

Barcelona, 25th April, 2016



Session II: Ports and Infrastructures

The Spanish Ports System

Álvaro Rodríguez Dapena

Technical Director

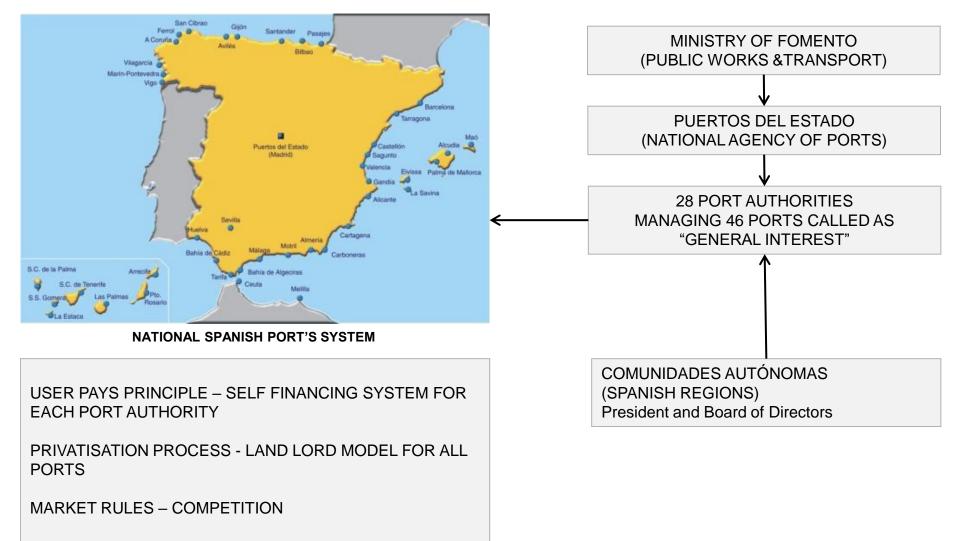
Puertos del Estado



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SPANISH NATIONAL PORTS

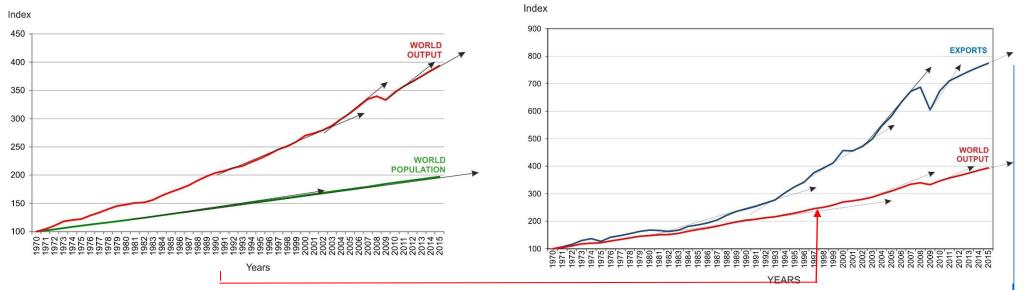




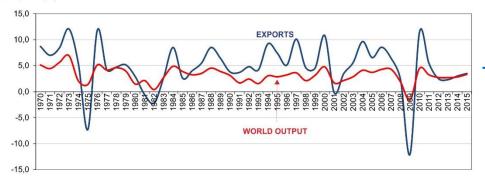
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POPULATION, ECONOMY AND TRADE IN THE WORLD (I)



Yearly rates (%)



Source: World Bank, WMF, OECD, UNCTAD 2015

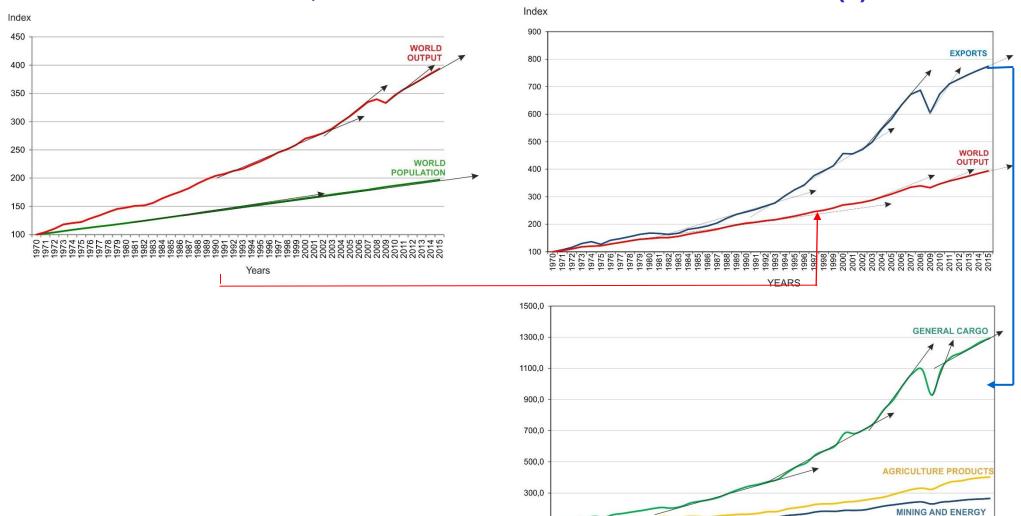
World Output (Real GDP at market prices); Exports in tons



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POPULATION, ECONOMY AND TRADE IN THE WORLD (II)



100,0

Source: World Bank, WMF, OECD, UNCTAD 2015

World Output (Real GDP at market prices); Exports in tons

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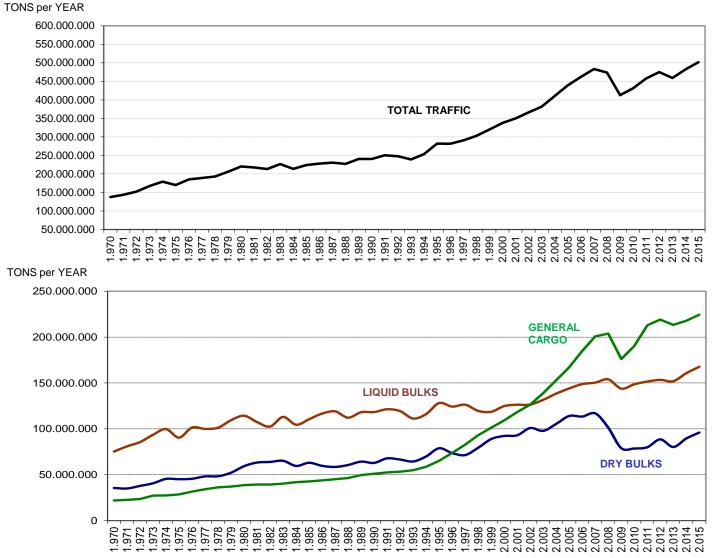


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SPANISH PORT'S TRAFFIC EVOLUTION SINCE 1970





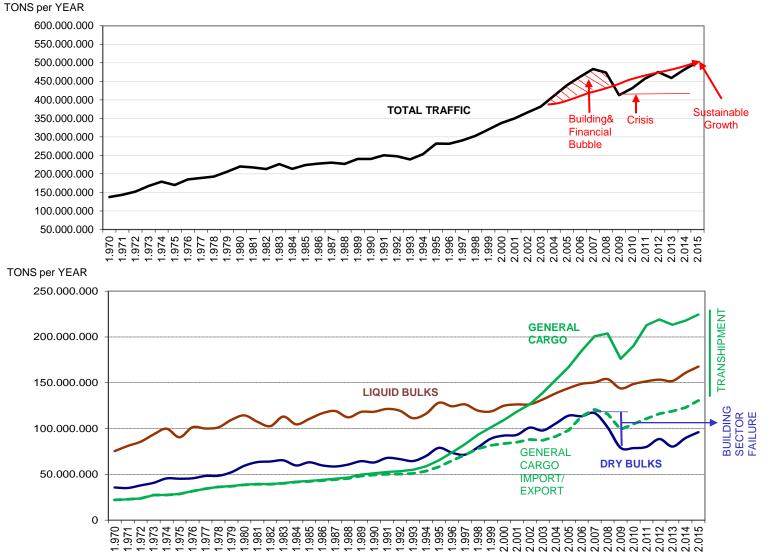


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SPANISH PORT'S TRAFFIC EVOLUTION SINCE 1970



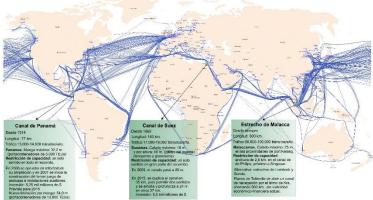




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DEEP SEA (I). CONTAINERS FLOWS REVOLUTION



Feeder (1960) 500 TEUs 8.000 TPM 140 x 17 x 9,0

Eeeder (1968) 800 TEUs 10.000 TPM 200 x 20 x 9,0

Handy (1972) 1.500 - 2.500 TEUs 20.000 TPM 215 x 24 x 11,5

Panamax (1980) 3.000 - 3.500 TEUs 40.000 TPM 250 x 32 x 12,5

Panamax (1985) 3.500 - 4.500 TEUs 50.000 TPM 285 x 32 x 12,5

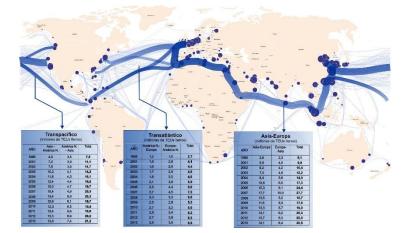
Post Panamax (1988 4.500 - 5.000 TEUs 60.000 TPM

Post Panamax (1999 6.000 - 8.000 TEUs 80.000 TPM 300 x 43 x 13.5

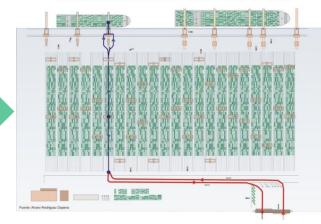
PostPanamax plus (2006) 12.500 TEUs 120.000 TPM 370 x 50 x 14

SuperPostPanamax (2010) 15.000 TEUs 150.000 TPM 395 x 56 x 14,5

Triple E (2014) 18.000 TEUs 195.000 TPM 400 x 59 x 14,5



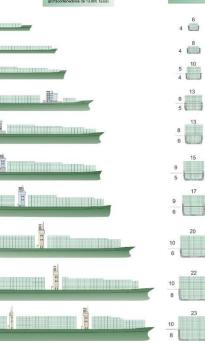
Transferencias horizontales en terminal automatizada. ASC + shuttle carrier. Acceso camiones hasta el patio



TWO EXAMPLES IN SPAIN

- BEST TERMINAL IN PORT OF BARCELONA (HUTCHINSON)

- TTI TERMINAL IN PORT OF ALGECIRAS (HANJIN)



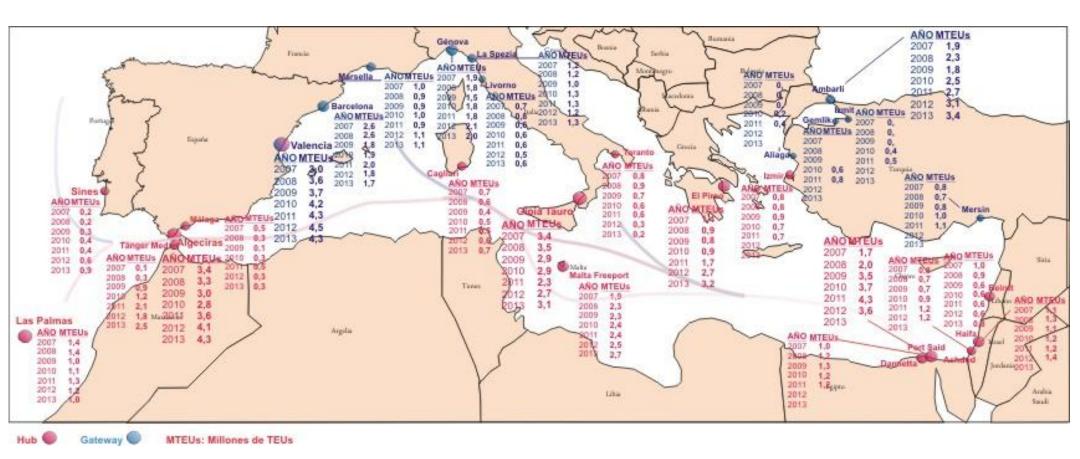




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DEEP SEA (II). PORTS TRAFFIC. MARKET COMPETITION



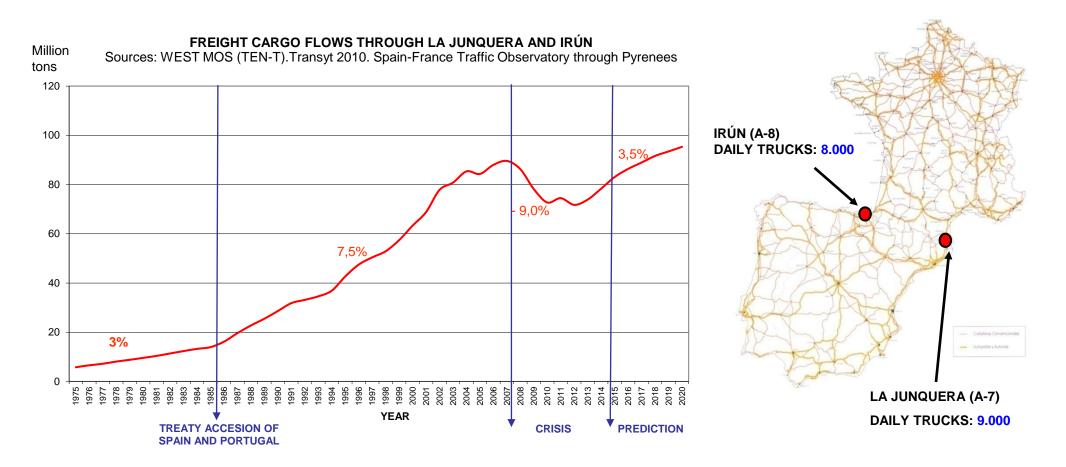


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SHORT SEA (I): SHIPPING AND MOTORWAYS OF THE SEA

TRANSFERING CARGO FROM CONGESTED ROADS. EXAMPLE: PYRENEES ROAD SECTIONS.





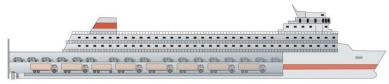
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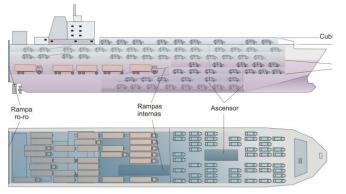
SHORT SEA (II): SHIPPING AND MOTORWAYS OF THE SEA

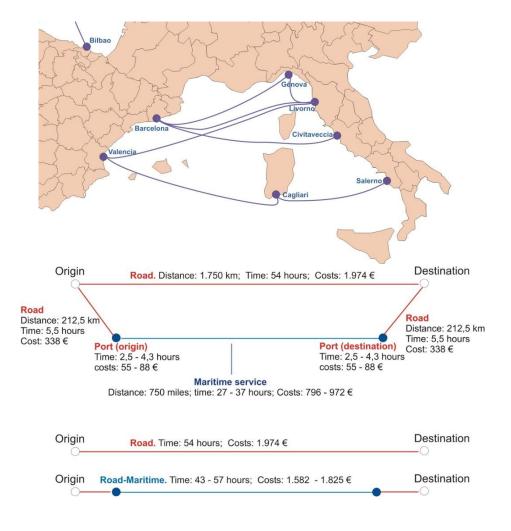
NEWORK OF SSS/MoS SERVICES WITH TWO OPTIONS:

1. TRUCKS WITH DRIVER



2. SEMI-TRAILERS AND PLATFORMS







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SHORT SEA (III): SHIPPING AND MOTORWAYS OF THE SEA

CONSORTIUM

COORDINATOR: PUERTOS DEL ESTADO

Four states:

Spain, MINISTERIO DE FOMENTO. PUERTOS DEL ESTADO

France

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE ET DE L'ÉNERGIE

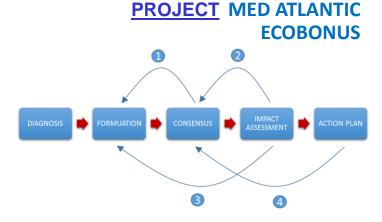
Italy

MINISTERO DELLE INFRASTRUTTURE E DEI TRASPORTI. RAM.

Portugal

INSTITUTO DA MOBILIDADE E DOS TRANSPORTES, I.P





ACTIVITY	DESCRIPTION	LEADER
ACTIVITY 0	Project Management	-
ACTIVITY 1	Background Information and Diagnosis	
ACTIVITY 2	Scheme Formulation	1
ACTIVITY 3	Scope and Consensus	漸
ACTIVITY 4	Impact Assessment and Programme	- E i
ACTIVITY 5	Dissemination	O

BUDGET:

Total: 1,93 M€ European fund: 0,965M€

PERIOD:

2015-2017

Expected results:

Mechanism to provide public aids to MoS demand

Based on:

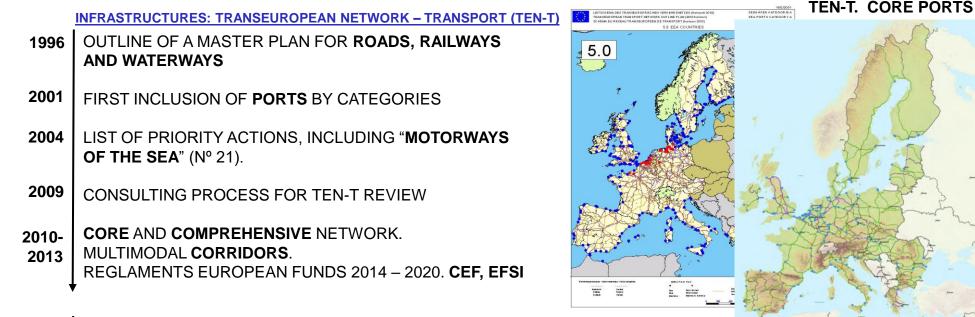
- Market study
- Financing requirements
- Juridical procedures
- Technology for implementation



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COMMON TRANSPORT POLICY. TEN-T AND MARKET



SERVICES. REGULATION.

Since 80s EU DIRECTIVES AND REGLAMENTS DRIVEN TO PROMOTE AND GUARANTE FREE AND FAIR COMPETITION WITHIN THE MARKET, IN ORDER TO ALLOW PRIVATE COMPANIES TO ACCESS TRANSPORT SERVICES PROVISION WITHOUT ANY KIND OF DISTORTION MARKET ACCESS TO PORTS SERVICES AND FINANCING TRANSPARENCY FOR PORTS.

PUBLIC FINANCING OF TRANSPORT INFRASTRUCTURES & SERVICES

INCLUSION OF EXEMPTIONS PROVISIONS FOR PORTS AND AIRPORTS IN THE COMMISSION REGULATION DECLARING CERTAIN CATEGORIES OF AIDS COMPATIBLE WITH THE INTERNAL MARKET IN APLICATION OF ARTICLES 107 AND 108 OF THE TREATY. (GENERAL BLOCK EXEMPTION REGULATION).



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PUBLIC & PRIVATE SECTORS' ROLE IN PORTS

Public sector

Private sector

Regulator

Responsible of "public interest". Control of "public domain". Active application of rules Co-operation with other public regulators Assistance to port community to comply rules Providing expertise ouside the port

Planner

Development of port integrated in European/National/regional/local plans based on comercial basis with financial support with an optimal allocation of public resources. Assistance for implementation and maintenance. Environmental. Sustainable development.

Facilitator

Active "real estate" broker, based on a dynamic use of land. Provide services of general economic interest. Shareholder in PPP projects. Port charges and quality/risk control with different options for sustainability Training, R&D, ICT support...

Operator

Efficiency in port operations. Labour and equipment management. Interoperability with maritime and land transport.

Services provider

Fulfil demand requirements on ports services under competitition with high quality/cost ratio. Port involved in global logistic network Integration in port community, based on an active participation using ICT.

Developer

Provide financial resources, assuming risks Provide technology. Contribute to sustainability.



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PUBLIC & PRIVATE SECTORS' ROLE IN PORTS

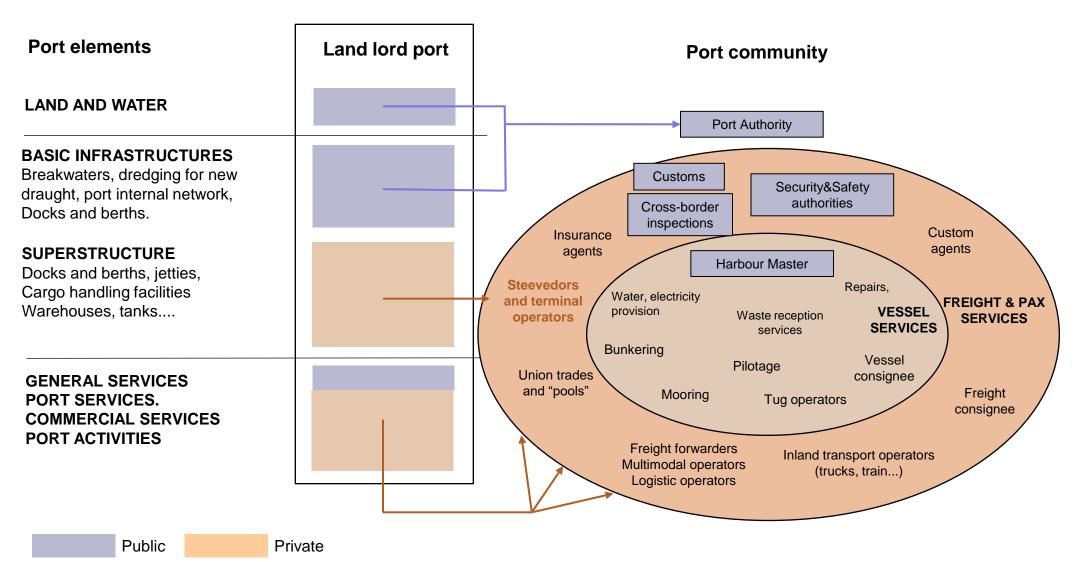
Port elements	Public (tool port)	Land lord port	Private	General trend
LAND AND WATER				PUBLIC
BASIC INFRASTRUCTURES Breakwaters, dredging for new draught, port internal network, Docks and berths.				
SUPERSTRUCTURE Docks and berths, jetties, Cargo handling facilities Warehouses, tanks				
GENERAL SERVICES PORT SERVICES. COMMERCIAL SERVICES PORT ACTIVITIES				PRIVATE



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LAND LORD PORT. PORT COMMUNITY





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PUBLIC & PRIVATE SECTOR'S ROLE. PORT CHARGES IN SPAIN.

Port elements	Land lord port			Port charges 1 TEU (%)	Annual investments (Mill €) Average last 5 years
LAND AND WATER		General port	dues Tax	15	550
BASIC INFRASTRUCTURES Breakwaters, dredging for new draught, port internal network, Docks and berths.		Taxes Land lease8 similar char		5	
SUPERSTRUCTURE Docks and berths, jetties, Cargo handling facilities Warehouses, tanks		Technical nautical serv Cargo hand	Dist	12 51	550
GENERAL SERVICES PORT SERVICES. COMMERCIAL SERVICES PORT ACTIVITIES		Tariffs Waste recept from vessels Rest		2	
			Total	100	1.400



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PUBLIC & PRIVATE SECTOR'S ROLE. PORT FINANCE IN SPAIN.

Port elements	Land lord port		nual investments (Mill €) erage last 5 years
LAND AND WATER BASIC INFRASTRUCTURES Breakwaters, dredging for new draught, port internal network, Docks and berths.		Taxes General port dues Land lease& similar charges General port dues NO PROVISIONS FROM NATIONAL/REGIONAL/LOCAL BUDGET SELF-FINANCING SYSTEM	550
SUPERSTRUCTURE Docks and berths, jetties, Cargo handling facilities Warehouses, tanks		Technical nautical services "USER PAYS" BUT WITH EUROPEAN FUNDS Cargo handling	550
GENERAL SERVICES PORT SERVICES. COMMERCIAL SERVICES PORT ACTIVITIES		Tariffs Waste reception from vessels Rest	



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PUBLIC & PRIVATE SECTOR'S ROLE.

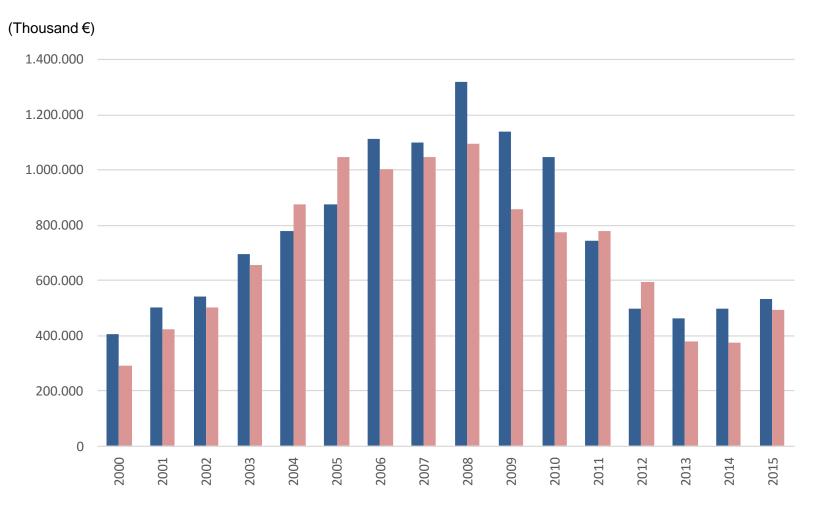
Port elements	Land lord port	Administrative port figures in Spain
LAND AND WATER		
BASIC INFRASTRUCTURES Breakwaters, dredging for new draught, port internal network, Docks and berths.		
SUPERSTRUCTURE Docks and berths, jetties, Cargo handling facilities Warehouses, tanks		
GENERAL SERVICES PORT SERVICES. COMMERCIAL SERVICES		Authorisation/CONCESSION LICENSES FOR LAND/PUBLIC ASSETS USE FOR PROVIDING A PORT SERVICE
PORT ACTIVITIES		RULES:RULES:Specific land uses and minimum traffic Minimum investment, maximum durationMinimum human and material resources, Prices and quality of service, maximum duration, public service oblig.



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INVESTMENTS IN SPANISH PORTS

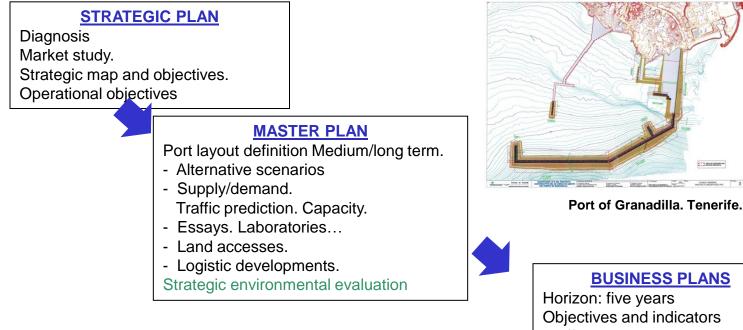




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PUBLIC INVESTMENTS IN SPANISH PORTS





Port of Bilbao expansion



Coruña Port. Operational simulation Physical analysis



Almería Port. Operational simulation Numerical analysis

Objectives and indicators Traffic predictions Budget: revenues, expenses; origins and applications **Investment Plans** Sustainability Reports **Eco-sustainability** objectives & indicators

BUSINESS PLANS



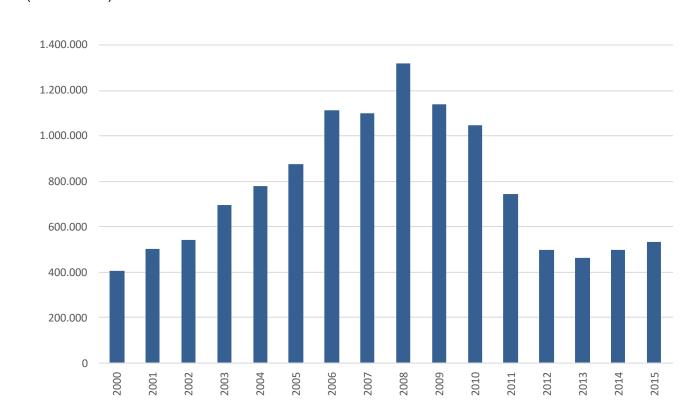
PROJECTS Basic infrastructures Cost/benefit & functional analysis Environmental evaluation



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PUBLIC INVESTMENTS IN SPANISH PORTS



Investments (Thousand €)

IN THE LAST 20 YEARS...

+ 30 km. of new breakwaters

Maritime terminal capacity in Spanish ports has been multiplied by 2,5.

...But not relevant new or upgrade land connections to ports, which are still pending...

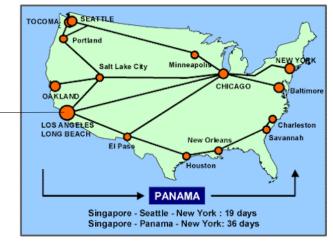


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RAIL-MARITIME INTEGRATION (1)

UNITED STATES

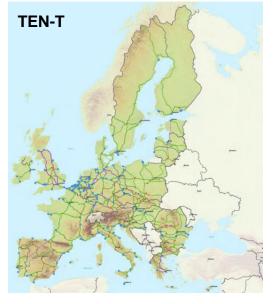


RAIL LAND BRIDGE DOUBLE STACKED CONTAINERS IN TRAINS MAX. LENGTH: 1.500 m.



LOS ANGELES & LONG BEACH PORTS CONNECTED THROUGH ALAMEDA CORRIDOR

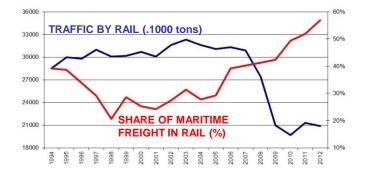
EUROPE





SPAIN





HAMBURG PORT EUROGATE TERMINAL

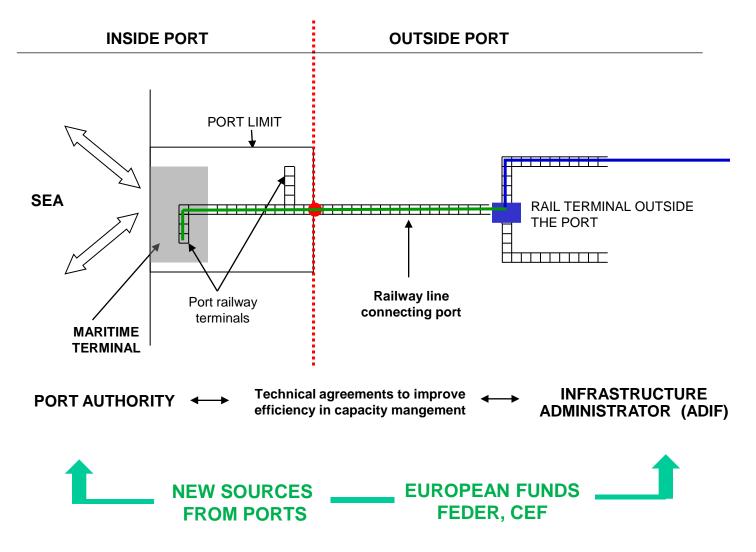


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RAIL-MARITIME INTEGRATION (2)







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RAIL-MARITIME INTEGRATION (3) NEW FUNDING FACILITY

Objective: To incorporate in Spanish ports investments plans, projects for upgrading road and rail corridors and sections linked directly to ports, with measurable effects on prices and level of service of land transport services devoted to maritime cargo. Those eligible projects could be classified into two groups:

Last mile projects, - Projects on road and rail network,

New regulation obligates Puertos del Estado and Port Authorities to provide to the new Fund a **mandatory contribution** payable during 5 years, estimated as a predetermined percentage of their net profits. Now:

50% for ports inside Iberian Peninsula - 25% for ports located outside Iberian Peninsula.

This rule applies each year for Puertos del Estado and all Port Authorities with positive net profits and significant working capital (more than 150% of corresponding provisions).

If Port Authority invests in eligible projects using their own resources, then **mandatory contributions could be compensated with investments**. Accordingly to this, it is possible for Port Authorities with positive results to avoid also contributions. They have only to deploy resources to improvements of land network connected to their ports. This is the way for pushing Port Authorities to focus the attention on land side, instead of maritime side, highly equipped with infrastructures in most cases.

- Mandatory contributions to this Fund, and also voluntary ones, are considered by Fund as credit obligations to be returned based on floating interest rates. Port Authorities will recover mandatory contributions through regular payments made by the Fund during 20 years with 3-years grace period.
- By other side, Puertos del Estado and Port Authorities can take to the Fund to apply for a loan devoted to investment projects in road or rail connections to ports. The credit will be refunded to Fund also based on floating interest rates, and during a maximum period of 20 years with no more than 3-years grace period.



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RAIL-MARITIME INTEGRATION (4) NEW FUNDING FACILITY

All credit terms and eligible projects are decided by a Committee of representatives of Puertos del Estado and all Port Authorities (29 members).

- July 2015: First meeting of the Committee
- December 2015: Second meeting of the Committee.

2015 AGREEMENTS: 29 projects has been unanimously agreed achieving a total amount of 466.7 M€ (million euros) until 2019.

- Last mile projects: 377.5 M€ (352.2 M€ rail and 25.3 M€ road)
- Upgrading actions only on some rail corridors: 89.2 M€ will.

New Fund will cover 425.4 M€ and the rest will be financed by CEF/TEN-T or FEDER funds.

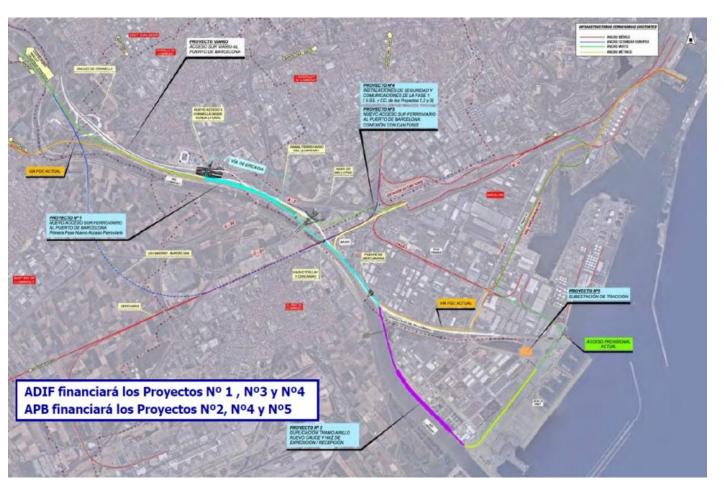


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RAIL-MARITIME INTEGRATION (5)

Example: NEW RAIL CONNECTION TO PORT OF BARCELONA



PORT AUTHORITY CONTRIBUTION: 117,2 M€ CEF – TEN-T: 13,967 M€ PORT FUNDING: 103,233 M€



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REINFORCING THE LOGISTIC FUNCTION OF PORTS.

EXISTING MAIN DRY PORTS IN SPAIN

PLAZA Y TMZ en Zaragoza San Cipriá FRANCIA Abroñigal, Coslada y Azuqueca en Madrid Carboneras Bahía de C Example in Spain of *dry port:* • Algeciras Tarifa . PUERTO SECO DE MADRID COSLADA rail terminal for maritime containers

LOGISTIC ACTIVITIES ZONES

ZAL OF PORT OF BARCELONA





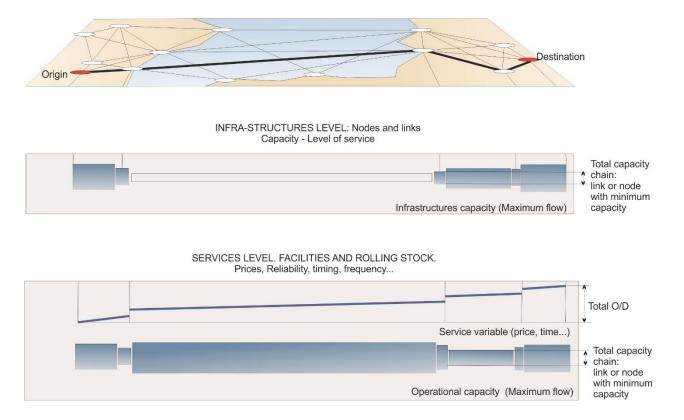
ZAL OF PORT OF SEVIILLA



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IMPROVING LOGISTIC CHAINS....



INFO-STRUCTURES LEVEL: LINKS BETWEEN AGENTS (ICT) Single window



Links between agents. Agreements, Contracts - Confidence - Compromises



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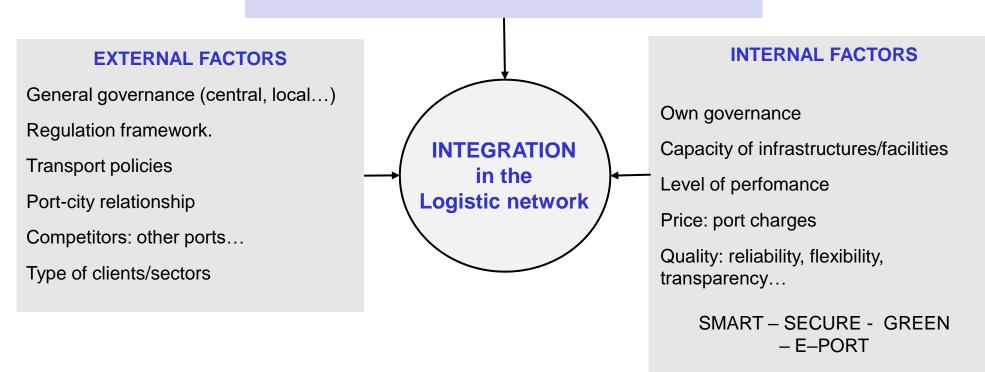


PORTS COMPETITIVENESS

LOCATION AND ACCESIBILITY FACTORS

Production&consumption áreas (hinterland&foreland)

Logistic&transport corridors/chains





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The INTERNATIONAL PROPELLER CLUBS

Grazie!, Gràcies!, Gracias!