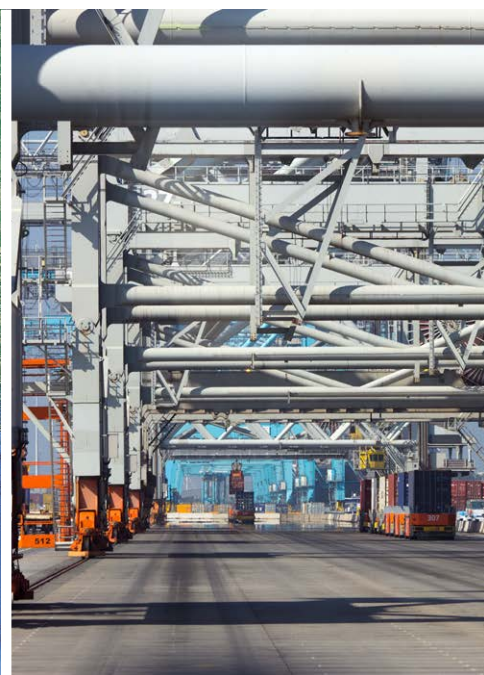


**STAKEHOLDER CONFERENCE:  
TOWARDS AN INITIATIVE FOR THE SUSTAINABLE  
DEVELOPMENT OF THE BLUE ECONOMY IN THE  
WESTERN MEDITERRANEAN**

*Barcelona, 2<sup>nd</sup> of February 2017*

**Briefing Note – Panel 2B**

**Maritime transport and ports:  
new technologies and skills for the maritime professions**



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## **PANEL 2B - MARITIME TRANSPORT AND PORTS: NEW TECHNOLOGIES AND SKILLS FOR THE MARITIME PROFESSIONS**

### **Introduction and framing the activity of the panel**

#### Objectives of the panel

A general concern for the western Mediterranean region is the capacity to address the lack of professional skills in a range of relevant Blue Economy activities. New technologies are developed to make maritime activities more sustainable (e.g. green shipping or fishing, smart ports), and reduce environmental impacts and overall economic costs, which require a constant development of infrastructure and upgrade of existing skills through effective professional education and training schemes. The panel focuses on the best ways to enhance competitiveness and sustainability of maritime transport in the region with a focus on optimization and rationalization of traffic, logistics platforms and intermodal transport and motorways of the sea; skill development; management and greening of ports; ship and offshore terminal safety and innovative solutions to ensure accident prevention, detect illicit pollution as well as to avoid congestion and foster safer transport to foster the Blue Economy in the western Mediterranean .

#### Introducing the speakers

##### **Co-chairs:**

- Mr Remi Mayet, Deputy Head of Unit for Ports and inland navigation, Directorate General for Mobility and Transport, European Commission
- Mr Alberto Palacios, Technical Director of CETMO, Centre for Transportation Studies for the Western Mediterranean

##### **Panelists:**

- Mr Jamal Eddine El Abdellaoui, Professor, University of Tangier, Morocco
- Mr Philippe Guillaumet, European affairs Manager and Strategic Plan Manager, Grand Port Maritime de Marseille, France
- Ms Noelia Ortega, Director, Sea and Naval Technology Centre and Secretary of NYM, Sea and Naval cluster of the Region of Murcia
- Mr Enrico Maria Pujia, Director General, Maritime and Inland Waterways Transport, Ministry of Infrastructure and Transport, Italy
- Mr Abdelkrim Rezal, Director of Studies, Ministry of Transport, Algeria
- Mr Eduard Rodés, Director, European School of Short Sea Shipping, Barcelona, Spain
- Mr Youssef Ben Romdhane, General Director, Maritime Transport, Tunisia
- Mr Imed Zammit, Director, Mediterranean Institute for Maritime Training, Tunisia

## Setting the topic of the panel

### What is the challenge at stake?

Research shows a shortage of skills across Blue Economy activities in the western Mediterranean. This is the case for activities such as maritime transport, coastal protection, offshore oil and gas, blue biotechnology, aquaculture and maritime surveillance, maritime tourism, offshore renewable energy and environmental monitoring. Existing training and education curricula are often reported as traditional and conventional (Ecorys 2016<sup>1</sup>) and not always addressing new innovation needs (EU Parliament 2015<sup>2</sup>). As such, they are not necessarily adjusted to the needs of the modern Blue Economy. A lack of Blue Skills therefore prevents the ability to innovate and hinders the resilience of mature activities, such as coastal and maritime tourism (Arco Latino 2014<sup>3</sup>) or maritime transport (MarinaMed 2015<sup>4</sup>), but also prevents growth potentials of more innovative and emerging activities, such as marine aquaculture and blue-biotech (UfM 2015<sup>5</sup>). To foster the Blue Economy in the region it is essential to find ways to address this challenge.

### What are the persisting problems and gaps identified?

The Western Mediterranean accounts for almost 200 ports and terminals located along its coasts and represents a third of total ports of the Mediterranean region. Maritime transport is a relevant and mature sector across the sub-seabasin. A number of relevant hubs (in terms of calls, container throughputs and freight transport) are distributed across the sub-seabasin. This high density of terminals involves a variety of potentially competing port authorities, both public and private. As a result, a fragmented governance structure hinders the sub-seabasin capacity in effectively addressing global trends, risks and opportunities.

The shipping sector has been facing a radical change in the business model after the 2009 crisis, with certain trends foreseen for the future. Amongst those, the persisting growth in size of deep-sea ships, the increasing concentration of the market in few large global carriers (Fortune 2015), the development of specialised ship types as well as the constant need of innovation to reduce costs and environmental footprints of ships.

Seaports in the sub-seabasin should be able to combine more effectively transshipment with a gateway cargo function, as currently implemented in northern EU ports and obtain a more stable position within shipping networks. Western Mediterranean ports may therefore find it beneficial to further cooperate and invest in diversification rather than compete and reinforce the current regional fragmentation. This may require a regional approach that complements national and local visions and interests.

More efficient and synergetic maritime activities across the Western Mediterranean can therefore provide an asset for boosting economic activities across the sub-seabasin, but potentials are currently hindered by the lack of integrated management of the ports system.

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<sup>1</sup> Ecorys, MRAG, « Study supporting a possible network of maritime training academies and institutes in the Mediterranean Sea basin », 2016, see <https://webgate.ec.europa.eu/maritimeforum/en/node/3951>

<sup>2</sup> [https://ec.europa.eu/futurium/en/system/files/ged/18-ep\\_report\\_on\\_the\\_communication\\_on\\_innovation\\_in\\_the\\_blue\\_economy.pdf](https://ec.europa.eu/futurium/en/system/files/ged/18-ep_report_on_the_communication_on_innovation_in_the_blue_economy.pdf)

<sup>3</sup> [http://es.arcolatino.org/download/Doc\\_Marina\\_Med/Section\\_1-SUSTAINABLE\\_TOURISM.pdf](http://es.arcolatino.org/download/Doc_Marina_Med/Section_1-SUSTAINABLE_TOURISM.pdf)

<sup>4</sup> [http://www.medmaritimeprojects.eu/download/MyTemplate/Pdf/20150629\\_Policy\\_Paper\\_final.pdf](http://www.medmaritimeprojects.eu/download/MyTemplate/Pdf/20150629_Policy_Paper_final.pdf)

<sup>5</sup> [http://ufmsecretariat.org/wp-content/uploads/2015/11/2015-11-17-declaration-on-blue-economy\\_en.pdf](http://ufmsecretariat.org/wp-content/uploads/2015/11/2015-11-17-declaration-on-blue-economy_en.pdf)

The efficiency of ports is not only a sea-related issue, given that they are not independent infrastructures in the regional transport system. Sometimes, integration into the territory conditions their activities and possibilities of further development, so connections may be an element to take into account in future port development plans.

Another element to be addressed is the fact that a mismatch of skills and qualifications appears to be critical across the Blue Economy activities. A survey<sup>6</sup> amongst education and training providers, employers and government bodies pointed to skills mismatches in the western Mediterranean. When asked about the mismatch between offer of skills and demand of the market, 20 out of 26 western Mediterranean public authorities pointed to a gap between the education and training bodies and the business sector. Of the private stakeholders, 50% of respondents agreed on the existence of such mismatch. When asked to indicate which maritime economic activities suffer from a demand/offer gap, public authorities in the western Mediterranean pointed to maritime transport, followed by shipbuilding, marine aquatic products and coastal tourism. Private sector respondents saw such gaps emerging above all in environmental monitoring and ocean renewable energy, followed by coastal protection, yachting & marinas, coastal tourism and maritime transport.

Another important issue affecting the matching of demand and supply of Blue Skills is the limited cooperation between education providers and the private sector, as well as between education providers themselves. Cooperation, networking and coordination are in fact concrete means to collectively address challenges that are, very often, shared by multiple stakeholders in different regions and countries. Cooperation and networking in marine and maritime knowledge can help responding to the needs of the Blue Economy and help building a modern, state-of-the art maritime education and training offer in the western Mediterranean. It is important to fully capitalise on existing cooperation experiences and the available resources. Several areas for cooperation can be identified, and these have been carved out in the context on a recent study carried out on the subject<sup>7</sup>. An important coordinating role for the UfM in this domain could be further supported, so to provide a fair playing-field amongst existing educational institutions and bodies.

## **Discussion on potential interventions to be supported by the initiative**

### **Proposed questions on Maritime Transport and port infrastructure's development**

- How the Transport Action Plan for the Mediterranean Region should be implemented to overcome existing barriers to the development of the motorways of the sea and promote investments in greater inter-connectivity, in-land and multi-modal connections and to shift towards smarter and greener mobility in the region?
- How maritime safety should be addressed? What are the infrastructure lacks necessary to improve maritime safety?
- How promoting investment in blue technologies, green maritime transport, sustainable tourism and aquaculture will contribute to creating growth and jobs in the region?

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<sup>6</sup> [https://webgate.ec.europa.eu/maritimeforum/sites/maritimeforum/files/Maritime%20Academies%20-%20Final%20Report%20and%20annexes\\_template%20EC\\_0.PDF](https://webgate.ec.europa.eu/maritimeforum/sites/maritimeforum/files/Maritime%20Academies%20-%20Final%20Report%20and%20annexes_template%20EC_0.PDF) cf. 2.3

<sup>7</sup> Ecorys, MRAG, « Study supporting a possible network of maritime training academies and institutes in the Mediterranean sea basin », 2016, see <https://webgate.ec.europa.eu/maritimeforum/en/node/3951>

- How optimizing port infrastructure, interfaces and procedures/operations can boost maritime transport, short-sea shipping capacity and cross-border ferry connectivity?
- How define, test and deploy the infrastructure network for the use of LNG - Liquefied Natural Gas for maritime transport can promote green shipping through clean fuels
- How new technologies can contribute to improve ports efficiency (specific measures to implement)?
- How the lack of integrated management of the ports system could be overcome for exploiting the sector potentialities?
- How a port cooperation mechanism in the Western Mediterranean, if necessary, could be implemented in order to discuss common problems and act in a coordinate way?

#### Proposed questions for the mitigation of mismatch of blue skills between offer and demand

- How to promote apprenticeship schemes and mobility programmes across the western Mediterranean, with a view to strengthen linkages between education and the labour market?
- How to enhance the attractiveness of the sector and increase the number of people entering the sector? How to opening of existing apprenticeship schemes (that target more traditional sectors) to less traditional topics in the maritime sector?
- How can the needs and challenges for the Blue Economy in the western Mediterranean be identified?
- How could opportunities for dialogue and exchange among private sector, public authorities and education providers be identified?
- How could initiatives help to set common themes and priorities in the training and education offer, and develop a gap analysis so to move from traditional to emerging maritime economic activities?
- How to encourage the sharing of best practices and lessons learned among stakeholders?
- How to engage with both public authorities and the private sector to ensure that all training and education approaches used in the western Mediterranean are brought together?
- How to share the existing infrastructures on the West Med, and how mobilize financial means to develop updated trainings and educational programs to support the blue economy .