Bilbao Ría drove this regeneration project through an entrepreneurial top-down approach. There has been little citizen engagement and no local participation. The new open spaces are considered by some to be exclusionary, only appealing to affluent groups.

6.5 Drivers and Catalysts for Change

Several factors drove Bilbao's regeneration:

- Waterfront regeneration occurred due to the deindustrialised waterfront areas to replace former port functions.
- Regional autonomy acted as an enabler, bringing power back to regional governments. Local stakeholders were able to make decisions and implement locally appropriate plans with funding.
- Bilbao Ría was a major catalyst for investment especially as it became self-financed and acted as a private company. Thus, it became an ally with private investors.
- Joining the EU offered opportunity and Bilbao benefitted from structural funding.
- The willingness of private and public companies to transfer land to Bilbao Ría was a key catalyst in the regeneration of key sites.

7 Bourgas (BG)

Name of Port: Port Bourgas

Type: Seaport

Function: Cargo, Container and Passengers

Scale of regeneration: City Harbour

Main project: Port Bourgas

Map 7.1: Location of Bourgas



7.1 History of the Port

The Port of Bourgas was built following a state decree on 20 December 1894 and opened for the first commercial activities in 1903. Shortly before, in 1899, the white lighthouse of Bourgas was erected, which was the first Bulgarian lighthouse. The port area covers about 60ha; there are three piers with a length of 590 meters and a water depth of about 24 feet. In 1941 the first two 3-ton electric cranes produced by Skoda were delivered. On 5 September 1974, the bulk cargo port was officially opened. Since 1963, three miles south of the main port, the oil and petroleum terminal has been operating in the Rosenets Park area. In 1980 the western area specialized in the processing of large-capacity ships carrying ferrous metals was put into operation. On May 18, 2003, the 100th anniversary of the port of Bourgas was officially celebrated.

7.2 Public Policy and Governance

There are several scales of policy (transnational, national, regional and local) that are contributing to the development and regeneration of the port and waterfront. Key policies are:

- The development of the trans-European networks - European Transport Corridor 8 and its extension to the east, which has grown into TRACECA (Transport Corridor Europe - Caucasus - Asia) is important for the management of the development of potential markets, on the east coast of the Black Sea and in Central Asia and the transformation of the port of Bourgas into the main link between the European continent and the Middle East.
- ECOPORT 8, where the port of Bourgas was included as a test for one of the pilot regions. Aims to improve the quality of ports, determine appropriate action for the prevention of marine pollution, air and soil, as well as conservation of all-natural resources in adjacent port and coastal areas through close cooperation with research centres and local authority leads.

Through the Operational Program "Development of Human Resources" 2007-2013, various opportunities for training and involvement of port operators have been activated for training and improving the quality of human capital. The different measures implemented to activate this process include:

- Existence of a general plan for the territory of the city of Bourgas, including the public access area;
- Presence of a general plan for the development of the port of Bourgas - approved and entered into force in 1996; and
- A general plan for the development of the Bourgas railway junction.

The development of this plan was based on a series of high-ranking legislative acts in the Republic of Bulgaria that outline the prospects for development in different directions. In addition to the general regulatory framework, strategic developments at supranational, national, regional and municipal level play a key role:

- National strategy for regional development of the Republic of Bulgaria for the period 2005-2015 - a key document that defines the long-term objectives and priorities of regional policy;
- Operational Program "Transport" 2007-2013 - information on the framework within which to develop the transport sector in the Republic of Bulgaria;
- A regional development plan for the South East Planning Region for the 2007-2013 period - general macroeconomic and social frameworks for development in the districts of Bourgas, Yambol and Sliven;
- Regional strategy for the development of the Bourgas district 2005-2015 - strategic planning document at the district level;
- 2007-2013 municipal development plan;

- The general development plan of the municipality of Bourgas; and
- A general plan for the development of the port of Bourgas.

From the overall analysis of the framework in which the public access area project will be implemented, some important points are evident: In essence, the project covers all factors for pursuing a spatial and economic development policy. The project is fundamental for the strategic development of the eastern border of the EU. The project is the key to the actions taken by the Municipality of Bourgas to create an integrated transport scheme. The construction of intermodal connections between rail, water and bus transport intensifies the effect of the actions undertaken by the Municipality and the state for the efficient use of European and national financial resources. An important feature of the project is the structural change of the economic nature of the territory, which will lead to a strong boost in four main branches: tourism, transport, construction and services. Given the scale, specificity and uniqueness of the project for the public access area, a detailed alignment of the project development policy pursued by local, regional, national and European authorities is made. This aspect is extremely important in terms of project success.

7.3 Outcomes and Impacts

The outcomes and impacts of this project are still difficult to assess but a methodology has been devised to determine the economic efficiency and relevance of the project. These may be useful as a lesson for other cities. The following dynamic models were used:

- Net Present Value Method (NPV)
- Internal Rate of Return (IRR)
- "Benefit costs" analysis (CBA)
- Payment Time (PBP)
- Exploration of the external costs of the project

A SWOT analysis analysed the strengths and weaknesses of the project and identified the opportunities and risks of its realization. The design and construction of a public access area is significant in terms of volume, complexity and duration of project implementation. The project will have a significant impact on the economic and social development of south-eastern Bulgaria, particularly in the region, the municipality and the city of Bourgas. The development of intermodal terminals in a broader sense offers new opportunities for interaction of the stations of the three types of transport: sea, road and rail, a prerequisite for:

- Development of maritime tourism including the port of Bourgas in the list of ports for cruises;
- Maritime tourism will make it possible to expand the possibilities of offering services to tourists who visit and stay in the north and south of Bourgas;

- Restoration of local maritime transport services from Bourgas to Nessebar, Pomorie, Chernomorets and Sozopol at least during the summer season;
- Increased number, types and quality of transport and the accompanying services for citizens and guests of the Municipality of Bourgas;
- Integration between customs, border, agency, brokerage, courier, postal, financial and cultural entertainment, commercial and other services;
- Particular attention is paid to the development of water sports and related services: sailing, sport fishing, underwater swimming, marine archaeology.

The surveys conducted and the basic parameters defined in the pre-investment research will be used for the future development of a "Bourgas Public Access Area" project within the defined territorial scope.

7.4 Implementation

The project is based on the results of previous analyses, on the development of existing port structure policies in the European Union countries and on the specific needs of Bourgas, and is expressed through the following points:

- Creation of prerequisites for Bourgas to become an important strategic maritime city of Europe - Asia - the "eastern gateway" of the EU;
- Create a model, through the restructuring of the territory, for the ecological development of a city and a port, meeting contemporary trends for sustainable development - ECOPORT 8;
- Reconstruct and ensure a direct connection between the city and the sea and implement European policy for a better and more efficient use of water transport as an element of the European transport system;
- Develop a lasting interest in the regional, national and international territory, distributing specific, unique, attractive functions, with a regional and global meaning;
- Building infrastructures to re-launch maritime passenger transport;
- Management and implementation of maritime traffic from the port of Bourgas directing it to the Asian transport corridors;
- Building a high-class marina;
- Build a terminal for high-end cruise ships;
- Development of systems and infrastructures to control and improve the quality of the environment.

The project consists of two sectoral components – the transport sector, which is the basis on which a project is being developed for a public access area – Intermodal Passenger Terminal, and the public services sector, which is the second substantial part of the area.

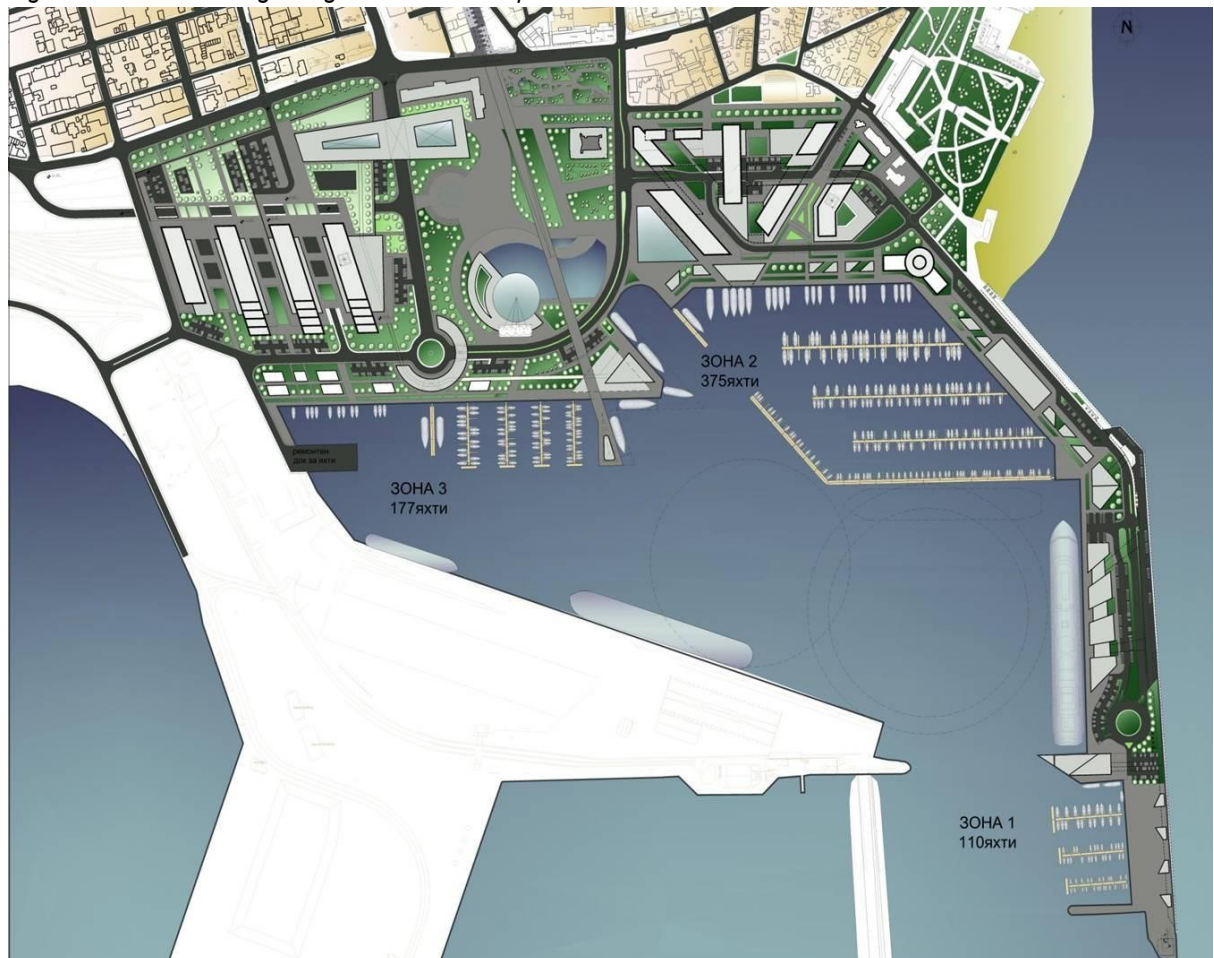
Important buildings and structures for the transport sector:

- Existing railway station;
- New railway terminal;
- New bus terminal;
- Sea Terminal 1 – for connections with urban ferries and yachts (180 yachts);
- Sea Terminal 2 – Cabotage - 5 moorings;
- Sea Terminal 3 – International Yacht Marina - about 400 yachts;
- Terminal 4 – International cruise terminal;
- Yacht Club – A training centre for children and adolescents, sailing sports.

Buildings and structures for the public services sector:

- International Congress Centre;
- Centre of attraction and research for control and research on the Black Sea;
- Commercial buildings, offices;
- Office complex in the convention centre area;
- Hotel complex in the convention centre area;
- Commercial area and office complex.

Figure 7.1: Port of Bourgas regeneration masterplan.



Source: Port Bourgas EAD (2019)

7.5 Drivers and Catalysts for Change

The project provided for a public discussion on a public access area. The discussion was attended by representatives of various public, state, municipal and commercial structures and specialists from different sectors. Based on a broad debate, the decision was taken to fully support the idea by the departments and companies concerned, as well as by the citizens of Bourgas. As a result, the waterfront areas were to be infilled around existing port functions along with a series of port expansions and developments. The area is also intended to be opened up the public via watersports and other maritime recreational activities.

8 Bremerhaven (DE)

Name of Port: Bremerhaven, Germany

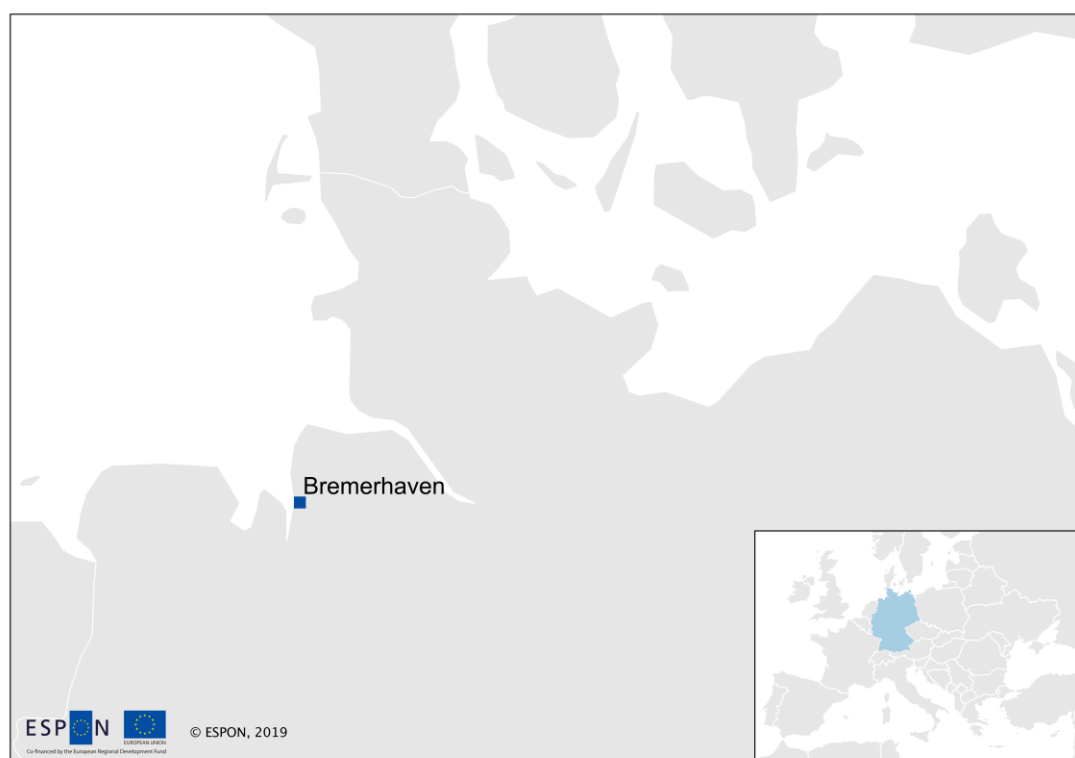
Type: Seaport

Function: Container, importer and exporter of cars and bulk, fishing port

Scale of regeneration: 1994 onwards with the significant SEAPORT project occurring between 2003-2006 while terminal expansion continued until 2008

Main project: Terminal expansion and redevelopment of the old port area

Map 8.1: Location of Bremerhaven



8.1 History of the Port

The town of Bremerhaven was founded in 1827 after the City of Bremen bought new land from the Kingdom of Hanover. Bremerhaven became a second harbour to Bremen, despite the distance of 50 km between [them]. The port grew quickly due to the rate of emigration and the development of new trade routes to North America. However, in 1845 the Kingdom of Hanover formed "a rival town directly beside Bremerhaven and called it Geestemünde". As a result, both towns became key ports for "shipbuilding and fishing". In 1927, Geestemünde merged with other municipalities to "become the new city of Wesermünde which later merged with Bremerhaven. Today, Bremerhaven is a *bona fide* city, however, the "overseas port is not part of the City of Bremerhaven but under the direct jurisdiction of the City of Bremen."

While the overseas port, the container terminals and the fishing port are still busy, the old inner-city port became derelict.

8.2 Public Policy and Governance

A key economic priority within the state of Bremen is the maintenance, regeneration and expansion of its ports, supported via the Office for Economic Affairs and Ports. At a city scale, the everyday management of the port and the implementation of government objectives are handled by Bremen ports, the 100% state-owned Port Authority.

There have been several projects to expand and regenerate the Bremerhaven Port, but few have been linked to the city. The most recent was the 'SEAPORT' (Stimulating Economic Regeneration and Attractiveness of Port Towns) project which was a cross European project that studied the factors involved in the economic development of ports and the process of strengthening "regional identity".

In Bremerhaven and elsewhere, regeneration efforts and spatial restructuring focussed on the Old Port. Several policies and governance areas have shaped the regeneration of Bremerhaven:

- The study of "divergent nationally significant economic structures."
- The "re-use and redesign of port areas for new uses" such as housing, "tourism", recreational and smart districts.
- The protection of "cultural heritage".
- Sustainable development in terms of infrastructure.
- "Cross-border cooperation"- this is significant because Bremen/Bremerhaven is an autonomous state in the framework of the federal structure of Germany thus, there is always an element of negotiation with the adjacent federal state of Lower Saxony as well as with international borders.

The stakeholders and project participants were highly represented at the transnational, national and local scale. This project was executed in collaboration with citizens through "informative meetings and formal proceedings" and public "exhibitions".

8.3 Outcomes and Impacts

Some of the key outcomes of SEAPORT and the expansion of the port are:

- There is no more land for further expansions due to a natural park and territorial border. Therefore, future economic priority will be placed on the JadeWeserPort in Wilhelmshaven.
- SEAPORT has contributed to the planning for "the transformation of its older port at the interface with the active port". Plans for hotels, housing, recreational spaces and a technology park have all been realised. Further, as the land is 100% under the

ownership of the City of Bremerhaven there is a discussion about the next stages of development.

A key impact is that port traffic has considerably increased during the life of the project. For instance, bulk increased by 7% between 2003 and 2004, and container turnover by 10% between 2003 and 2004, demonstrating enhanced economic performance of the port.

8.4 Implementation

In 1999 during the SEAPORT project, the space between the old port and new port was deemed an "industrial wasteland"- a Seveso site in need of decontamination. This resulted in conflict between the historical and cultural heritage and the economic value of the land. However, eventually, the quays were renovated into roads, squares and bridges. New buildings were completed including the "German Emigration Centre". Public investment encouraged the implementation of the above infrastructure but for other projects such as parking, hotels, residential and commercial buildings, private investment was sought.

8.5 Drivers and Catalysts for Change

The catalysts for the development of Bremerhaven Port and city include:

- The relationship between the port and Bremerhaven is more complicated than in other cities as the port relocated decades ago to outside of the city, leaving the old port area deindustrialised and dilapidated. Therefore, regeneration has seen the old port functions within the city replaced, but an active port remains in operation elsewhere.
- It is the 16th largest container port in the world and growing.
- It is the 2nd biggest exporter and importer of cars and still growing.
- 25% of all employment is either directly or indirectly related to the port activities.
- The redevelopment of the old port area was driven by a successful court battle between the State of Bremen and the National Government of Germany at the Federal Constitutional Court arguing that the state was provided with "insufficient financial resources" in the 1990s. From this pay-out, €270 million were "budgeted for the development of Bremerhaven's" old port.

9 Cherbourg (FR)

Name of Port: Cherbourg, France

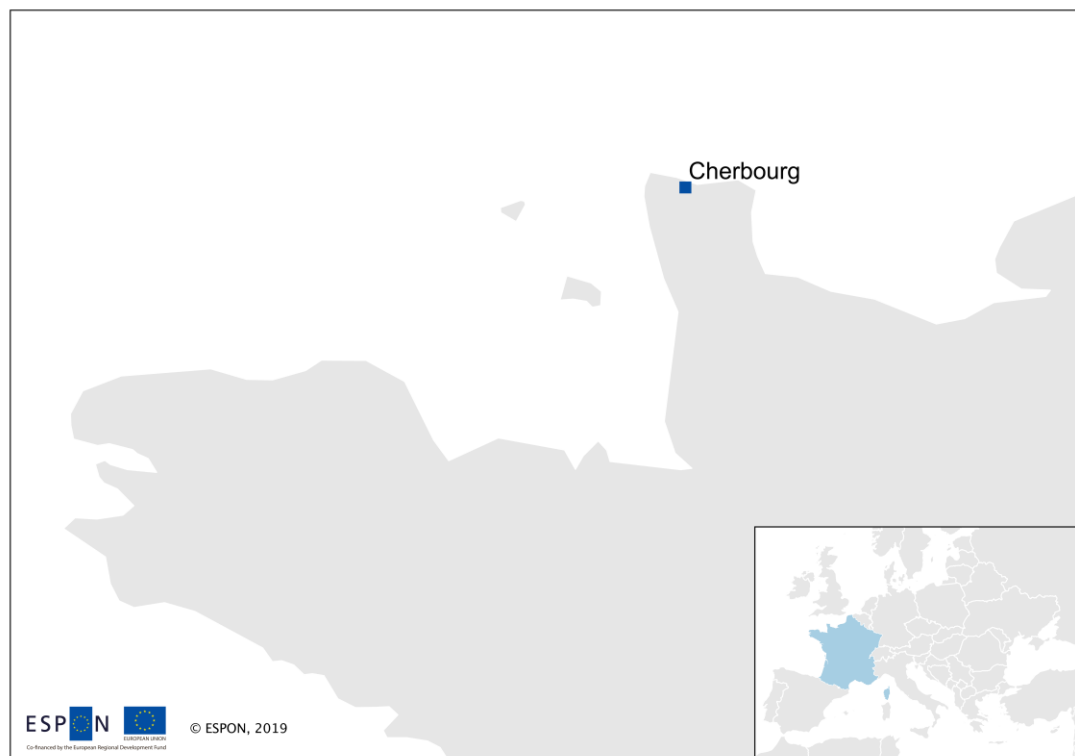
Type: Seaport

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)

Map 9.1: Location of Cherbourg



9.1 History of the Port

Initially a Gallic fishing port, and then a Roman stronghold on the tip of the Cotentin and a strategic point of the Hundred Years' War. Eventually, Cherbourg developed strongly in the nineteenth century, thanks to the decision to establish an artificial port with the construction of a dam, then with the establishment of a military port. Cherbourg was a transatlantic port of call in the first half of the twentieth century; the port was one of the priority objectives of American troops during the Normandy landing in 1944, due to its strategic location. Cherbourg merged on March 1, 2000, with the nearby town of Octeville to form Cherbourg-Octeville. On 1 January 2016, Cherbourg-Octeville merged with the four neighbouring cities of Equeurdreville-Hainneville, La Glacerie, Querqueville and Tourlaville to form the new

municipality Cherbourg-en-Cotentin. The military port, submarine base, and the commercial port still coexist today.

9.2 Public Policy and Governance

The governance of the port is entrusted to the "Ports Normands Associés" which deals with the ports of Cherbourg-Octeville and Caen-Ouistreham, owner and manager of the ports of Caen-Ouistreham and Cherbourg since 1 January 2007. In front of a very strong Port Authority, the new municipality Cherbourg-en-Cotentin is working separately on urban planning activities and strategic horizons towards 2030.

In 2006 the National Agency for Urban Regeneration (Agence Nationale pour la Rénovation Urbaine – ANRU) supported the regeneration of the area between the Basin du Commerce and the hospital. In 2014 PNS published a call for layout of docks in Basin du Commerce based on Schema Directeur d'Aménagement Portuaire (2010). This masterplan confirms the city-port strategy of 2006 ZAC (Zone d'Aménagement Concerté) and it works to complete the transformation of the city-port.

9.3 Outcomes and Impacts

A key outcome of the almost completed project in the Basin du Commerce area is its role as a catalyst for further regeneration. The Strategic Plan identifies the city-port reconnection as a goal: it is clear there is a strategy of continuity between the ZAC intervention, the Port Masterplan and future development strategies demonstrating the longer term expected impacts of the project.

9.4 Implementation

The ZAC implementation has produced positive effects and the joint solution, typical of the French urban regeneration process, produces urban quality and shared choices. The port of Cherbourg has a great cultural and touristic attractor (the Cité de la Mer) which greatly catalyses this process of redevelopment. In fact, it is the reason why the ZAC was designed: the current implementation status shows an important outcome for the interface area along Avenue Carnot.

On the other hand, the non-joint SDAP (Schema Directeur d'Aménagement Portuaire) interventions, such as the green belt along the fences, have not yet been implemented.

Table 9.1: Timeline of waterfront transformation

Year	Action
2006	National Agency for Urban Regeneration (Agence Nationale pour la Rénovation Urbaine – ANRU) supported the regeneration of the area between the Basin du Commerce and the hospital A joint development zone (ZAC – Zone d'Aménagement Concerté) is defined

Year	Action
2010	Ports Normands Associés released the Port Masterplan (SDAP - Schema Directeur d'Amangement Portuaire)
2011	The first transformations of the Commercial Mall on the right bank of the Basin de Commerce are completed Realization of new housing on Av. Carnot
2014	Call for the layout of docks in Basin du Commerce based on Schema Directeur d'Amangement Portuaire

Source: Mairie de Cherbourg-Octeville (2006), Ports Normands Associés (2010), Mairie de Cherbourg-en-Cotentin (2017), Central des Marchés (2014)

Further, joint planning and development activities are the most important achievement in Cherbourg experience, activated by SHEMA (Societe Havraise d'Economie Mixte pour l'Amangement). The new governance structures - small metropolitan context - is able to attract more funds and realize high-level urban services, as shown in Table 9.2.

Table 9.2: Investment on ZAC Basin du Commerce: characters of the project

Client	Communauté Urbaine de Cherbourg	Legal editing	Development concession
Amount	25,000,000 € HT	ZAC areas	22.8 ha
Project manager	Fabien FEUILLETTE	Urbaniste	Atelier Serge RENAUDIE
Operation start	June 2006, started works in 2008	BET VRD	SCP Pottier de Boursetty
Concession duration	7 years	Housing	250 logements env. 20,200 m2 SHON
Casino Hôtel	4,500 m2 SHON	Commercial mall	16,600 m2 SHON
Shop Services	4,850 m2 SHON		

Source: SHEMA.fr (2019)

9.5 Drivers and Catalysts for Change

The ZAC was a key driver of change, in particular:

- As the commercial and military port co-exist within the city waterfront areas have been infilled around these existing functions,
- the creation of new public space,
- the mall to support the economy of the project,
- the new housing along Avenue Carnot to support the presence of residential activities,
- the promenade that leads along the canal to the Cité de la Mer.

10 Dunkerque (FR)

Name of Port: Dunkerque Port

Type: Seaport

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

Scale of regeneration: Regeneration of harbour and pier from 1991 to the present day

Main project: Pier 1

Map 10.1: Location of Dunkerque



10.1 History of the Port

Dunkerque developed from a fishing village in the 10th century and was the site of major battles during World War II. In 1969, the great Dunkerque Council was established consisting of 18 towns from the 'Nord-Pas de Calais' to the Belgian border. It is an industrial and port area that was home to iron and steel manufacturers in the 1960s. In the 1980s, Dunkerque suffered deindustrialisation but re-emerged as a key energy platform in the early 2000s. This was supported by the European Union Structural Funds, which later were also used to encourage the economic, social and cultural diversification of Dunkerque.

10.2 Public Policy and Governance

The site for regeneration is the 18-hectare East Harbour and 7-hectare Pier 1. This was proposed by Dunkerque Urban Community (CUD) and the City of Dunkerque. The site is owned by the Port Autonome de Dunkerque, but the city acquired Pier 1 from the Port Authority in the early 2000s. Pier 1 is a former wharf currently used for warehousing, and a key element of the 1990s “Neptune” project, which attempted to re-incorporate the port into the city. CUD argue for a cultural and recreational area, but Dunkerque City proposes mixed-used housing, retail and recreational.

Port regeneration has been occurring since the “Neptune” project in the 1990s and was continued through the ‘Grand Large’ Project in 2010 as a public-private partnership. This aimed to diversify the space by developing different building types, including open spaces such as a park, houses with gardens and apartment blocks. These projects are incorporated into the Local Plan for Economic Development (LPED) led by the Greater Dunkirk ¹Council and Région Nord/Pas-de Calais although this is primarily an economic rather than urban development plan. The key actors are:

- The state at various scales including the Nord-Pas de Calais region, Département du Nord, and the Greater Dunkirk Council.
- Higher education in the form of the Université du Littoral Côte d’Opale (ULCO).
- Commercial and business associations including Dunkirk Chamber of Commerce, the Chambers of Trade and Industry, the Employment agency, the port of Dunkirk, “Dunkerque Promotion”, Maison de l’emploi and Flanders-Dunkirk planning office.

The redevelopment site is located where the city meets the water. The aim is to make the space as car-free as possible thus, the TGV station will be restructured while pedestrian and cycling lanes will link the port and city. A visual connection between the city and the water will be created through the regeneration of ‘La Halles aux sucres’ incorporating the architectural and maritime heritage such as the Princess Elizabeth museum ship.

In 2018, Dunkerque-Port finalized the implementation of its strategy project 2019-2023 development programme with an investment of almost €65 million (33% more than in 2017). The project focuses on major development projects of the West port, with the realization of the extension the Flanders quay, but also the continuation of development work Dunkirk International Logistics Area (DLI) South and the start of the work of the Large Industries Zone (GIZ).

¹ The city refers to itself as Dunkerque (French) and Dunkirk (English) in different ways. We use both terms to stay aligned with the city.

10.3 Outcomes and Impacts

According to 'Econographe' 2019-2020, there are several outcomes and impacts of the port redevelopment and city regeneration. In 2018, there were 34,000 jobs both directly and indirectly related to the port. A key outcome is that across 10 km of offshore space, 50 to 80 new wind turbines are being planned. There are also plans for the refurbishment of the site by 2028 to account for six new nuclear reactors.

The observed and expected impacts are that Dunkerque has become France's foremost port for the importation of minerals and carbon, container fruits and rail freight. In 2018, there was an increase of 3% on traffic from 2017 resulting in 51.6 million tonnes of cargo. There are now 115 public and private agencies and enterprises located in the port area including Coca-Cola's new bottle production line factory worth an investment of €19 million.

10.4 Implementation

A competitive tender was launched for the redevelopment of "Halle aux Sucres" while the regeneration of the harbour and pier is being completed in two phases. Phase 1 has been completed including the development of the marina, reconnection of the city and harbour through a pedestrian and cycle bridge, the development of student housing and the creation of open public space. Phase 2 will include the full re-integration of the pier into the city and the development of retail, housing and other services.

10.5 Drivers and Catalysts for Change

Dunkerque is an important economic asset for France as such, the City was able to use the regeneration plan to reclaim Pier 1 from the port Authority for redevelopment. Thus, the regeneration of deindustrialised sites was implemented to ensure sustainable housing, amenities and open spaces in order to sustain its economic development. Further as the 3rd largest Port and one of Europe's largest energy platforms, it is home to nine different forms of energy generating companies including wind farms, a nuclear power plant, subsea gas lines and coal. It is the region's second-largest location for foreign direct investment representing 13,000 jobs.

11 Gdynia (PL)

Name of Port: Gdynia, Poland

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)

Map 11.1: Location of Gdynia



11.1 History of the Port

The port of Gdynia was established by the Polish Parliament in 1922, although work on its establishment commenced much earlier. The favourable international situation, signing of the Treaty of Versailles and restoration of Poland's access to the sea incentivised the Polish government to act.

Polish trade was secured by the Free City of Gdańsk (Wolne Miasto Gdańsk), located within the customs area of Poland and the Polish state was granted use of the commercial port. However, in 1920, the head of the Department of Maritime Affairs at the Ministry of Military Affairs, appointed Tadeusz Wenda, as the engineer to choose a place to build a future port. Tadeusz Wenda not only presented a proposal of the port location, but he also designed it and was appointed the construction manager of the port. Post-World War II, Gdynia port was

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re-built; in 1991 it became a joint-stock company wholly owned by the State Treasury and in 1996 it became Port Gdynia Holding S.A., as public holding.

11.2 Public Policy and Governance

The Port of Gdynia is owned by Port Gdynia Holding S.A and it is independent of the municipality. The municipality of Gdynia (Urząd Miasta Gdyni) released a 'Local Spatial Development Plan' for the part of the Śródmieście district in Gdynia, the area of central waterfront in 2010. This plan applies to the central waterfront area on the north of the promenade John Paul II. In the context of this plan, and partly before its adoption, Vastint Holding BV Poland produced two development plans called Gdynia Waterfront I and Gdynia Waterfront II. The first phase of the mixed-use Gdynia Waterfront complex includes an office building offering 10,000 sqm of A-class office space accommodating the new headquarters of PKO Bank Polski and the hotel - Courtyard by Marriott. The ground floor walkway is occupied by cafes and restaurants. The office space has been designed per sustainable principles and construction was completed in 2015.

An important element of the concept is passages with a generally accessible square and landscape architecture, which emphasises individual functional zones of future buildings with an estimated area of 75,000 sqm. The newly designed buildings harmonize with the modernist architecture of Gdynia. In creating public spaces, classic elements were used to create the so-called "soft borders" - like arcades or pergolas. The public space and urban interiors are designed to create a good atmosphere and sense of "living between buildings".

11.3 Outcomes and Impacts

It is too early to assess the impact on the environment, business, identity or population but the project expects the creation of new jobs. Mixed use development is a very visible outcome including new apartment buildings and office buildings. The overall goal is that Gdynia Waterfront II will create 80,000 sqm of residential, office and service space. An important element is the public square for enhancing vibrancy and vitality. The whole site will be complemented by urban greenery, which will give a seaside character and emphasize the diversity of different zones of the planned project.

11.4 Implementation

The transformation of Gdynia's waterfront during Phase I was a private development undertaken in alignment with a local masterplan. The project was defined by Vastint Holding, without the participation of public stakeholders.

Gdynia Waterfront II has already received a building permit. Due to the scale of the planned project, its implementation will be phased. Vastint Holding announced that the start of construction works is planned for spring 2020. The goal of the project is to create an attractive place that will be open not only to people working and living there, but to all city residents and tourists. In an area of four ha, four buildings will be built first - two residential and two office buildings. In the next stage, an office building, commercial premises, a hotel with conference space and public and cultural facilities, including a cinema, will be built.

11.5 Drivers and Catalysts for Change

The project is centred on the transformation of the areas no longer used for port activities, in order to harness the real estate potential of these lands. Thus, the city is regenerating waterfront spaces around the existing port functions. In reference to the implementation of the Waterfront I project, as well as the provisions of the Act of October 9, 2015, on revitalization, in 2017 the City Council of Gdynia adopted the Municipality Revitalization Program of the City of Gdynia for 2017-2026. Areas adjacent to the implemented Waterfront I and II projects were intended for revitalization in this programme.

12 Malmö (SE)

Name of Port: Malmö

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

Map 12.1: Location of Malmö



12.1 History of the Port

Malmö developed during the 13th century due to its close proximity to Copenhagen and due to its importance as a key fishery for the herring market. During the 18th century, Malmö underwent decline as it was reterritorialized within Sweden resulting in the fishing town becoming a marginalised military town in Sweden, as opposed to its former status as a central trading town located within Denmark. By 1914, it was Northern Europe's fastest-growing city and a leading industrial city. It housed 300 factories and 10,000 employees. During this time, the region was dominated by textile and engineering companies. However, during the 1960s Malmö began to decline due to a collapse in the textile industry and later within shipbuilding. To overcome this deindustrialisation, the city was rebranded as a "*city of knowledge*".

12.2 Public Policy and Governance

“Bo01: City of Tomorrow” (henceforth known as Bo01) is located in the Västra Hamnen area, which was a deindustrialised waterfront space located close to the city’s historic centre. The Municipality of Malmö bought the site in 1996 to develop a whole new city district. However, investment was allocated to developing an ‘international housing exhibition’ by the city’s ‘Property Development Office’ in collaboration with 20 developers. This has since become a permanent mixed-use housing development built within “sustainability principles”. The Bo01 project was built upon land reclaimed from the sea over several stages from the mid-1980s onwards. The key objectives of this regeneration were:

- The regeneration of the deindustrialised space into sustainable living spaces;
- It was governed via a public/private cooperation and to be funded via all partners;
- It needed to be environmentally sustainable and run entirely on renewable resources; and
- The housing exhibition was to be transformed into a permanent housing space.

This project was funded by both the public and private partners. However, the public funding was aided by a grant of 250 million Kronor by the ‘Local Investment Programmer Fund’ and a further, 1.5 million was provided by the European Union to support the renewable energy aspects of the project. The B001 AB company borrowed 40 million from the city due to liquidation problems in 2000 as profits were restricted until the opening of the expo in 2001. Overall, funding and cost of the project can be seen in table 12.1.

Table 12.1: Funding and cost of the project

Action	Cost
Site Acquisition	€8,300,000
Site improvement (Seveso clean ups etc.)	€45,400,000
Revenue from the sale of development rights	€29,000,000
Site development costs for Malmö	€24,500,000

International Housing Expo

The international housing expo was divided into two parts. Firstly, it was used as a platform to develop, illustrate and discuss radical future living. Secondly, it was to be a pilot project that acted as an exemplar for mixed sustainable housing. The expo was the first stage of redevelopment and highlighted “commercial and social uses as well as approximately 350 residential units” built in an environmentally sustainable manner. While, it further encouraged the live experimentation of radical sustainable construction, design and living methods.

The developers who collaborated on this project were sold the rights to the space by the Property Development Office in 1998. However, there were conditions attached to the buying of this land. These included:

- Developers were contractually obliged to participate in the ‘Owners Group Association’, which outlined and governed the planning guidelines and obligations for the space.
- The City of Malmö would have the power to approve the developer’s choice in architect.
- Ten of the twenty developers purchased more than one site and twenty were represented by minor and major developers such as “Skanska Nya Hem, LB Hus AB, NCC Boende, JM AB, Packwerk Bygg och Fastigheter, HSB, Wikeborg och Sander Fastighetsutv, AB, and MKB”.

The Owners’ Group

Malmö appointed exhibition architect Klas Tham to oversee the ‘Owners’ Group’ and its work resulted in the development of the “Quality Programme Bo01.” This programme describes:

“The final master plan, the guidelines for the physical development of individual plots (including requirements for sustainability), and, most important, the clear allocation of responsibilities among the city, the exhibition team, and the participating developers. Developers were therefore obliged to fulfil guarantees regarding the quality of architecture, materials and technology used throughout the development”.

The use of public investment as a lever in this way showed that “sustainable place-making” was possible and profitable. Further, all profits from the sale of plots went straight back into the Swedish purse and instigated a change in the housing market across the country. This has resulted in plans for Bo02 to be a fully private but sustainable housing development.

12.3 Outcomes and Impacts

The international housing exhibition ran between May and September 2001 but was not initially supported by residents. However, as the development into a permanent quarter has developed, the waterfront’s open and recreational spaces have boosted the area and achieved community support. The outcomes and impacts of this development, in general, can be divided into positive and negative, and Malmö are very willing to illustrate both as Bo01 was a pilot study to offer a sustainable example for other cities.

- A key outcome was the major success of the expo as a boosting and branding exercise and as a catalyst for further permanent development. However, no affordable housing was built within the initial site. Lessons were learned resulting in a change in mix of tenure in Bo02 to 70% affordable housing.
- Impacts include the longer-term adoption by the city to ensure open public spaces, particularly for swimming and other outdoor activities are included in projects. By 2014, halfway through the life of the project, 4,000 homes have been built and 10,000 jobs have been created. However, some housing units have large glass areas which have resulted in extremely high heating bills. Bo01 has also been criticised as a

magnet for a homogenous group of “well-shod, healthy, white residents despite the fact that 40% of Malmö's population was born outside Sweden”.

From 2014- 2031, the second half of the plan is being implemented and expected to result in 11,000 homes, 17,000 jobs, 3 schools, 15 pre-schools and a population of 20,000.

12.4 Implementation

The implementation of the plan can be seen in Table 12.2.

Table 12.2: Timeline and actions of implementation

Timeline	Action
February 1997	Site Purchased
1998	Planning started
March 2000	Construction started
2001	Phase 1 completed (housing expo)
Project completed	Ongoing-estimate 2031

12.5 Drivers and Catalysts for Change

There have been two key catalysts in the regeneration of the waterfront. Firstly, its redevelopment formed part of the recovery from post-industrial decline. They adopted “a radical vision of a modern eco-city to tackle the collapse of the city's economic structure” particularly in Västra Hamnen, where Bo01 and Bo02 are located. Secondly, the success of the international housing exhibition was a catalyst for the further development of the Västra Hamnen area and it continues to be a driver of regeneration to date. All of this occurred because of the city's push to regenerate deindustrialised waterfront areas to replace port functions.

13 Norrköping (SE)

Name of Port: Norrköping

Type: Riverport

Function: Oil, container and cargo

Scale of regeneration: Interval redevelopment over a long period of time

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

Map 13.1: Location of Norrköping



13.1 History of the Port

Norrköping is located in Eastern Sweden at the mouth of the Motala Ström river, entering the Baltic Sea. It has an estimated population of 95,618, with a municipal population of 130,050. Its birth as a port city can be traced back to 1841 when a branch of Motala Verkstad (one of Sweden's oldest engineering companies specialised in shipping) opened a branch in Norrköping. By 1850, the industry had grown to employ over 600 employees and other industries clustered together including textile manufacturers. By 1950 Norrköping was dubbed the "Manchester of Sweden" with 54 factories employing 6,000 people. By 1956, global competition resulted in deindustrialisation, the closure of factories and by 1970 only 10 factories and 1,200 employees remained. To counter this, several governmental agencies

were decentralised to Norrköping with the municipality buying “a 25 per cent share in the stevedoring industry”. By 1991, the port and the stevedoring industries merged into one integrated authority ‘Norrköpings Hamn och Stuveri AB’ (name change to Norrköping Hamn AB in 2015). Since, 2002, Norrköping has been undergoing redevelopment as a centre of culture and education. In 2010, the Pampus Container terminal, an outer port built-in 1983 to handle larger ships, was integrated with a railway terminal.

13.2 Public Policy and Governance

Norrköping port is owned by the city. Representatives of Norrköping Hamn AB and the city government sit on each other’s steering groups. The redevelopment of the port, particularly the development of the rail links and the relocation of port activities, was supported by the city, Norrköping Hamn AB and the National Board of Transport. 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.

Between 2016 and 2023, the Port of Norrköping will leave the inner harbour and grow the Pampus terminal. The brownfield site left behind is designated for new residential areas, while the relocation of the port will allow for expansion to meet global market needs. Reasons for the relocation and expansion of the port include:

- To take full advantage of the infrastructure of Pampus Terminal;
- The reduction of travel distances and congestion in the city;
- To meet future demands;
- To provide space for the urban redevelopment and regeneration of the city; and
- To create an environmental, business and socio-economically sustainable port

13.3 Outcomes and Impacts

It is too early to assess the impact on the environment, business, identity or population. However, a key outcome is the success of the railway development and the future relocation and expansion of the port. These were successful due to strong organisation and collaboration between local and national stakeholders, critical for other cities undergoing port regeneration. The key challenges faced during this redevelopment, relocation and expansion are around cost and timing of economic cycles. The global downturn had an effect on the scale and speed of the railway development.

13.4 Implementation

Due to the early stage of the project, it is difficult to assess implementation successes and obstacles. The Port of Norrköping has provided a timeline of expected implementation which provides insight into the challenges they expect to face (See Table 13.1).

Table 13.1: Timeline of port relocation and expansion

Year	Action
2016	Leaves the northern quay at the Inner port. Initiates application for environmental judgement and water operations at the Pampus Terminal. Decisions are being made about the extent of the expansion at Pampus and Öhman Terminals. Preparation of system documents for planned expansion at the Pampus Terminal. (systemhandling) Projecting of planned actions at the Öhman Terminal. Detailed planning of project Kardonbanan (new railway).
2017	Submission of a permit application for water operations at the Pampus Terminal. Environmental judgement. Contracting at the Öhman Terminal. Continued work with system documents for expansion at the Pampus Terminal. Production of tender documents for expansion of the Pampus Terminal. Contracting for Kardonbanan (new railway) starts.
2018	Environmental judgement for water operations at the Pampus Terminal. Contracting at the Öhman Terminal ends. Specifications for the expansion are provided.
2019	New port areas at the Öhman Terminal. Procurement of dredging and pre-contracting. Construction work of pre-contracting at Pampus Terminal. Construction for dredging begins.
2020	Dredging operations finish. Construction work for quays and port areas begin. Specifications for electrical systems etc for the Pampus expansion are provided.
2021-2022	Construction work - quays and port areas. Construction of electrical systems etc begins.
2023	Construction work at Pampus Terminal finishes. Commissioning of new quays and port areas.

Source: Port of Norrköping (2019c)

13.5 Drivers and Catalysts for Change

A key catalyst was that the port is owned by the city, therefore there is a lot more control over the port city relationship than in other sample cities. Thus, the waterfront regeneration was occurring around existing port functions, but will now also be facilitated by the relocation of the inner harbour. Other catalysts included the redevelopment of the new high-speed railway investment in order to facilitate liveability in the city. Baltic Urban Lab (2019) were key in the development of the vision created for the inner harbour space and they worked closely with a “variety of groups from developers to citizens during the planning process and used their expertise and knowledge in planning”. Cooperation and collaboration “strengthening the role of arts in the planning of the pilot site, better communication of the development to citizens, politicians and other stakeholders especially when it comes to the soil remediation process” and through the use of “new digital tools such as the visualisation tool ‘Earth Autopsy’” was key. Social media was critical for ensuring knowledge sharing and coordination between stakeholders.

14 Split (HR)

Name of Port: Split, Croatia

Type: Seaport

Function: Cruise, Passengers, Cargo, Containers and RO-RO

Scale of regeneration: Interval redevelopment in a short period of time

Main project: Refurbishment of Riva seaside promenade (2005 competition of projects)

Map 14.1: Location of Split



14.1 History of the Port

Facing the Adriatic Sea and the Italian Peninsula, the historic city of Split is constructed in a harbour bay on the Dalmatian coast. Split is the second-largest city of Croatia and the largest city of the region of Dalmatia. The first foundations were laid by Greek settlers. In the 12th century, due to its geographic position, Split developed land trade caravan routes and maritime trade through its port, becoming an autonomous maritime town. In the 16th century, Split became the central export harbour of the Balkan Peninsula and for a number of centuries was the centre of geopolitical wrangling. In 1850, Split developed into a trade centre for its surrounding hinterland and neighbouring islands and a large breakwater was built, promoting the development of the port. In 1925, it was connected to the main railway Rijeka-Zagreb- Belgrade. In recent times, Split has extended the city port and built a new specialised

cargo terminal that separates passenger traffic. Consequently, the southern part of Split Port, close to city core is used for passenger traffic, and the cargo traffic is re-directed to the industrial zone, north of the port.

14.2 Public Policy and Governance

The main project is the regeneration of the waterfront along the Riva seafront promenade, located close to the port and overlooked by Diocletian's Palace, a UNESCO World Heritage site. In 2005, Split City Council decided to regenerate the brownfield sites along the waterfront and launched a competition. This intervention affects a section of the promenade that is over 250 m long and 50 m wide. All the awnings of the commercial premises have been removed so that there is now a clear strip of five metres wide at the foot of the whole maritime facade. A row of palm trees separates this lateral strip from the central promenade. The central zone is separated by a double row of palm trees from a third thoroughfare strip that runs along the water's edge. The zone that runs between the first row of palm trees and the sea was completed in 2008, at a cost of 9 million euro. The regeneration of the Riva promenade project included a public square that acts as a space for social events, sports events, religious processions, festivals and celebrations. It also re-integrated the port and the city and strengthened the traffic infrastructure and identity of the city.

Recently, the Port Authority has launched the Port of Split Infrastructure Rehabilitation Project. This aims to extend and regenerate passenger berths at the outer side of the breakwater in order to drive land and maritime traffic. The construction of wharves on the outer side of the breakwater in the city port of Split started in June 2014 and the works were divided into two phases. This is partly funded by the Croatian Government, aimed at providing support to the traffic infrastructure and tourist network in Croatia. In March 2019, a masterplan was published targeting the city's East Coast and Kopolica area. The project is supported by the European Bank for Reconstruction and Development (EBRD), who are co-financing the project. Other partners include Croatian Railways, Port Authority and Croatian Roads. The Kopolica site is located in the north of Split and is approximately 100ha zoned for transport and commercial mixed-use. The site is owned by the HZI, Split Port authority and a number of municipal companies, and the majority of the site is disused brownfield space. The Kopolica site will be developed as a location for the new railway and bus transport hub accompanied by commercial and industrial infrastructure.

14.3 Outcomes and Impacts

EUROSTAT data illustrates a decline in population between 2013 and 2017, which may or may not be related to ongoing construction.

Figure 14.1: Split – population change 2013 and 2017

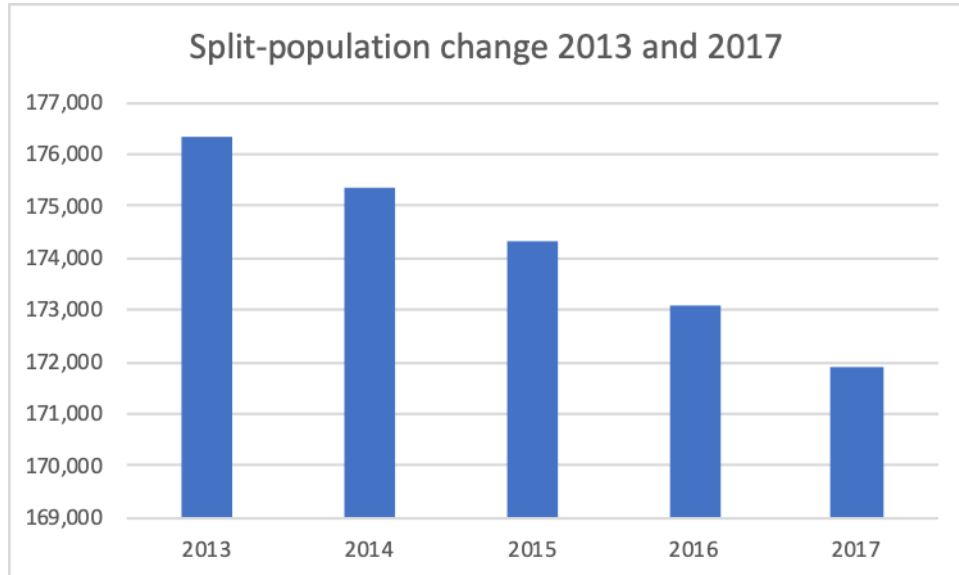
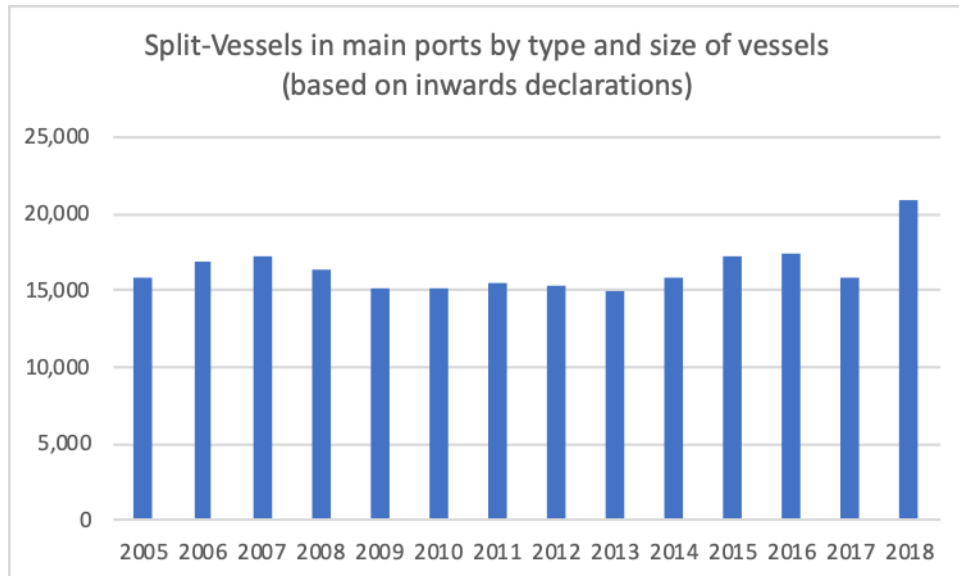


Figure 14.2 illustrates the number of vessels that have docked in Split between 2005 and 2018. Between 2017 and 2018 there is considerable growth perhaps an outcome of new facilities.

Figure 14.2: Split – Vessels in main ports by type and size of vessels



14.4 Implementation

The Riva project promoted by the City Council of Split is completed. The East Coast and Kopolica regeneration masterplan are currently subject to a public hearing including the draft Urban Revitalization Study. When finalized, the study will become the basis for any necessary change in planning frameworks, which will open the space for investment and development of the city of Split for the next 50 years. In order to improve the involvement of all stakeholders, but also citizens, a showroom project was organised to illustrate the redevelopment plans. Drivers and Catalysts for Change

The catalyst for redevelopment was the City Council vision for waterfront regeneration. The Riva project aimed to create liveable and vibrant spaces and did so by regenerating spaces around existing port functions. While, the East Coast and Kopolica regeneration masterplan, aims to provide an integrated traffic solution for Split and Dalmatia and is a very ambitious regeneration project for the port city development. The commitment of both the city and state, through funding, has acted as a key catalyst for both of these projects.

15 Swansea (GB)

Name of Port: Swansea

Type: Seaport

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

Scale of regeneration: City scale regeneration (2019- 2027)

Main project: Maritime Quarter and Waterfront

Map 15.1: Location of Swansea



15.1 History of the Port

The Port of Swansea was developed and named by the Romans and Vikings around 1013. It continued to grow and by the 16th century, it was a key exporter of limestone and coal. Thus, by the 18th century it was a leading coal port and market town. Swansea's City Centre developed due to late 19th-century industrialisation, which was due to increases in industrial trade in copper, zinc, iron and other metals combined with a growth in shipping. As a result of this, Swansea became a key place for copper smelting due to the resources co-located with the port, local coal and trading links within the United Kingdom. Thus, the harbour required expansion and in 1881 the Prince of Wales Dock was opened by the Swansea Harbour Trust. This dock was further expanded in 1898. Further, railway and port infrastructure were developed to meet the needs of the coal mining industry spurring urban growth. However, in

the mid-20th century, Swansea experienced major deindustrialisation and an economic downturn. Today the city has become predominantly post-industrial, dominated by the tertiary based knowledge economy.

15.2 Public Policy and Governance

Urban redevelopment has been driven by the City and County Councils, the Welsh Assembly and numerous public and private sector stakeholders. The 'Swansea City Centre Strategic Framework' was published in 2007, incorporating the maritime quarter. This area was already under development on an ad hoc basis as a residential zone with dispersed heritage buildings and acted as a leisure and cultural destination. The framework proposed further growth of the Maritime Quarter with the addition of another 952 mixed-type dwellings between 2007 and 2015. The Maritime Quarter is divided from the rest of the city by roads and other barriers thus, re-integration was to be encouraged through the redevelopment of pedestrian routes linking the area to the City Centre.

The Swansea Local Development Plan 2010-2025 was newly revised in February 2019. It fits within the Welsh National Planning Policy and Guidance as well as regional and local strategies. It aims to create more open, public and green space, redevelop the Pilkington site in the Maritime Quarter, which is a key gateway into the city and the conservation area, and provide a range of small leisure schemes which make the Maritime Quarter an attractive destination. In this plan, there is a separation between the Maritime Quarter and the City Waterfront with both being treated separately. The plans for the Waterfront include a flagship development as a method of attracting people, mixed-use, open and public spaces, public facilities to support the use of the beach and open spaces for events.

The Council is both 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.

15.3 Outcomes and Impacts

The most recent plan is only in the early planning stages, therefore impacts cannot be defined. However, as the Maritime Quarter is designated in the 2019 plan as a space with the potential to be maximised and re-integrated into the city, it suggests previous plans had limited impact.

15.4 Implementation

The 'Infrastructure Delivery Plan' is critical to implementation as it outlines the infrastructural projects, costs and necessity. This combined with the new 2019 local development plan illustrates that regeneration is still in the planning phase. As part of this planning phase, a schedule of supplementary planning guidance policies are available and the development of the future 'Swansea Bay Strategy and Development Framework for Waterfront Destinations' is not due to until between 2022-2025, indicating that the implementation plans for the regeneration of the Waterfront are not expected to start before then.

15.5 Drivers and Catalysts for Change

Three key catalysts are driving the regeneration plans:

- The regeneration of deindustrialised waterfront areas to replace port functions.
- A growing knowledge economy, in which commercial and housing units were/are required.
- Significant population growth forecasts over the next decade (2019-2029) requiring both physical, social and amenity infrastructures.
- National Planning Policy and Guidance required the development of the local plan.

16 Tallinn (EE)

Name of Port: Tallinn, Estonia

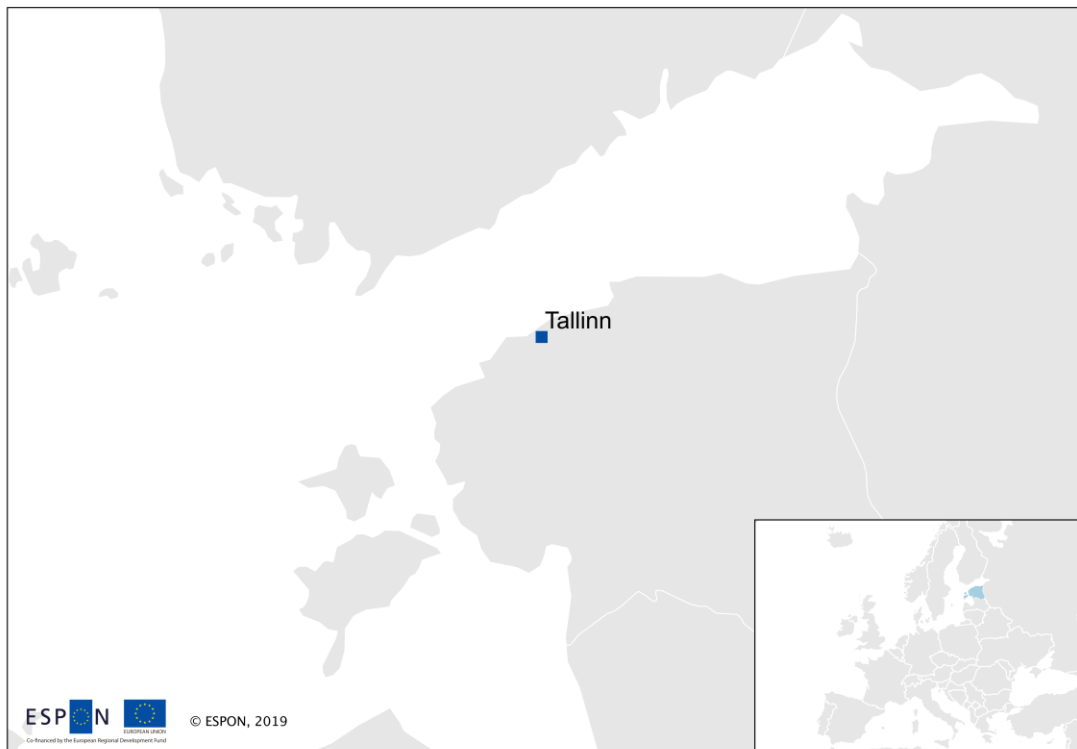
Type: Seaport

Function: Cargo, passenger

Scale of regeneration: Old City Harbour

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

Map 16.1: Location of Tallinn



16.1 History of the Port

Tallinn is the oldest capital city in the Baltic Sea region. First mentioned in 1219, it received city rights in 1248. Due to its strategic location, the city became a major trade hub, especially from the 14th to the 16th century, when it grew in importance as part of the Hanseatic League. In the Modern Age, Tallinn was involved in the Hundred Years War and its importance diminished. Nowadays, Tallinn is the leading digital capital city in EU, and Estonia is the leading digital nation. The recent history of the port of Tallinn is very complex and is conditioned by the history of Estonia, in particular from the moment when the Baltic Republic gained independence from the USSR in 1991. In October 2016, the Port of Tallinn subsidiary TS Laevad took over operation of the ferry routes between the Estonian mainland and the islands of Saaremaa and Hiiumaa. Under the subsidiary, OÜ TS Shipping, the Port of Tallinn

owns and operates icebreaker MSV Botanica. On 29 September 2017 at the EU Digital Summit in Tallinn, a partnership of Ericsson, Intel and Telia Estonia announced that they had implemented the first live public 5G network in Europe at the Tallinn Passenger Port to connect with the native Tallink cruise ship corporation at the port. In 2018 the company was listed on the Tallinn Stock Exchange. It was the first time in nearly 20 years that a state-owned company went public in Estonia. The Republic of Estonia remains as the largest shareholder and holds 67% of the company.

16.2 Public Policy and Governance

The port of Tallinn is the biggest port in Estonia and based on both cargo and passenger traffic, is the biggest Baltic Seaport. In order to compete effectively, the Port of Tallinn underwent a complete restructuring process in the mid-1990s by developing from a service port into a land management port authority. In 1999, the last cargo handling operations were privatised. Today, the Port of Tallinn operates as a landlord type of port, with no public cargo handling operations. The port authority is maintaining and developing the infrastructure of the port and leasing territories to terminal operators through building titles, giving the operators an incentive to invest in infrastructure and technology.

In 2016, the Port of Tallinn launched a competition for Masterplan 2030 for the Old City Harbour with the aim of finding a comprehensive, long-term approach to property development in the port area and to connect the city and public space with the functions of the port. The Port of Tallinn plans to introduce more urban development to the Old City Harbour alongside its port functions and to transform the area into an urban space that is both attractive and easy to traverse. Some contributions to the reconnection project are present in the Peatanav project (first and second phase). These projects do not directly concern the waterfront but include a set of transversal connections towards the Admiral Basin, towards the sea, and towards the old city.

The design competition, organized by the Estonian Centre of Architecture, took inspiration from sustainable city planning solutions in other European capitals, such as Berlin, London, Stockholm and Helsinki. The project is due to be completed by 2020. The goal is to transform the heart of Tallinn from a transport corridor to a people-friendly space with its own identity and street culture – a space for meeting and spending time, not just a busy thoroughfare for cars that citizens and tourists alike try to avoid.

16.3 Outcomes and Impacts

As this project is currently under construction, it is too early to assess the impact on the environment, business, identity or population.

16.4 Implementation

Tallinn is a capital city with a very high level of social and ICT innovation. The development of Tallinn Harbour may offer the opportunity to create residential development that is near the city centre and the waterfront. Many residential premises in Tallinn built in the Soviet era require considerable improvement in order to be an attractive living environment. Development of the harbour area offers the opportunity to broaden the housing typologies available to residents.

Through the Hadid Studio project, Tallinn wants to improve its global position. The project is multi-phase, starting with new maritime station and facilities, that are almost completed.

The works are articulated in four steps:

- City of waterfront (phase 1). This phase (ongoing) is redeveloping the new and iconic Terminal A/B and Cruise Terminals, the updated Admiralty Basin marina and surroundings. During this stage, the masterplan builds the central spine for the development and adjacent roads. The first mixed-used development will also be included to capitalize the new urban realm that the operation has created. Terminal D Port's facilities will remain as planned during this stage. The existing Eastern plots of the port will remain operational to allow it to function as normal.
- Explorer Community (phase 2). During Phase 2, the masterplan proposal is to consolidate the mixed-use market. New offices, hotel, serviced apartments, and IT-oriented commercial space and a new and existing retail area will be made available for the market. The masterplan also proposes to activate the Cable Car landmark linking the new cruise terminal with the old city centre. The spine will be extended to the South extension linking new commercial and office developments. In parallel the new wellness and leisure pool facilities will create the new activator for the north development creating a new focus that will bring people from the city to the coastline.
- Innovation district (phase 3). Connected to the innovative identity of the city and to university research activities. During Phase 3 the masterplan exploits the newly consolidated link towards the city by expanding towards the sea. Facilities for terminal D will be built along with the sea extension, new developable areas will be released to the market for offices, retail and the first residential components. The new harbour with the new user-friendly approach will make this the new destination for Tallinn. The masterplan also proposes a new landmark for Tallinn – the new Tallinn Aquarium – to be built at the sea edge along with a new marina and leisure activities that links the Kadriorg Park to the New Port;
- New coastal metropolis (phase 4). During the last phase, the masterplan will benefit from the consolidation of the port as a destination for Tallinn, with the provision of the largest residential component towards the west.

The project is ongoing and the central area of D-terminal (where Tallink ferries operate from) is in transformation. Table 17.1 shows the proposed timeline for implementation.

Table 16.1: Timeline of port regeneration

Year	Activity
2016	Port of Tallinn launched the competition for ideas.
2017	Masterplan competition for the Old City Harbour in Tallinn won by Zaha Hadid Architects.
2018	The ongoing construction site for phase 0.
2030	End of the works articulated in four steps (city of waterfront, Explorer Community, Innovation district, new coastal metropolis).

Source: Tallinn Masterplan 2030 (2017)

16.5 Drivers and Catalysts for Change

The old City Harbour is one of the biggest and busiest passenger harbours in the Baltic region. It is also the biggest passenger harbour for Estonia. Tallink, Eckerö Line and Viking Line ferries depart from the Old City Harbour for Helsinki, as well as the Tallink vessels operated on the Tallinn - Stockholm route and Moby SPL vessel on the Tallinn - St. Petersburg route.

A key driver of change is the strategic location of the old harbour at the heart of the city. This facilitated waterfront regeneration to occur around existing port functions, ensuring excellent access for passengers to the city centre and is a superb berthing place for passenger ferries and cruise ships. It, therefore, could play a major role in the economic development of the whole city. The development plans of the Port of Tallinn envisage the Old City Harbour being converted fully into a passenger port and therefore cargo handling has been gradually relocated into the Muuga and Paldiski South Harbours. As of today, the Old City Harbour terminals are handling predominantly RO-RO cargo (rolling stock).

17 Thessaloniki (GR)

Name of Port: Thessaloniki, Greece

Type: Seaport

Function: Container, Cargo, RO-RO, oil, Passenger, Liquid and dry bulk

Scale of regeneration: Interval redevelopment on a long period of time

Main project: Pier 1 and 2 development

Map 17.1: Location of Thessaloniki



17.1 History of the Port

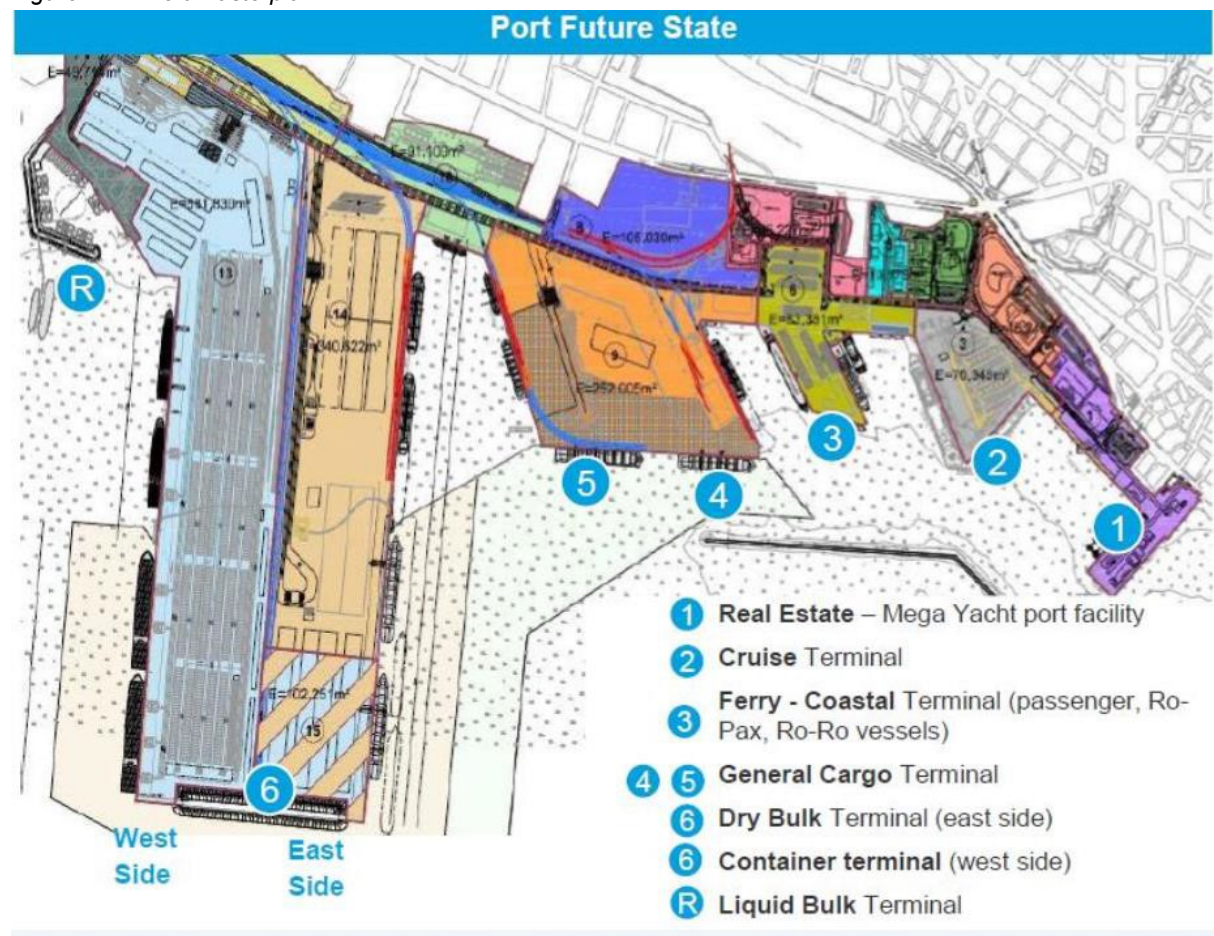
Thessaloniki port is one of the five ports of Greece (Piraeus, Patras, Igoumenitsa & Heraklion being the others) that has been included in the Core European Transport Network. Since 315/6 BC, the port has constituted one of the most important ports in South-East Europe. The modern history of the port commences during the last decade of the 19th century with the expansion of the pier of Thessaloniki towards the sea, and the creation of an eastern section, today's Pier 1. Since the end of World War II, the port of Thessaloniki has been constantly expanding westwards, initially with the restoration of its installations and afterwards with the construction of new piers, warehouses, motorways and railway lines, and a simultaneous procurement of mechanical equipment. In 1972, works for the construction of the 6th pier commenced, the larger part of which was concluded in 1989, which was the first

year of operation of the Cargo Terminal. During the 1990s, a major redevelopment project upgrading the area environmentally and increasing substantially the storage capacity of the port of Thessaloniki was undertaken. A direct road link with the national road network was constructed, by-passing the city (Thessaloniki Port Authority, 2019). In 2014 HRADF (Hellenic Republic Asset Development Fund S.A) issued an international tender process for the sale of 67% of the shares of ThPASA (Thessaloniki Port Authority S.A). In 2017 the privatisation of the Port of Thessaloniki was finalised, and the companies have agreed to spend over €650 million on upgrading the port's facilities over the 34-year concession timeframe.

17.2 Public Policy and Governance

The Port Masterplan planning horizon is 25 years (2040). The masterplan defines the current and future land uses and building restrictions within the port zone and sets. Among the different Thessaloniki Port Authority (THPASA) strategic priorities, they plan to regenerate the port areas which do not host operations and to exploit vacant buildings within the port area in order to attract alternative business and cultural activities. Thus, strengthening the links with the city through the development of real estate opportunities in the area of Piers 1 & 2.

Figure 17.1: Port Masterplan.



Source: Thessaloniki Port Authority, 2017.

In 2014 Thessaloniki Municipality was selected as part of the second cohort of cities to join the 100 Resilient Cities (100RC) network. The 100RC methodology provided 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. One of the four goals of the Resilience Strategy is “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”. This goal will be developed with the following actions:

- Action 01: Develop a Land Use Investment Framework to capitalize on real estate along the coastal zone;
- Action 02: Develop recreational infrastructure; and
- Action 03: Develop an offshore infrastructure.

17.3 Outcomes and Impacts

Thessaloniki 1997 European Capital of Culture was an important starting point for the waterfront regeneration. A key outcome was the restoration of the old warehouses in the port, which were offered to public use and include the Museum of Photography, the Centre of Contemporary Art, four large multipurpose rooms, restaurants, cafes, etc. Pier 1, until then abandoned, was transformed into a metropolitan cultural park.

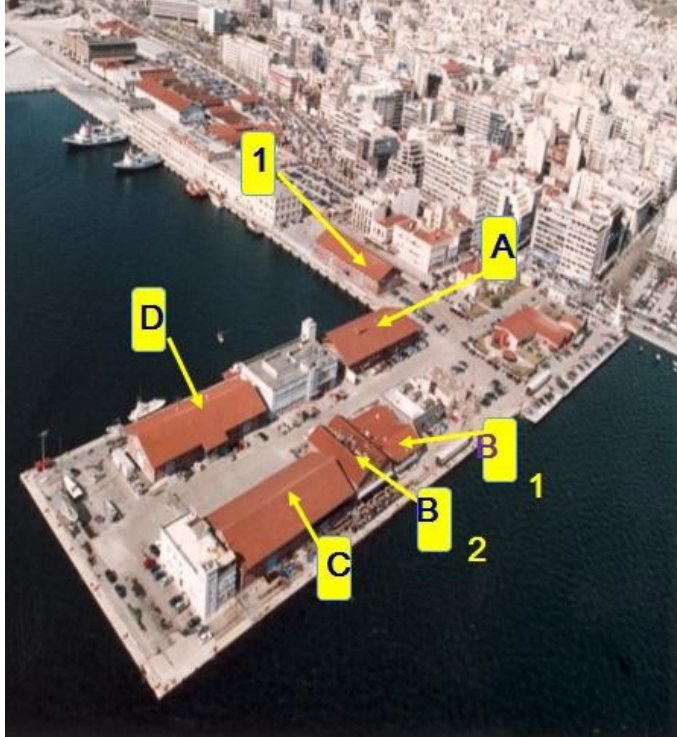
In 2000, the Municipality of Thessaloniki launched an International Architectural Competition for the redevelopment of the New Waterfront and in 2006 the construction of the 1st phase begun. The first part (around 75800m²) was completed in 2008 and the second part (around 163000m²) started in 2011 and was completed in 2014. The total length of the New Waterfront is 3km. There are 2.353 new trees, 118.432 new plants, 58,75 acres of green spaces and 11.557m² of playgrounds. There are two main areas of the project: the pedestrian area next to the seafront stretching over 5 km and offering an uninterrupted field of vision of the sea and differentiated spaces, including green areas and constructions such as sports courts, refreshment facilities, an outdoor amphitheatre, sculptures, water features and playgrounds. The new Seafront Rehabilitation was awarded to the Hellenic Institute of Architecture as the most important public project of 2008.

Total investment for the project “Thessaloniki’s New Seafront Rehabilitation” is €22 million, with the EU’s European Regional Development Fund contributing €19 million under the Operational Programme “Macedonia & Thrace” for the 2007-2013 programming period.

17.4 Implementation

On Pier 1 a series of warehouses have been renovated for multipurpose uses (i.e. conferences, seminars, exhibitions, film projections and reception halls). Two outdoor parking lots have been created and is successfully operating with a total capacity of 595 vehicle parking lots.

Figure 17.2: Regenerated buildings



Pier 1: A (ground floor): Cinema Museum; A (first floor): Photography Museum; B1: Museum of Contemporary Art; B2: Kitchen-Bar; 1: 2 amphitheatres of 245 seats each; D: 2 amphitheatres of 263 seats each; C: Multi-purpose cultural hall.

Source: Thessaloniki Port Authority, 2017.

In the case of the Resilience Strategy in 100 resilient cities framework, through various thematic working group meetings, workshops and mini-labs focusing on developing new ideas, over a period of 12 months, more than 2,000 people and 40 organizations contributed to Thessaloniki's Resilience Strategy.

17.5 Drivers and Catalysts for Change

The catalyst for redevelopment was the Thessaloniki 1997 European Capitals of Culture and the relocation and expansion of the port furthered by the regeneration of waterfront spaces into mixed use areas. Both the municipality and the Port Authority are key actors in the development of the vision created for the harbour space and in general for the urban waterfront, but planning processes seems to be almost separate. Further, being a part of the 100RC has also acted as a catalyst for future development.

18 Valletta, Grand Harbour (MT)

Name of Port: Grand Harbour (*il-Port il-Kbir*), Malta

Type: Seaport

Function: Cargo, passenger, shipping and a former military port

Scale of regeneration: City harbour

Main project: Valletta waterfront at Pinto's Wharf (completed), other projects completed or planned along Grand Harbour perimeter

Map 18.1: Location of Valletta



18.1 History of the Port

The Maltese Islands have a long history, mainly due to their strategic location and natural harbours, especially the Grand Harbour that has been used since prehistoric times. By the 12th and 13th centuries, the Castrum Maris (now known as the Fort S. Angelo) had been built. The Grand Harbour was the base for the Order of Saint John for 268 years, from 1530 to 1798. The area was also the scene of much of the fighting in the Great Siege of Malta of 1565. After the siege, the capital city of Valletta was built on the Sciberras peninsula on the north-west shore of the harbour. Over the years, more fortifications and settlements were built. During British colonial rule after 1800, the harbour became a strategic base for the Royal Navy and the base of the Mediterranean Fleet. With the departure of the British Navy,

the harbour lost much of its military significance. A considerable part of Malta's commercial shipping is now handled by the new free port at Kalafrana, so the harbour is much quieter than it was during the first half of the 20th century.

18.2 Public Policy and Governance

The Malta Planning Authority developed a new cruise terminal in Pinto Wharf area. The site proposed for the development of the cruise passenger terminal is strategic within the Grand Harbour. It extends along the entire Floriana waterfront on the Grand Harbourside. It is bounded by the various Pinto wharves and Wine wharf on the seaward side, and by the line of the Floriana fortifications facing the Grand Harbour. Most of the buildings in Pinto area are of historic importance.

Land ownership of the development area is predominantly public, and the project was commissioned by Valletta Cruise Terminal Steering Committee, a public body, and prepared by Malta Environment and Planning Authority (MEPA). Since 1996, Valletta Cruise Port plc (VISET) has been managing the activities of the cruise terminal.

The Steering Committee of the Valletta Cruise Terminal Development Project on behalf of the Maltese government developed lease terms to be agreed with the selected development consortium, ensuring the government's vision was retained by the developers, creating the terms and conditions first, and after by selecting the companies for development.

In 2004, the Ministry for Urban Development and Roads (MUDR) was set up to address directly two of Malta's major long-term challenges: the upgrading of the country's land transport infrastructure and the facilitation of capital projects undertaken by the Government of Malta directly or in partnership with the private sector. This port regeneration is therefore based on a public-private governance model of public property and planning, with both private and public funding.

18.3 Outcomes and Impacts

Outcomes include:

- The construction of the Valletta Cruise Liner Terminal, a total project area of 30,000 sqm, including reclamation and quay extensions and an investment of €22 – €32 million. This project has helped to address and improve the road network between the cities in the harbour region.
- The Cottonera Waterfront Redevelopment (5,000 sqm) was undertaken at a total cost of €60 million. This project brought about the restoration of historic buildings, most of which are related to the industrial heritage of the Maltese Islands. The Dock 1 Project, completed in 2015, is located at the site of the main dock areas, which were no longer in use. The project brought about the consolidation of the waterfronts along

Senglea, Cospicua and Vittoriosa into one continuous waterfront. It provides access to the waterfront to the local residents who had been deprived of access to the waterfront and it enhanced the landscape of the area through the re-design of public spaces.

- The impact of the Cruise Terminal project within the redevelopment of the entire Grand Harbour is substantial as it is intended to be a spark for the regeneration of the Three Cities area and the Malta Smart City project. The cruise activities generated by Pinto Wharves Cruise Terminal is very strong: the forecasts for the financial year 2017 raise the bar even higher, with a target of over 700,000 passenger movements through 330 port calls (Valletta Cruise Port plc 2018).

18.4 Implementation

The Ministry for Urban Development and Roads established an ambitious masterplan for the area to be delivered through private finance. The final cost of the Cruise Terminal development project by AP Malta for VISET was €30.5 million. The timeline for implementation of the transformation is below:

Table 18.1: Timeline of Valletta Cruise Liner Terminal transformation

Phase/Year	Action
Phase 1 – March 2002 to April 2003	Construction of a new block to accommodate third party owners. Relocation of Pinto road between the bastions and the rear of the Pinto stores. Emergency repairs to the quay infrastructure on Pinto 1 and 2.
Phase 2 - October 2002 to April 2004	Restoration of the Pinto Stores Facades and the re-building of part of the stores which were destroyed during World War II. The construction of the Maritime Trade Centre - MMA Offices. General improvements of the Ferry Terminal facilities. Establishment of VISET Administrative offices. New Police Station. Formation of the Laguna and other excavation work within the development site.
Phase 3 – October 2003 to December 2005	Internal structural interventions to Pinto 13-19 and Forni Stores. The construction of the Waterfront promenade and the completion of the laguna. Construction of the Forni retail facilities and passenger facilities.
Phase 4 – Nov 2005 to April / May 2007	Restoration of an area to house new check-in for homeport operations. Refurbishment of Pinto 1 and 2 deck and installation of new fenders. Restoration of the Old Power House façade. Construction of a new arrivals' hall at the Pinto Terminal (Ferry Terminal). Internal structural interventions to Pinto Vaults 1 to 6. Completion of the marina entrance at the west-end and bridge construction. The building of the Pinto Departures Lounge and facilities.

Source: Valletta Cruise Port Plc (2019)

18.5 Drivers and Catalysts for Change

A key catalyst for redevelopment was the expansion of the port furthered by the regeneration of waterfront spaces into mixed use areas which co-exist with the port. For instance, the Cruise Terminal project was a significant catalyst for the transformation of the Grand Harbour. It serves as the starting point for the redevelopment activities of the waterfront areas in the various cities overlooking the Grand Harbour. The establishment of a specific Ministry for Urban Development and Roads and the creation of a masterplan and lease terms for public lands created the necessary framework to attract private investment.

19 Resources for further exploration of the sample cities

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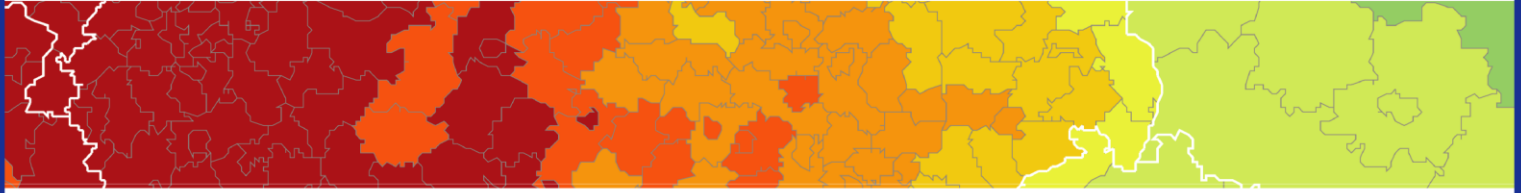
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ISBN: 978-99959-55-35-9

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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.