#### Port de Barcelona:

Towards a more efficient and sustainable European logistics model:

The role of Mediterranean ports

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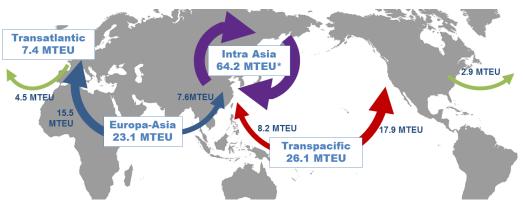
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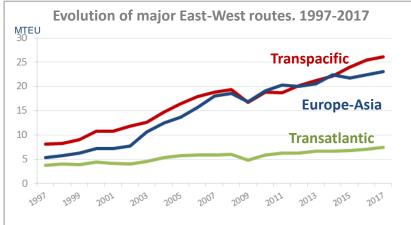
Global logistics trends and the new role of Mediterranean ports

2 Why today intermodality is vital for a Port's strategy?

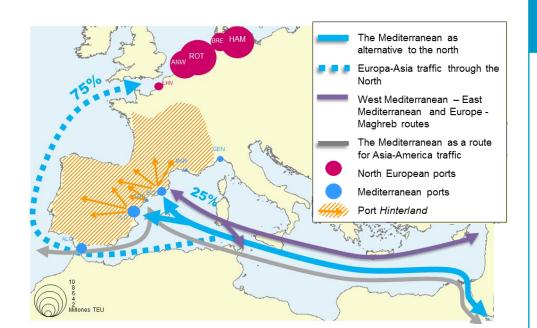
**3** Present and future challenges

#### The role of Mediterranean ports in a sustainable and more efficient logistics





Source: UNCTAD, Review of maritime transport 2017. \*Drewry Maritime Research 2017 (2016 Data)



#### **Advantages of Mediterranean ports:**

- Reduction of navigation days, CO<sub>2</sub>&NOx emissions. Reduction of emissions up to 20% aprox in the Far East-Europe route
- Reduction of logistics costs
- Slows steaming: better transit time through the Mediterranean
- Reduction of congestion in Northern European infrastructures
- Take advantage of the Mediterranean and North and West African potential
- Improved infrastructures to berth the biggest containerships.



#### What does BARCELONA offer as an Euro- Mediterranean distribution center?

## Biggest industrial & consumption in the MED & Southern Europe



Logistics specialization

Packaging REVERSE LOGISTICS specialised transport services
E-FULFILMENT CLASSIFICATION
JIS GPS tracking GHS regulations
AIR REAL-TIME INVENTORY SYSTEMS
GROUPAGE IRONING SUPPLY
ONLINE TRACK & TRACKS
Supply chains handling and storage
RE-BRANDING PICKING CAR WASHING
REPAIRS PICKING CAR WASHING
REPAIRS PICKING CAR WASHING
REPAIRS PICKING SUPPLY
ACCESSORIES handling of fragile goods
Polsecurity system belivery and consolidation
ACCESSORIES handling of fragile goods
Polsecurity regulations
WAREHOUSING (150 9001, 150 14001, 015A5 18001)
CLP Spare parts management
distribution transport on hangers JT
delivery outlets CUSTOMER ORDERS RECEPTION

### Distribution capacity to Europe/MED/Africa



### An integrated logistics hub with port, airport and logistics facilities



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#### The Port of Barcelona's mission

"To contribute to the competitiveness of the customers of the Port by providing efficient services responding to their needs for maritime transport, land transport and logistics services"

- 1. Competitiveness of shippers, industries, logistics operators & shipping lines.
- 2. Attraction of new industries & distribution centers.



#### Connectivity: efficient maritime connections with foreland & Mediterranean

Weekly connections with all main world ports

Regular, frequent & direct container services

Main maritime routes from Barcelona (direct container services):	
MAIN MARITIME ROUTES	Number of services from / to Barcelona
Europe – Far East	4
Europe – Indian Subcontinent	2
Europe – Middle East	10
Europe – Africa	26
Europe – North America	8
Europe – Central & South America	9
Mediterranean	47

Almost 100 regular shipping lines
Operated by 54 shipowners
connecting Barcelona with 209 ports

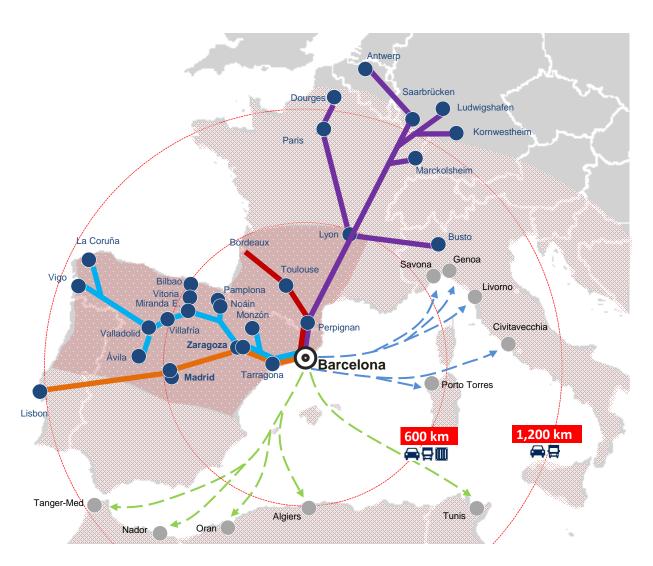
PORT DE
BARCELONA
ABIU NHAVA HONG
CARTAGENA
ABIDIAN
SANTOS

#### **Network of maritime services in the Mediterranean**





#### Location of Port of Barcelona customers and hinterland



























- Intermodal terminals connected to the port by rail (containers and vehicles)
- Ports currently connected to the port by Motorways of the Sea

#### **Strategic corridors**

- Iberian North Western
- Iberian Central
- Southern France
- Central European
- Motorways of the Sea with Maghreb
- Motorways of the Sea with Italy



#### Competitive logistics chain through the Port of Barcelona

China



#### **Barcelona**



#### **Madrid**





World

### Saturday 08:00

Container ship arrives at the Port of Barcelona.
Containers are unloaded and transferred to the train (Sunday 01:00)

### Sunday 06:00

Cargo train leaves the Port destination Madrid

#### Sunday 16:00

Cargo train arrives to Azuqueca intermodal terminal (Guadalajara, Madrid)

#### 18:00

Trucks pick up containers and transport them from the terminal to the nearby distribution centre In Madrid

### Monday 10:00

From the distribution center the pieces of clothing are shipped throughout the world













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# What are the challenges in an end to end supply chain driven market which need to be considered?

### Digitalisation







Connected vehicle
Sustainable transport
Autonomous transport
Intermodality and syncromodality
Smart traffic management
Mobility management
Connected infrastructure roads and rails
Advanced parking

Transparency
e-Administration
Security
Cybersecurity
Business models
Digital platform
Enabling tech
Strategy and management



Circular economy Pollution reduction Waste management Energy efficiency Energy production Water management Alternative fuels Biodiversity

Port city
Passengers
Port heritage
Diversity
Social cohesion
Nautical cluster
Training and knowledge





Economic impact
Competitiveness
Employment
Routes and connections
Open innovation
Cost reduction
Financing



Port de Barcelona



# What are the challenges in an end to end supply chain driven market which need to be considered?

### Sustainability



- Improve air quality: electrification, more sustainable fuels(LNG), multimodality, energy generation and smart grids)
- Improve the quality of ports waters
- Make efficient use of resources
- Prevent soil contamination
- Generation of renewable energy



#### Increase the sustainability of the supply chain that uses the Port

- Promote more sustainable forms of transport
- Reduce the carbon footprint of port activities
- Promote the use of alternative fuels for the different forms of transport: LNG



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Thank you.