

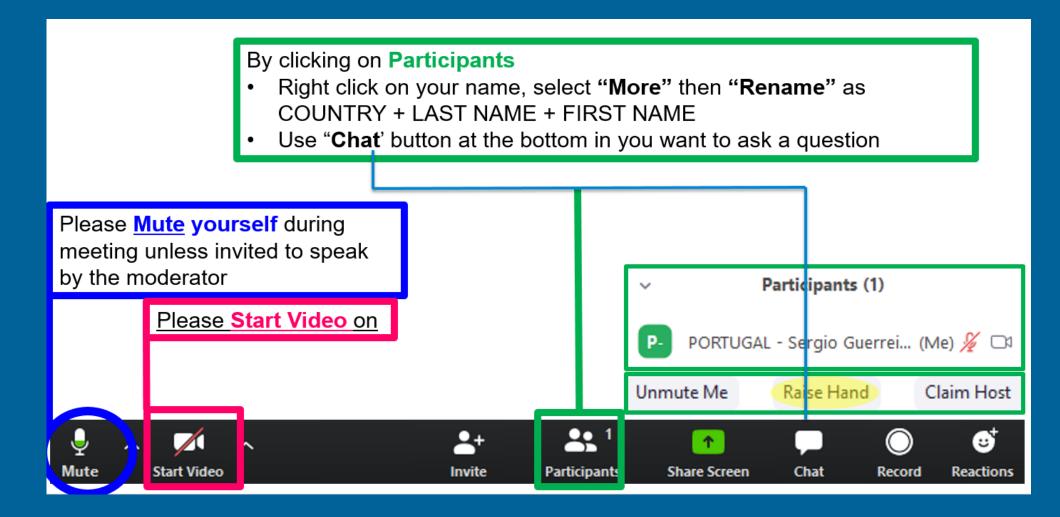
# MAKING PORTS AND LOGISTICS NETWORKS AND AN ASSET FOR REGIONAL DEVELOPMENT





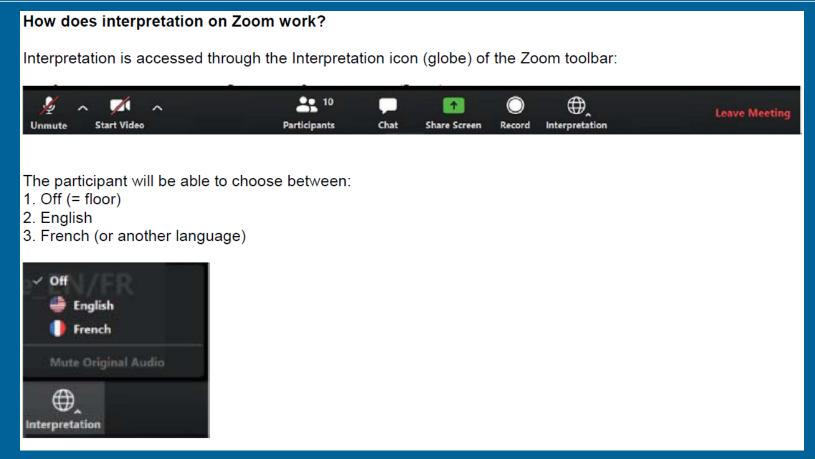








# Zoom interpretation



Disclaimer: Interpretation of remote meetings on Zoom serves to facilitate communication and does not constitute an authentic record. Only the original speech is authentic. Interventions that are too fast or read out or where the sound quality is insufficient may have to go uninterpreted.



# Opening Remarks



Claire Charbit

Head of Territorial Dialogue and Migration Unit

OECD Centre for Entrepreneurship, SMEs, Regions & Cities (CFE)

OECD



**Olaf Merk**Project Manager Ports and Shipping
International Transport Forum (ITF)
OECD



Bruno Delsalle General Manager International Association of Ports Cities (AIVP)



# Panel 1 - The links between types of ports and regional development: What demand for what type of ports?



William Friedman
CEO, Port of Cleveland



Ireland
Liam Lacey
Director, Irish Maritime
Development Office



Portugal
Ana Rita Rosa
Director, Systems, Planning and
Communication
Ports of Sines and Algarve Authority



Colombia
Jonathan Bernal
Director for Infrastructure,
National Planning
Department DNP



# Panel 2 - Connecting ports with hinterland regions for inclusive and sustainable development



Anna Bottasso
Professor and Director of the Phd
program in Economics,
University of Genoa UNIGE



France
Arthur Marronnier
Head of Development of Major French
Ports



Spain
Cristina Barahona
Managing Director of the Ports of
the Balearic Islands
(Ports de les Illes Balears)



Ireland
David Minton
Director, Northern and
Western Regional
Assembly



# Conclusions: A development perspective



**Sebastián Nieto Parra**Head of Latin America and Caribbean Unit
Development Centre (DEV)
OECD



# Thank you! / Muchas gracias! / Merci Beaucoup!

# **OECD Centre for Entrepreneurship, SMEs, Regions & Cities (CFE)**

- Claire Charbit claire.charbit@oecd.org
- Peter Haxton peter.haxton@oecd.org
- Maya Camacho <u>maya.camacho@oecd.org</u>

### **International Transport Forum (ITF)**

Olaf Merk - Olaf.MERK@itf-oecd.org

## **OECD Development Centre (DEV)**

- Sebastián Nieto Parra <u>sebastian.nietoparra@oecd.org</u>
- Laura Buchet <u>laura.buchet @oecd.org</u>





# A volatile global environment renders logistics networks ever more important



## Crisis after crisis

- 2008/9
- COVID-19
- War in Ukraine



# Supply chain disruptions

- Transportation costs rise
- Shortage of necessary goods



# Volatility in trade, markets

- Soaring energy prices
- Cost of key commodities on the rise



# Regional attractiveness indicators: why and for whom?

Regional data is important for developing a tool for promoting territorial development towards various targets.

The approach aims to provide an analytical framework support policy makers at different levels of government

### **INVESTORS**

The concerns of investors – and exporters - to locate in a territory conducive to the development of their activities concern research and innovation, but also the availability of infrastructure, land, digital connectivity and skills.

### **TALENT**

The demands of talent in terms of employment, but also in broader terms of "well-being", such as access to health care and education for themselves and their families and cultural and environmental amenities

### **VISITORS**

Visitors outlook regarding cultural and natural capital and the availability of services for tourism activities.

### **POLICY-MAKERS**

Policy-makers who seek to diagnose which assets can be promoted to attract the aforementioned targets, and which key development opportunities can be exploited to promote inclusive, economic and sustainable development though the internationalisation of their region

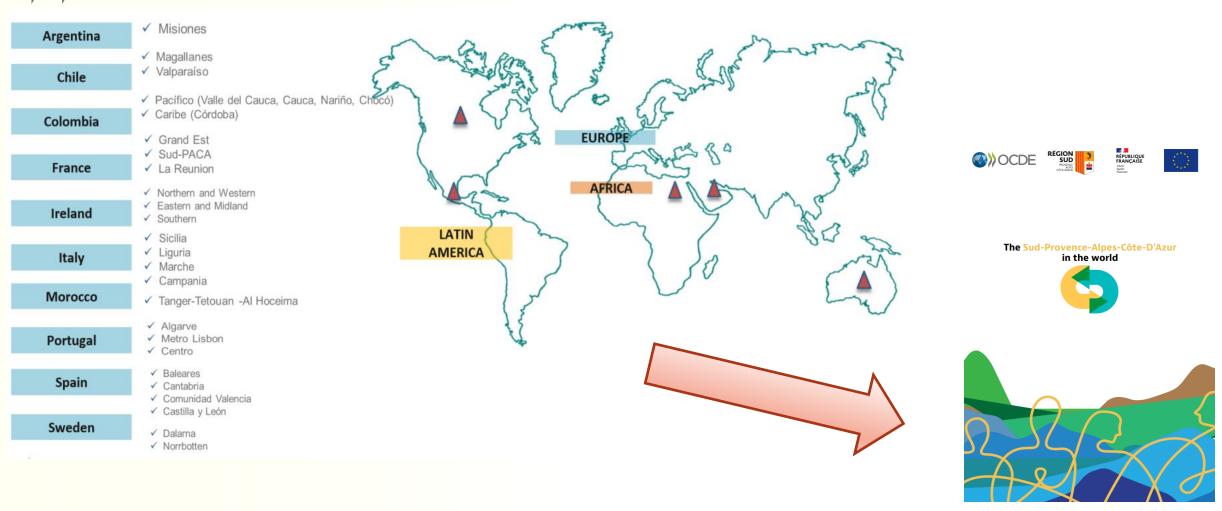


A regional approach to attractiveness



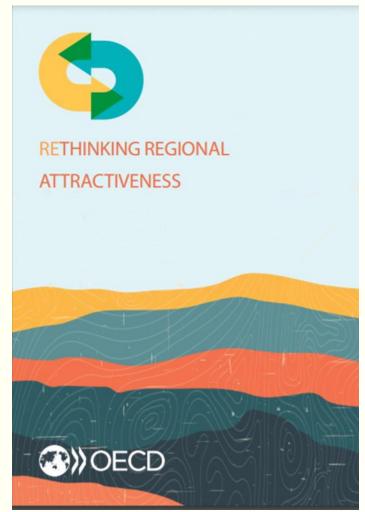


# **A Growing Community of Practice**





# Thank You!



https://www.oecd.org/fr/regional/globalisation.htm

# Rethinking Regional Attractiveness Series

Making Ports and Logistics Networks an Asset for Regional Development



Liam Lacey
24 May 2022

# Changing role of ports at national and regional level

What are the drivers of change?

- 1. Environmental concerns
- 2. Congestion at larger, hub ports
- 3. Indigestible parcel sizes (is the rise in parcel sizes inexorable?)
- 4. Ports as energy hubs (offshore renewable energy and alternative fuels)
- 5. Ports as hubs for business building supportive eco-systems and clusters
- 6. Desire for balanced regional development

These messages are articulated strongly and clearly in the Atlantic Strategy



# Regional ports as energy hubs

What do we mean by regional?

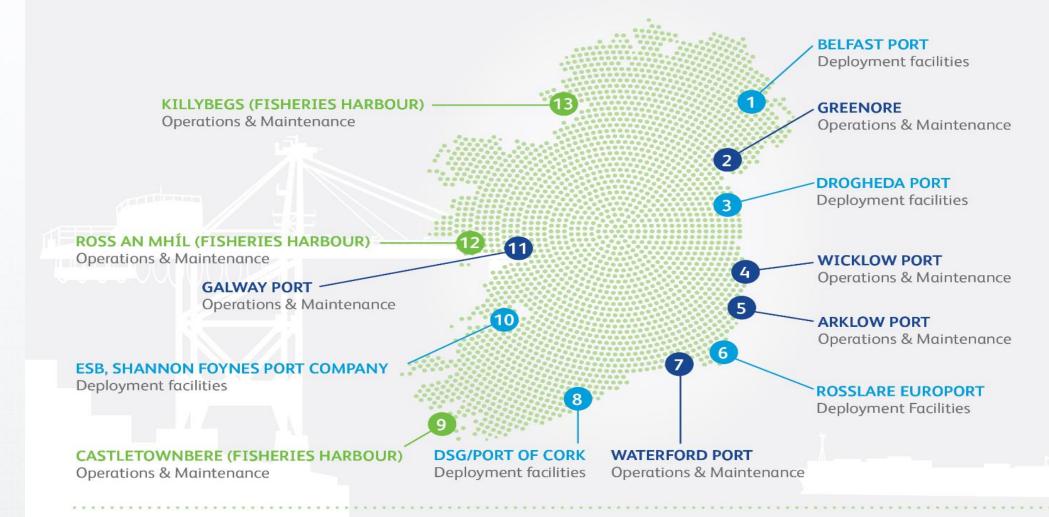
**Need for different funding mechanisms** 





# Role of regional ports in offshore renewable energy

Natural resources are regionally dispersed

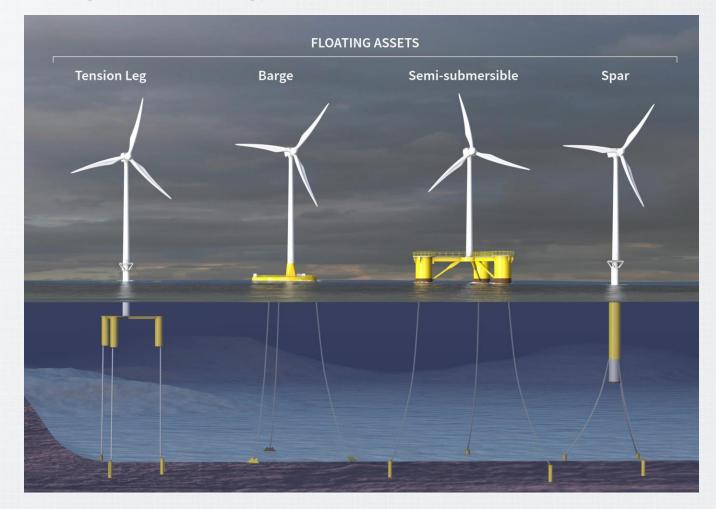




# Role of regional ports in offshore renewable energy

Opportunities at all points in the value chain (floating wind technology)

- 1. Construction and deployment
- 2. Operations and maintenance
- 3. Supply chain
- 4. Ports as hubs for business
- 5. Choice of technology





# Example of regional development Atlantic Strategy (Action Plan 2.0 – 2019 to 2024)

The Atlantic Sea Basin – Ireland, France, Spain and Portugal

The main objective of the Atlantic Action 2.0 is to unlock the potential of blue economy in the Atlantic area while preserving marine ecosystems and contributing to climate change adaptation and mitigation. Its aims are in line with the global commitments for sustainable development

- A European Green Deal
- An Economy that works for people
- A stronger Europe in the world.

The development of regional ports is at the heart of the plan.

Specifically, the Atlantic Action Plan seeks to:

- Develop the TEN-T Motorways of the Sea in the Atlantic
- Create a network of green ports by 2025
- Foster short-sea shipping links in the Atlantic area to better integrate Ireland
- Launch an Atlantic strategy on liquefied natural gas
- Develop eco-incentive schemes to upgrade port infrastructure
- Jointly develop waste and handling plans for Atlantic ports



# Ports Pillar - Roadmap

Charting a way forward – 4 priorities, all of which will support regional ports



# Ports as hubs for business

Use ports as hubs for other industry sectors such as offshore renewable energy, aquaculture, coastal tourism, alternative fuels.

**AspBAN Project** 

### **Digitalisation**

Advance the digitalisation agenda to help facilitate green ports and connectivity.

International Fast and Secure Trade Lane project

# **Connectivity**

Connecting short sea shipping routes in the Atlantic.

Develop a programme of actions to protect existing shortsea routes and foster new routes.

Ireland's response to Brexit challenges

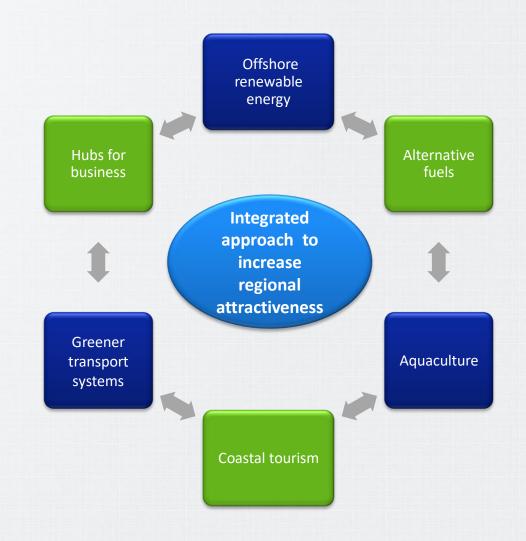
### **Green Ports**

Development of best practice guidelines in the areas of port sustainability and alternative fuels.

**Ealing Project** 



An integrated approach to increase regional attractiveness, with activities focused on emerging sectors and a greener **future** 





0000

# Thank you



Liam Lacey 24 May 2022

# OECD webinar on building ports and logistics and active networks for regional development



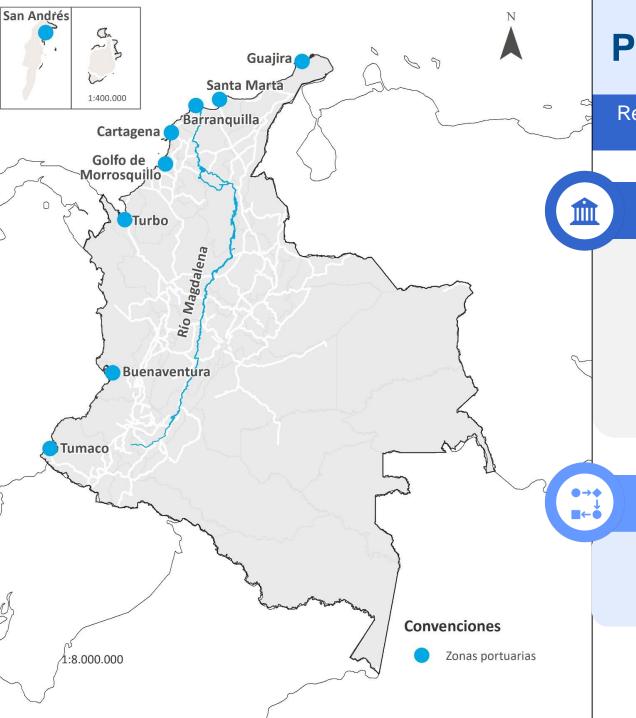
## Jonathan David Bernal

Director of Infrastructure and Sustainable Energy of the National Planning Department

May 2022







# **Port Policy beyond Expansion Plans**

Requirements for the updating of the Port Public Policy:

- Law 1 of 1991 includes the following elements of a **CONPES for Port Expansion:**
- Desirability of new investments in port facilities
- ✓ Possible new port areas
- Possible public investments
- Consideration guidelines
- Guidelines for defining port tariff conditions

### **Complementary actions:**

- ✓ Institutionality and Efficient Governance
- ✓ Reconcession and reversal model
- ✓ Sustainable ports

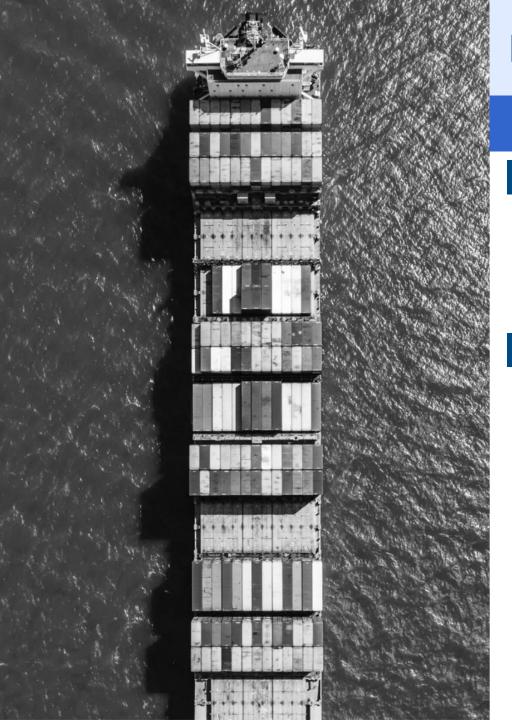












# **Economic growth of the sector**

### Connectivity



1st in South America in index of connectivity to the global maritime network (UNCTAD\*)



7th in efficiency in port services in Latin America\*\*

### **Port traffic - Last three years \*\*\***

### **National**

2019: 196,2 Mill Ton -15,3%

2020: 166,2 Mill Ton

2021: 168,6 Mill Ton

### **Z.P.** Caribbean region

2020: 146,5 Mill Ton +0,7%

2021: 147.4 Mill Ton

**Z.P. Pacific region** 

2020: 17,7 Mill Ton + 3,7%

2021: 18,4 Mill Ton

### Main cargo mobilized\*\*\*

1. Bulk coal: 36% (mainly in Ciénaga)

Liquid bulk: 27% (mainly in Golfo de Morrosquillo, Cartagena and Santa Marta)

+1,4%

Containerized cargo: 25% (mainly in Cartagena and Buenaventura)

\*United Nations Conference on Trade and Development 2021

\*\* National Competitiveness Index 2020-2021



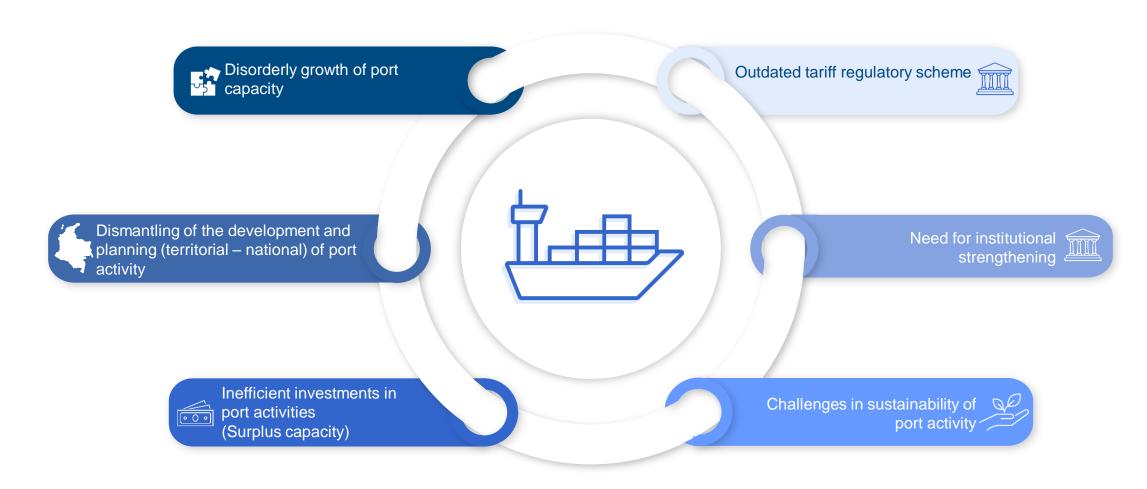






# **Justification**

# Port policy must address the problems identified:











# **Action Plan**

Seven pillars are proposed for this policy:

	Mainstay	Lines of action			
	Port capacity oriented to the development of the country and efficient use of the coastal resource	Efficient use of installed capacity			
		Granting or modification of contracts			
	Articulated port planning Nation - Territory	Classification and definition of port roles			
		Port master plans			
		POFPA Update			
000	Public and private investments for port development	Optimization of access to port terminals			
		Investments for collection of compensation			
		Private investments			
\$50 D	Appropriate regulatory scheme to promote competitiveness	Tariff scheme			
(Clay)		Reversal processes and award of concession contracts			
*= *=	Port consideration methodology	Implement guiding principles			
		Definition criteria for formula design			
	Strengthening the institutional framework and the port authority	Strengthening the port authority			
		Sectoral and intersectoral articulation			
	Environmental sustainability	Preventive measures environmental component			
		Management of social conflicto			
		Climate change management			

# **Buenaventura Port Area**

# The main port area of Colombia in foreign trade operations for products other than energy mining

# **Demand/capacity ratio per ZP by Load Segment (Base Scenario)** (2018, %)

	CM	СТ	CG	С	GL	GS	Н
Buenaventura	34%	31%	30%	38%	<b>75</b> %	63%	1%
Tumaco						2%	33%
Total General	47%	54%	33%	55%	42%	52%	36%

**C**: Containers; **GS**: Solid bulk other than coal; **GL**: Liquid bulk other than hydrocarbons; **CG**: General Cargo; **CT**: Thermal Coal; **CM**: Metallurgical Coal; **H**: Hydrocarbons

Between 2010 and 2019, a total of **USD 2,653 million** were invested in areas of public use in Colombia, 44% in Buenaventura.

Component of connectivity – transport (Pacific road project of the plan Todos somos pazcifico– document CONPES 3847 of 2015.



### **Available port infrastructure**

- ✓ 5 active port facilities for foreign trade and one under development (Port only).
- ✓ Port traffic 17.8 million tons in 2021
- ✓ Access channel 34 km long, Depth: 13.5 m. in the Outer Bay and 12.5 m. in the Inner Bay
- ✓ Capacity to serve post panamax vessels
- √ 3 specialized container terminals with 18 gantry cranes.



### **Special projects**

- ✓ Double carriageway Bogotá Buenaventura 517 Km, Saving in time 4.5 hours.
- ✓ Rehabilitation and operation of the Pacific railway network
- √ Structuring APP for access channel deepening
- ✓ Pilot project for the reuse of dredging material











# **Conclusions**

The implementation of this policy expects to generate the following benefits:



**Strengthening** of the port authority and greater presence in the territory

INSTITUTIONALITY



Territorial planning articulation

TERRITORIAL ARTICUALTION



Update of the regulations, rates and consideration

REGULATIONS



Consolidate
sustainable and
resilient
projects in the
face of climate
change



A vision of intermodality with a long-term perspective - Competitive ports

INTERMODADLITY





**Port of Sines** 

**Atlantic Gateway** 

to Europe

**Ana Rita Rosa** 

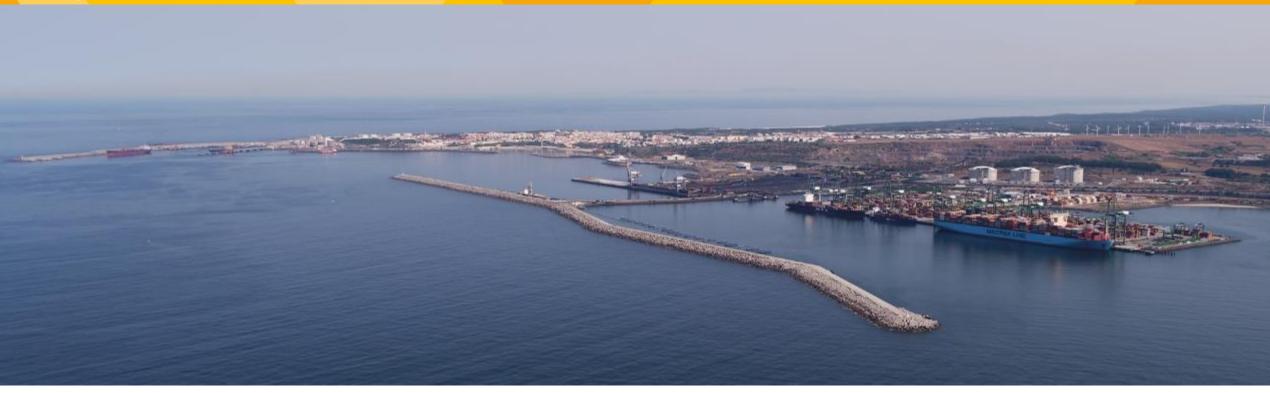
Communication

www.apsinesalgarve.pt





# **Port of Sines Characteristics**



- Deepwater port (-28 m);
- Open sea port, with no maneuvering restrictions;
- Rocky bottoms with no need for dredging;
- Able to receive the largest vessels in the world;

- Specialized terminals for the handling of all types of cargo;
- No urban constraints, with expansion capacity in all the terminals;





### **NATIONAL LEADER**

MORE THAN 50%

OF THE TOTAL CARGO HANDLED
IN PORTUGAL BY SEA

### **DIGITAL AND SIMPLIFIED**

IN AVERAGE, THE AUTHORIZATIONS
FOR BEGINNING THE OPERATIONS
ARE GRANTED **2,5** DAYS
BEFORE THE SHIP'S ARRIVAL

# INCLUDED IN INTERNATIONAL LOGISTICS CHAINS

SINES IS PART OF THE WORLD TOP 100

CONTAINER PORTS

AND EUROPE'S TOP 15

### **INTERMODAL PLATFORM**

THE PORT OF SINES OPERATES ABOUT

6.000 TRAINS PER YEAR



# **Preparing the future**

Strategic Plan 2020/2030

**Strategic Goals** 

# **Port of Sines 2020-2030**

Achieve **8%** share in the handling of Iberian ports with the hinterland. [Intermediate goal, 2025: 6%]

Cargo

**40%** increase in the volume of cargo with origin/destination in ZILS/ZAL, excluding the energy sector.

Expand Activity of ZILS and ZAL

Caputure of Iberian

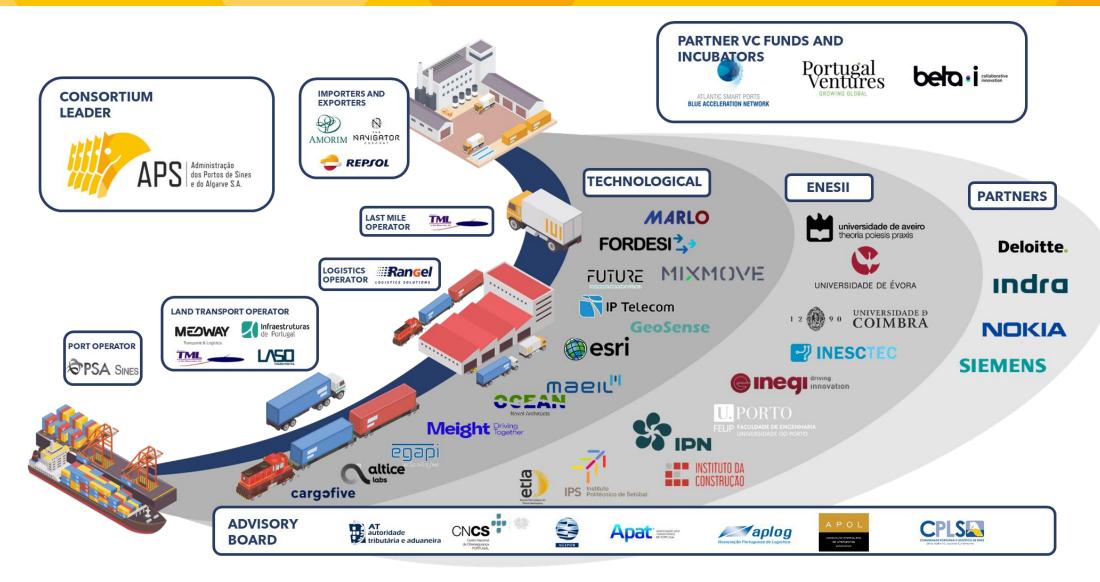
Lead stakeholder satisfaction, with a rating of 8 (on a scale of 1 to 9) on internal connectivity, port cost and flexibility.

Lead Stakeholder
Satisfaction





# Innovation, digital and green transition NEXUS agenda







# **Thank You**

geral@apsinesalgarve.pt www. apsinesalgarve.pt



# The impact of ports on economic activity Spillover effects in non port regions

OECD webinar series on Rethinking regional attractiveness in the new global environment:

Making ports and logistics networks an asset for regional development

24 May 2022



- Most of studies analyzing the impact of transport infrastructure on different economic outcomes (trade, employment, GDP) suggest that such effect differs across transport modes and economic sectors.
- The productive effect of transport infrastructure investments tend to grow with the level of data aggregation.
- This result can be interpreted as evidence supporting the view that transport infrastructure networks generate significant positive spillovers across local areas.



In the case of Ports activity, possible interaction effects (spillovers) among different regions emerge when:

- GDP (or other economic outcomes) of one region may be influenced by GDP in other neighboring regions.
- Drivers of port throughput may depend on the economic activity in neighboring areas.
- GDP of one region may be influenced by port activity of other neighboring regions.
- GDP in different areas may be correlated because of unobserved characteristics that have similar effects in neighboring areas (spatially correlated).



- An increase or a reduction in economic activity observed in one area as a result of transport infrastructure investments might be at least in part driven by reallocation of economic activity across regions.
- The analysis of possible positive or negative spillover effects can shed some light on this issue in order to understand whether these variations represents a net positive effect or simply the by-product of the spatial or sectoral reorganization of economic activity.



Transportation Research Part A 65 (2014) 44–55



Contents lists available at ScienceDirect

#### Transportation Research Part A

journal homepage: www.elsevier.com/locate/tra

Ports and regional development: A spatial analysis on a panel of European regions

Anna Bottasso, Maurizio Conti, Claudio Ferrari\*, Alessio Tei

DIEC - Department of Economics, University of Genoa, Via Vivaldi 5, 16126 Genoa, Italy

We analyze the impact of port activities (throughput) of the largest 150 ports belonging to 120 port regions on local development for a sample of 621 (TL-3) regions located in thirteen European countries and observed over the period 1998–2009.



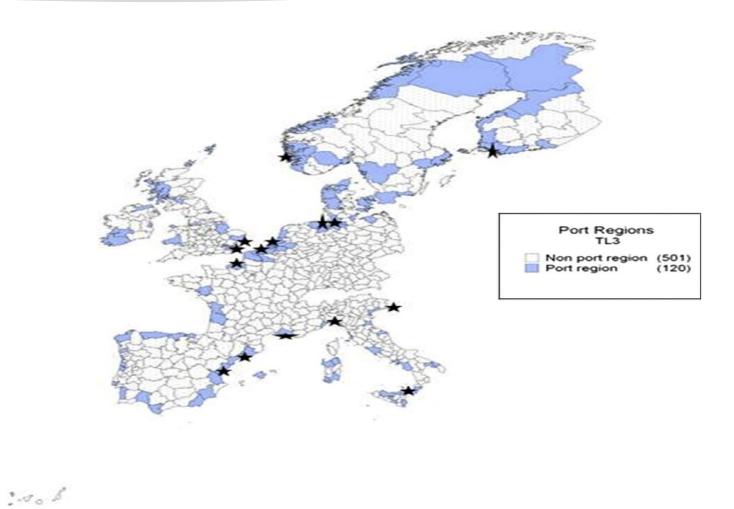


Fig. 1. Sampled regions. Source: Authors' elaboration. Black stars represent the location of main included ports.



- Results suggest that ports might have non-negligible effects on local GDP: interestingly, an important share of the effects takes place outside the region where the port is located thanks to positive spillover effects.
- Estimates of the direct effect suggest that an increase of 10% in the level of port throughput in a given region tends to increase GDP in that particular region by about 0.01–0.03%.
- An increase of 10% in the level of port throughput in a given region is associated to an average increase in GDP in all regions ranging between 0.06% and 0.2%, which in turn implies indirect spillover effects in the range 0.05–0.18%.



Transportation Research Part A 107 (2018) 126-139

FLSEVIER

Contents lists available at ScienceDirect

#### Transportation Research Part A

journal homepage: www.elsevier.com/locate/tra

Port infrastructures and trade: Empirical evidence from Brazil<sup>★</sup>

Anna Bottasso<sup>a</sup>, Maurizio Conti<sup>a,b</sup>, Paulo Costacurta de Sa Porto<sup>c</sup>, Claudio Ferrari<sup>a,\*</sup> Alessio Tei<sup>d</sup>

a Department of Economics and Business Studies, University of Genova, Italy

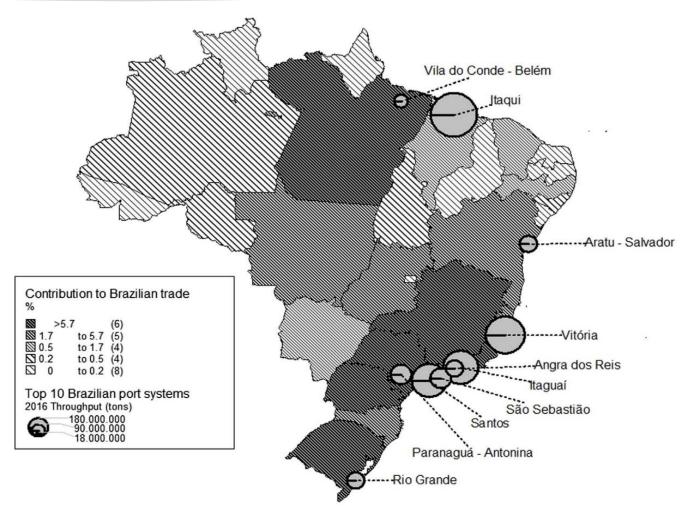
<sup>b</sup> European Commission, Joint Research Centre (JRC), Ispra, Italy

We analyze the impact of port infrastructure (total quay or pier extension relative to area surface) on trade for 27 Brazilian states observed over the period 2009–2012.

<sup>&</sup>lt;sup>e</sup> Universidade Federal de Sao Paulo, Brazil

<sup>&</sup>lt;sup>a</sup> School of Engineering, Newcastle University, UK





**Fig. 2.** Contribution of Federal States to Brazilian trade. *Source:* own elaboration from ANTAQ data, 2017



• Infrastructure investments realized over the sample period have generated an increase of about 14% for export and 11% for import flows.

 Estimates provide evidence in favor of the existence of positive spillover effects of ports on landlocked regions.



# Impact of port infrastructure on economic activity

- Arbues et al. (2015) do not find strong evidence for a significant effect of ports on productivity in Spain.
- Cohen and Monaco (2008) find evidence of a negative correlation between a state production costs and the stock of port infrastructure in that state for a panel of US states. The authors find some evidence of negative spillovers associated with the stock of ports in neighboring states.
- Cohen and Monaco (2009) do not find any correlation between production in the retail sector of panel of counties in California and the stock of ports, but find positive spillovers from neighboring ones.
- Fageda et al (2017) find that ports positively affect industrial employment of Spanish regions. Moreover, regions that benefit from having a large port, along with the regions located nearest to these port regions, obtain more employment in manufacturing activities without harming the other regions.



### **POLICY IMPLICATIONS**

- Need for good connections among port regions and non port regions.
- Need for coordination of infrastructure investment projects across regions within the same country and across countries within a trade area.
- Need for internalizing positive externalities generated by port activity.



### **POLICY IMPLICATIONS**

- Non-port regions might share the costs of ports infrastructure investments, since benefits tend to spread from port regions while costs, in terms of congestion, pollution, etc., have mainly a local nature.
- Non-port regions might participate in port governance.
- The rules of representations of general interests in the managing bodies of public infrastructures might be revised in order to account for a larger number of stakeholders.
- Need for a unifying regulatory framework.



Liberté Égalité Fraternité

# FRANCE'S NATIONAL PORT STRATEGY

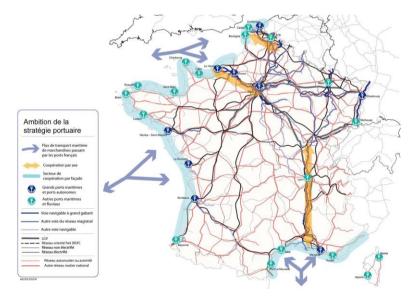


Arthur Marronnier, PhD Head of Development of French Ports French Department of Transportation & Environment





- France is one of the centers of trade in Europe and at the crossroad of the world's major shipping routes (3 main entry points: Haropa Ports, Dunkirk, Marseille)
- Ports are ideal places for setting up new industrial and logistics activities
- They are at the heart of **regional** development and ecological and digital transitions







- France is one of the centers of trade in Europe and at the crossroad of the world's major shipping routes (3 main entry points: Haropa Ports, Dunkirk, Marseille)
- Ports are ideal places for setting up new industrial and logistics activities
- They are at the heart of regional development and ecological and digital transitions

#### France's National Port Strategy (January 2021)

#### 2030-2050 Goals

- Increase the share of containerized freight handled in French ports to and from France from 60% to 80% by 2050
- Double the number of direct and indirect jobs linked to port activity by 2050
- Increase the share of rail and waterway bulk transport in pre- and post-carriage port traffic by 30% by 2030





#### 4 strategic axes:

- Ports as essential links in the performance of supply chains (towards smoother port transit)
- Ports as tools for the economic development of regions
- Ports as catalysts for the ecological transition
   (alternative fuels, modal shift to waterways or railways, industrial ecology....)
- Ports as drivers of innovation and digital transitions

mansialion results



# France's National Port Strategy

#### Ports as tools for the economic development of regions

 Develop new activities through dynamic land management, develop the port hinterland, interport cooperation, move towards a model of "entrepreneurial ports".

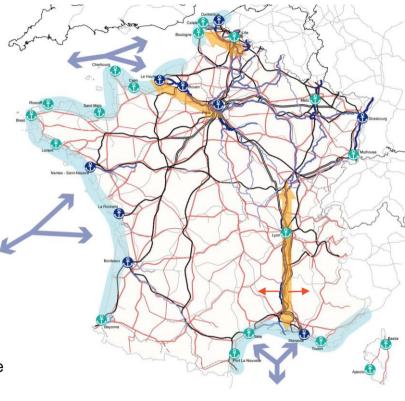




#### Ports as tools for the economic development of regions

Structuring of logistics corridors and development of mass cargo transport

- →Our goal = shift the main maritime ports' attention from the shore side to their hinterland
  - → Increase the share of French port on France's territory (gain of CO2 emissions)
  - → Irrigate the connected regions generating new businesses
- → Co-Investing in infrastructures with regional authorities (win-win relationship)
- →1 flagship example: merging Le Havre, Rouen and Paris ports into HAROPA PORT (June 2021) 2020-2027 investment program of 1.45 G€; strong implication of the 2 regions in the governing bodies of Haropa and in cofinancing its projects
- → Next step: better integrate Marseille in its hinterland (from Marseille to Lyon and beyond)
  - → Identify 100 high potential and highly connected sites (railway, waterway) for new logisitic activities





Liberté Égalité Fraternité



Arthur Marronnier, PhD Head of Development of French Ports French Department of Transportation & Environment



# CRAFTING A VISION FOR REGIONAL DEVELOPMENT

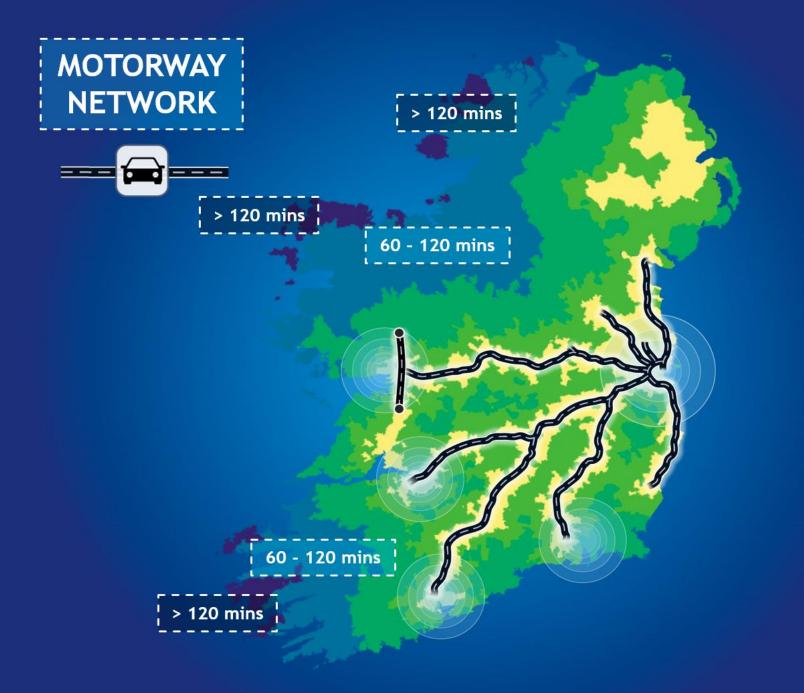
Framework for Dialogue on new Regional Spatial and Economic Strategies



@ DavidMintondire #ournwassembly







MOTORWAY NETWORK



RAIL INFRASTRUCTURE



ELECTRICAL GRID NETWORK





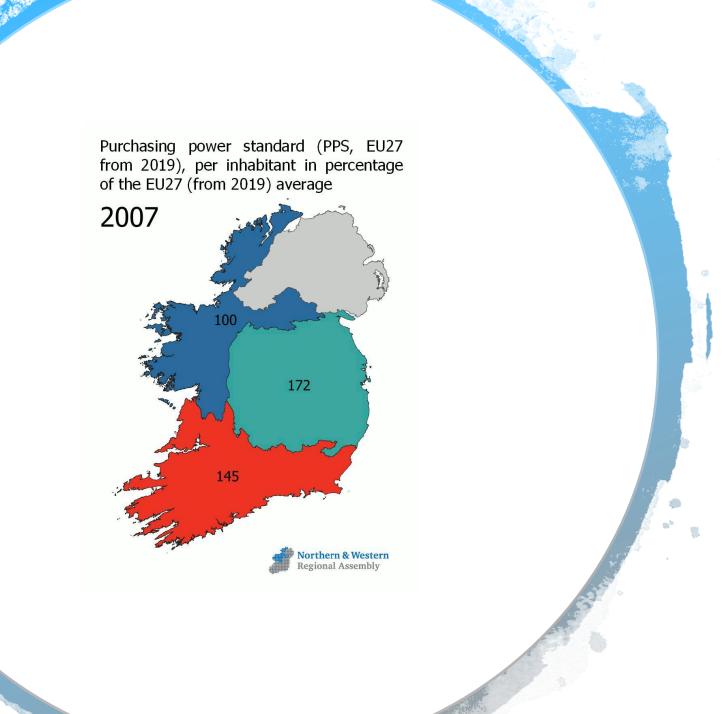
GAS INFRASTRUCTURE

















# **Southern Regional Assembly**

- Bring together main stakeholders in the port sectors in the Southern Region to focus and communicate the collective strength, capacity and opportunities of the Region's port and harbour assets on the EU Trans-European Transport Network (TEN-T), build resilience in our Region's and State's economic growth to deliver for:
  - National Strategic Outcome 4 High-Quality International Connectivity;
  - RSES Strategy Statement 6 High Quality International Connectivity; and
  - RSES Pillar for a Creative and Innovative Region.

