



Businesses and Cities of the Mediterranean

Engines of Innovation, Cohesion and Peace

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Port Development and Urban Mobility in the Mediterranean

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Some Med data

20% of global maritime trade

30% of containerised traffic

2° largest cruise market (21,5%) in the world

39% of of European SSS flows

over 50% of the world's superyachts



90 ports

58% Europe (North side)

42% Africa (South side)



MEDA City



Port transformation

1st Generation

-----/1940

Mechanic Port

Mechanical operation

Handicraft works

2nd Generation

1960

Container Port

Free Zone

Industrial area

Free tax port

3rd Generation

1980

EDI Port

International network

Integrated centre

Commercial area

EDI services

4th Generation

2000

Internet Port

Global Network

Port community

Logistic area

Intermodal services

Internet services

5th Generation

2020

Smart Port

ITS port

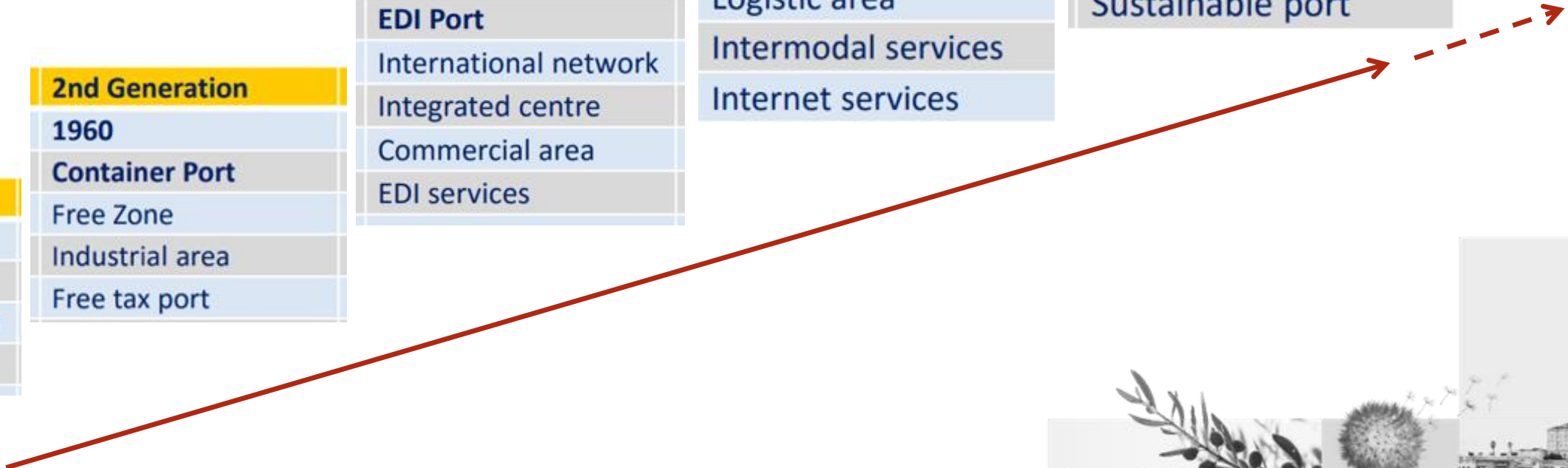
Logistic community

Smart City

Smart Hinterland

Multimodal services

Sustainable port



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The port systems have always been **very slow** to embrace change and innovation

Infrastructural aspects

Tecnological systems

Administrative organization

Economic and manufacturing structures

Environmental and social organization

Reasons

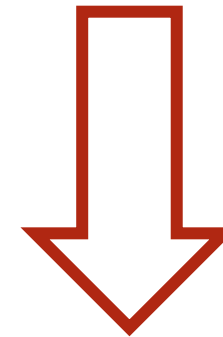
finance

management

heterogeneity

governance

cultural



Slow transition process



The port is transforming into a highly complex system

Transport intermodal hub



Industrial and manufacturing site



Production/storage energy hub



Digital and innovation hub



A large part of a city

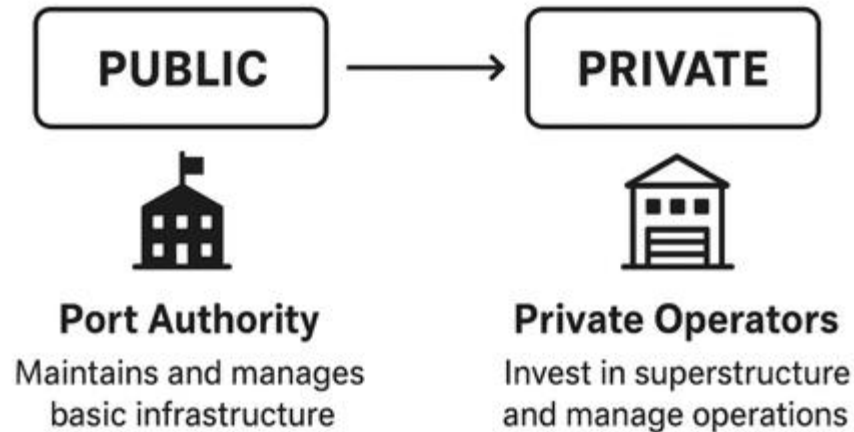


A place for recreation and social interaction



Widely used port governance model

LANDLORD PORT AUTHORITY



Clear and distinct **separation of roles** between public and private bodies

Highly integrated intermodal transport: railways, inland waterways, motorways. Strong automation.

Significant **specialisation of ports**

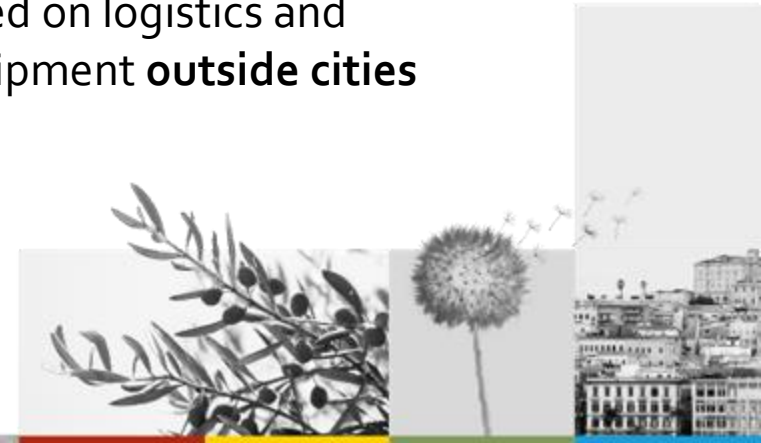
Focused on logistics and transhipment **outside cities**

Northern Range

Several Med ports (especially northern shore)



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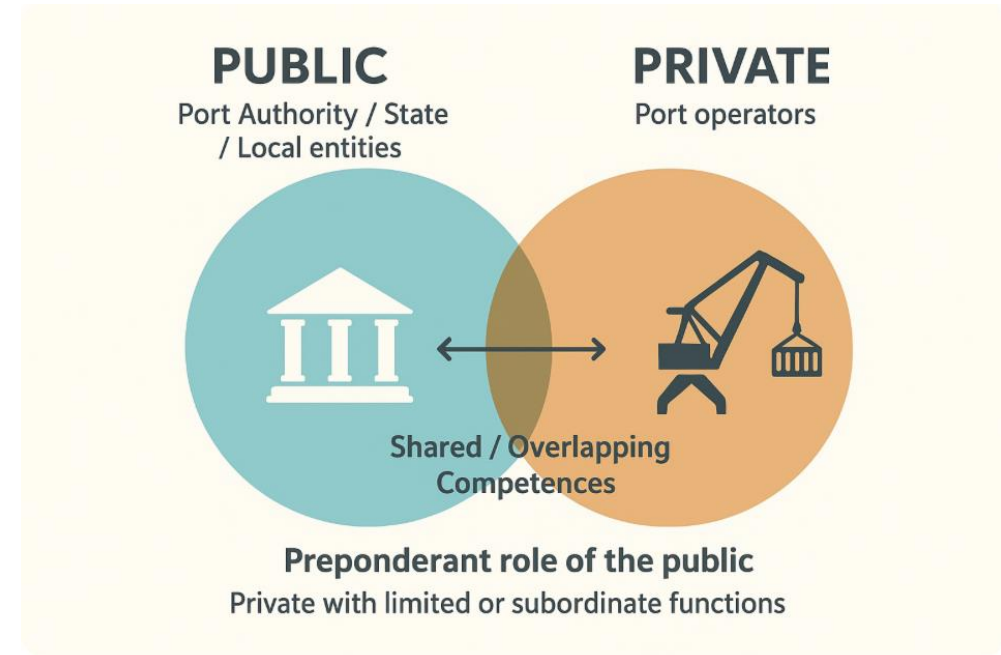
Is there a common model for Med ports?

Strong presence of public authorities,
sometimes also with operational roles.
Overlap of responsibilities.

**Weak or fragmented hinterland
integration,** with less efficient rail and road
infrastructure, smaller hinterland ports

Significant multifunctionality: goods, passengers, ferries,
cruises, fishing, recreational boating, urban activities.

**Strong integration with the urban functions
and high level of local impacts**



Port and city: a compound relationship

For historical reasons, many Med ports are closely integrated with cities.



Port was the real hub, with urban, economic and social functions.

The city and the port were one and the same.

Nowadays, several ports are closely integrated with the city, while others are clearly separated.



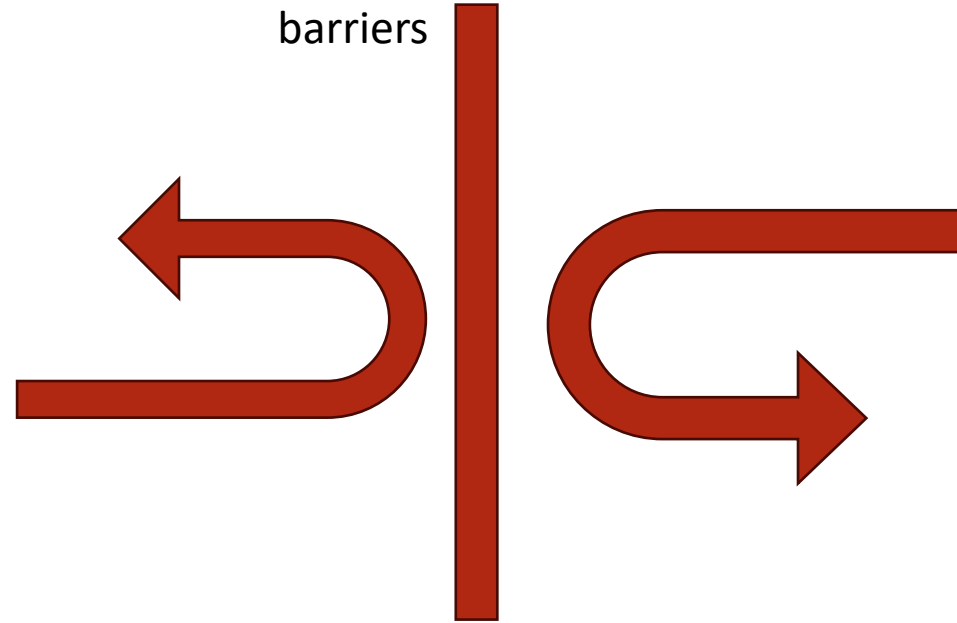
Port and city: a compound relationship

- Residential
- Shopping
- Leisure
- Personal care
- Services
- Land use



city

Physical and functional
barriers



- Freight transport
- Passenger transport
- Freight movement
- intermodal service
- Customs services

Urban area



Port and city: a compound relationship



- Freight
- Manufacturing
- Intermodal
- Trucks

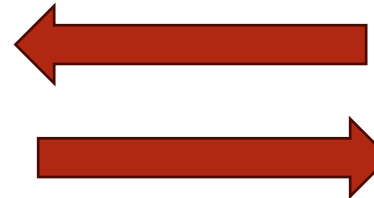
suburban area



- Residential
- Shopping
- Leisure

Central urban area

No barrier



- Passengers
- Yachting
- Cruise



New urban port layout

Passenger traffic remains in the city, especially that related to cruises, SSS ferries, yachting and recreational boating.



The ports need urban proximity, pedestrian accessibility, multi-transport last mile connections and **relations to the urban system**

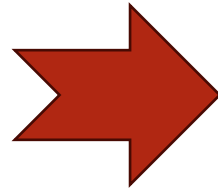
Urban ports are increasingly becoming multifunctional spaces: mobility hubs, seaside squares, urban and tourist attractions.



MFDA City



Waterfronts: from freights to people



What will be the main drivers of change for Med ports in the future?

Smart Ports and high digitalisation

- Digital Twins
- AI and IoT
- Blockchain
- New PCS
- Automation/Robotics
- Simulation

Sustainability and ecological transition

- Renewable sources
- Cold ironing
- Green infrastructure
- New fuels and engines
- Saving energy

Safety and Security

- Integrated controls and responsibilities
- Cooperation between countries
- Cybersecurity
- Training and Human Factors



What are the new challenges for these urban ports?

New planning approach	→	Co-planning Port Authority and Municipality. New governance.
High level of accessibility	→	Promoting active mobility and integration with PT
Sustainability	→	Emission reduction measures, green spaces, land use integration
Financial resources	→	New PPP approach



Thank you

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