Atlantic Stakeholder Platform Conference - 20 January 2015, Porto

Best Practices in Sustainable Development of Ports

Parallel Session D1: Science and Technology (11:00 – 12:00)

In the field of port management, being smart, competitive, and integrated in the logistics networks it is essential to ensure sustainable development. This workshop includes specific examples such as pioneering initiatives and real experiences.

Organiser: Andalusian Institute of Technology (IAT)

1. Jaime Beltrán. “Working on Smart-Port Concept”. Manager of Assessment & Improvement. IAT. Spain. (beltran@iat.es).


1. Key messages

- Based on our previous experiences working on Smart-Port and Green-Port Projects, we have been able to identify new ideas and opportunities which can turn into innovative actions. These actions could be implemented through collaborative projects, under the framework of the upcoming co-funding programs. This would give us the opportunity to go further in the Smart-Port Concept in the Atlantic Area, deepen in the following fields:

  o Blue Economy Strategies in port’s influence area
  o Innovative Port Governance and Public-Private Partnerships
  o Integration Port-City (Social Impact)
  o Synchronization and Optimization for more efficient Operational Processes
  o Green Port (for improving air quality). Environmentally friendly ports by the establishment of new procedures, controlled in real time.
- Use of low emission bunker fuels in Ports (LNG initiatives)
- More resilient to disasters by the creation of optimized operations and the creation of technologically informed emergency plans and IT based management of accidents
- Safer operations through the use of advanced IT technologies
- Etc.

- Bearing in mind the upcoming programming period it is worth anticipating to the challenges concerning European regulations on low- emission fuels. In this sense, it is important to continue working hand-in-hand with Standardization Bodies in order to share experiences in the best way.
- Nowadays, modelling and simulation tools are very useful for improving the operational, environmental and security Processes, thus reducing associated risks, time and costs.

2. Summary

Workshop focuses on development of ports as part of a smart, competitive, sustainable & integrated transport network, introducing and analysing the speakers’ experiences on previous projects:

- TEFLES (technologies & Scenario for Low Emissions Shipping in three different scenarios, presented by Carlos Botana, Vigo Authority Port);
- French ports experiences on reconciliating port development & environmental protection (presented by Hendrik Lohse (IPER));
- Definition and performance of environmental sustainability indicators in ports (María del Mar Cerbán (University of Cádiz));
- High-resolution coastal forecasting models as a tool for improving security & efficiency in ports (Flávio Martins (University of Algarbe)),
- Consolidation of the blue economy and enhancement of ports development by cooperating and generating knowledge: the SMART-PORT project (Jaime Beltrán, IAT).

3. Questions and answers

- Attendees emphasized the importance of approaching the social and human dimension when defining the SMART-PORT concept. Attendees’ contributions were well noted and of course, these factors (social and human) will be particularly taken into account when preparing new projects related to the integration Port-City-Citizen, including issues related with Port’s Staff Training
- In addition attendees wanted to know if port development is going to be integrated among the priorities of any of the upcoming Atlantic Area programmes. The speakers agreed on the fact that the efficient development of Ports and Logistics are essential for the sustainable growth of the Atlantic Area. Thus these issues will be most likely supported in the
forthcoming programming period by the (updated) funding schemes. (SUDOE, INTERREG Europe, Middle Atlantic, etc.).

4. Follow up

- Continuing working on project ideas related to Blue Growth, Social Factors and Operational Improvement in transport and logistics chains (seaport area), for example, around the following concept: SmartPort-NET “European Network of Smarter Ports of the future”.
- Identifying synergies with other projects and incorporating new partners (Academia, Research, Technological Centers, Port Authorities, Shipping companies, Operators, and Decision Makers) in these initiatives.

5. Next Atlantic Stakeholder Platform Conference

[Would you be interested in reporting back on the progress made since Porto at the next Atlantic Stakeholder Conference, which is to take place towards the end of 2015 (date and place TBC)?]

Yes