





DOCKSTHERUTURE defining the concept of "Port of the Future"

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- DTF is a project funded by the European Commission under Horizon 2020.
- As a Coordination and Support Action (CSA) it will support the EC (DG MOVE and INEA) in covering coordination and networking of Research and Innovation projects, Programs and policies.
 - Starting date: January 2018 (implementation time 30 months).







Identify appropriate KPIs ("Key Performance Indicators") and relevant monitoring and evaluation actions

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➤ Leading to the "Port of the Future Road Map for 2030" that will include a number of exploitation elements such as:

- o <u>tools</u> for evaluation and transferability of Port of the Future solutions,
- <u>R&D and policy recommendations</u>,
- o training packages and
- the creation of a "Port of the Future Network of Excellence".













FINANCE - LEGAL - MARKET RESEARCH - IT - OPERATIONS - ENVIRONMENT



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The project is coordinated by **Circle S.p.A (Italy)** as the leader of the Working Group including:

ISL - Institut für Seeverkehrswirtschaft und Logistik (Germany)

Magellan (Portugal)

PortExpertise (Belgium)

University of Genoa (Italy)





DocksTheFuture has already addressed in early stages of the Project:

1. a preliminary research on the "Port of Future" concept;

2. the definition of several "**Port of the Future topics**" to be addressed and their related targets in 2030;

- $\circ \quad \text{Port infrastructure and management}$
- o Accessibility and fulfillment of European standards

- o Integration in the supply chain and synchromodality
- o Environmental concern
- Sustainability
 - Safety and security
 - Digitalisation
 - Port-city relation
 - Port Governance
 - o Human element





3. 136 projects and initiatives, were assessed and clustered according to the criteria.

Criteria of the Type, Data availability, and Types of action. Then some projects added according to the Port Experts from the Project Conference in Trieste

4. To connect the concept of Future Ports with the UN Sustainable Development Goals by 2030, 5 Macro area , with their 36 related-Strategic Objectives were defined



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Second macro area for ports:

2- Community outreach and port-city dialogue



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4. To connect the concept of Future Ports by 2030 with the UN Sustainable Development Goals by 2030 Potential topics

stakeholder management, sustainability reporting, community outreach, city-port relations, employment, education, spatial planning, nature in ports, port culture, externalities of port operations

Relevant UN SDGs







Port of the Future by 2030,

A focus on sustainability and Port-City dialogue





Source: PortForward



Port-city relationship,

the importance of the port function for the city may be different in each situation, allowing to identify three situations in which:

- Port's functions dominate the urban functions (e.g. Rotterdam).
- Port's and urban functions have equivalent importance (e.g. Amsterdam).
- Urban functions dominate the port functions(e.g. New York), the port holds a secondary role in the city.





Developments in port-city relation

- has been an issue for a number of decades
- when ports and cities started to lose their
- mutual interdependence and their
- developments since then has influenced

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each other.





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Developments in port-city relation can be characterized as:

- an increasing rivalry for limited land resources and
- in parallel by a decrease in benefits from ports for their port cities (e.g. in terms of employment) and
- an increase in negative consequences from port operations like environmental impacts and traffic congestions.







In 2018, **AIVP** started collaborating with Docks the Future.



A survey was done in 2018, to understand the priorities of port-city actors, by asking their leaders or top managers.

To do the **survey**, AIVP invited 3500 organizations worldwide, of which 224 responded to the call.

The questions that were formulated in this survey reflect on the dominant topics that have been considered crucial for the port-city relationship either by AIVP or by experts in congresses, academic literature or specialized media.

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Methodology What did we ask?

The survey has 68 questions, structured in five key topics, considering relevant for port-city relationships: spatial organization, environment, society and culture, economy and governance

- 1. Spatial Organization: 17 questions;
- 2. Social Interaction with the local community: 13 questions;

- 3. Environnemental Challenges: 14 questions;
- 4. Economic issues: 11 questions;
- 5. Port City Governance: 13 questions.





Despite the sectorial differences, and tension that may emerge among port and city actors, the survey demonstrates that there is considerable common ground in the main issues like waterfront organization, port expansion, energy or mobility.









Cooperative approach is reflected in other answers in the survey, to develop **hybrid waterfronts**, preparing the local economy to answer to global companies, cooperate to finance projects, or develop the port-city interface to reduce the port nuances.







The concern to reduce port externalities was

visible in several questions, indicating that port city actors, and mostly port authorities, are increasingly aware of the problem.

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The adoption of green technologies is critical to reduce the environmental impact of port operations on port city, and to save resources.

The adoption of some of the following technologies is part of the current debate

among cities and port authorities:

- LNG
- Eolic Off-Shore energy
- Wave energy
- Cold ironing







Mobility was considered an important problem for **spatial organization** in port cities, where there is the added challenge of port generated traffic, either by cargo or passenger.

predilection for

- improving public transport,
- supporting multimodality.
- coordinating traffic plans and
- using smart tech is a top priority, but ports prioritize a sectorial approach, insisting on dedicated infrastructure.







Circular economy was considered the last priority regarding economic

issues,

protecting biodiversity was not among the top-3 environmental issues,

while participatory processes were also the last priority among governance concerns.

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The **ISPS** has been used countless times in conferences and meetings as:

- the main obstacle for accessibility to port areas.
- the fences and controls, and reduce the transparency of port areas



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In conclusion,

- port and city actors are aware of the problems, thinks they are important and show willingness to cooperate and find solutions. The question is then how can this cooperative spirit be translated into concrete actions supported by all actors.
- We cannot rely only on technological innovation to address all challenges related to sustainable development and sustainable port-city relationships.
- It is necessary that the "smart" tech is accompanied by new mindsets and governance structures that can profit from the new tools, otherwise, we risk making changes only superficially, without tackling the core of the problems.







The survey shows :

Although port city actors recognize the importance of several key topics such As sustainability, energy transition, circular economy, or protecting biodiversity emphasized ,

the <u>Economic focus</u> of ports still remains

dominant, not recognizing these new issues

as top priorities. 🚬



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More info available on DocksTheFuture and AIVP,

Thank you very much

