

ATLANTIC ACTION PLAN

Consultation workshops

12 September 2018 – Gran Canaria, Spain
28 September 2018 – Viana do Castelo, Portugal
8 October 2018 – Dublin, Ireland

Summary Paper



Building a better
working world

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1. Atlantic action plan Consultation Workshops Spain, Portugal & Ireland – Overview

So far, three consultation workshops have been held, each one focussing on a number of subtopics:

	Marine Renewable Energy (MRE)	Ports & Marinas	Aquaculture	Blue Skills
Funding	Project finance and route to commercialisation for MRE	Ports as blue economy hubs	Strategic implementation of EMFF funding in the blue bioeconomy	Boosting blue skills and blue careers and promoting ocean literacy in the Atlantic Area.
Stakeholder cooperation	MRE in a synergy - ports and related businesses	Smart ports and marinas to foster recreational boating, leisure and coastal tourism	Development of Innovative Aquaculture	
	Innovation – Solutions to maintain technological leadership in developing new MRE technologies Rolling-out innovative MRE technologies in the Atlantic			
Innovation	Islands and isolated coastal areas: opportunities for MRE	Developing Short Sea Shipping	LEGEND ES PT IE	
Regional Cooperation				

Who was present?

The workshops were attended by representatives of both – the private and public sector. While most of the participants came from the hosting Member State, each workshop had a number of international experts. In Spain, MRE experts from the UK, Ireland and Portugal attended. In Portugal, MRE experts from Spain and the UK, and ports and blue skills experts from Spain were among the participants, while Ireland hosted a number of port experts from France and Spain. The Spanish workshop had around 100 participants in the morning and around 50 for the breakout session, while both Portugal and Ireland had around 50 participants throughout the day.

How were the workshops structured?

The workshops followed a uniform choreography, where a more official opening ceremony introduced the Atlantic strategy, followed by more technical, breakout sessions. The breakout sessions were split into two parts. Firstly, participants identified a number of challenges which they believed had the highest Atlantic added value and urgency. The room was subsequently split into two to three groups, each of which discussed potential actions to address the identified challenges. Finally, each group briefly presented their actions to the whole room for feedback.

What the most important challenges identified and actions proposed?

Challenges	Actions	WS
<i>MARINE RENEWABLE ENERGIES (MRE)</i>		
Funding gaps	Create an Atlantic ERA-NET	ES
	Diversify risks through joint financing of public and private investors	ES
	Create a financial instrument specific to the sector	ES
	Implement a 25MW, 5 * 5 MW farms in the water by 2025 pilot, joint demonstration projects to generate investor confidence	ES, PT
	Perform explicit analysis of performance/ economic study, show additional benefits, quantify the time value of energy	ES
	Create a common insurance scheme and develop tools to counter risks	PT
Cooperation, Coordination	Operationalise the European Technology Platform: regular conference on economic / technological challenges.	PT

and Knowledge sharing	Concentrate efforts of companies, pick winners	PT
	Develop transversal courses to reduce the gaps between technological and economic challenges (not only on tech issues) – create a pool / network of interdisciplinary experts	PT
	Share knowledge with citizens on economic benefits to increase social acceptance and communication on Atlantic specificities which are not well known to attract investors	PT, ES
	Create an information sharing and information collection mechanism to draw lessons	ES
	Ensure common access to support vessels in south Atlantic to increase offshore activity: use it as a common basis of support to reduce time and cost	PT
PORTS & MARINAS		
Cooperation and Coordination	Create an Atlantic Port Forum, include it in the Atlantic Strategy, (Interreg), use it for sharing knowledge, learning, tackling problems together	PT, IE
	Create Nautical stations, develop cooperation by creating clusters and creating integrated nautical touristic products	PT
Governance	Create blue hubs of excellence, ports as a catalyst for the blue economy	PT
Financing of infrastructure	Create strategic plans to foster MRE infrastructure	ES
	Expand data collections beyond traditional (logistics) data, including social factors, bottom-up approach, show results to the public to generate support	PT
	Create conditions to attract new stakeholders in ports, encourage partnerships, allow for more flexibility, install incubators for start-ups of the blue economy, allocate dedicated areas to industry, create economic incentives	PT, ES
Smart Ports	Launch an Interoperability project by sharing knowledge on different systems, developing a joint interoperable system, deploying it (finance through MoS)	IE
	Develop a pilot project of a smart port, mobilize EU funding through joint effort, coordination by Atlantic Port Forum, built on current CSA on ports of the future	IE, PT
Promotion of SSS	Commission a study on supply / demand side on an Atlantic scale (Brexit)	IE
	Incentivise shipping companies, increasing lobbying efforts	IE
Marine Spatial Planning	Expand the MSP platform to involve ports and municipalities (port forum as a subset of the current MSP platform);	ES
AQUACULTURE		
Reputation	Educate media and politicians, increase communication, marketing	IE
	Motivate support to aquaculture through education and industry-led field trips	IE
Sustainability	Develop the potential to grow seaweed (CH4 reduction, impact on CO2)	IE
	Promote the use of biodegradable substrates, e.g. cotton socks instead plastic	IE
EUROPEAN MARITIME AND FISHERIES FUND (EMFF)		
Stakeholder involvement	Create a Marine innovation Platform & a newsletter website incentivise	IE
	Establish a national EMFF roadshow	IE
Funding	Introduce innovative financial instruments (loan guarantees, capital investments, blending)	IE
	Ensure better coordination between Funding Agencies at national level (ERDF, EMFF, etc.)	IE
	Create an Industry forum to guide project areas to be funded	IE
BLUE SKILLS		
Ocean literacy	Launch a communication campaign, such as a literacy action to give a brand to Ocean and change perceptions of investors and the general public	PT
Skills gap	Develop a skill set for healthy oceans and respond to the needs by mapping actual/ future skill sets, linking technological and environmental issues	PT
Attractiveness	Launch a communication strategy to show the added-value of the careers of the sea, using all media and a cross-sectoral approach	PT
	Cooperate on educational policy, developing Blue schools programme	PT

2. Workshop Spain – Summary

What was discussed?

The Atlantic Action Plan Consultation Workshop in Las Palmas, Gran Canaria discussed the topic of Marine Renewable Energies (MRE). The workshop included four breakout sessions, focussing on four distinct topics, namely:

- ▶ Innovation – Solutions to maintain technological leadership in developing new MRE technologies;
- ▶ MRE in a synergy - ports and related businesses;
- ▶ Project finance and route to commercialisation for MRE;
- ▶ Islands and isolated coastal areas: opportunities for MRE.

Who was present?

The breakout sessions were attended by both representative of the private and public sector, all with expertise in Marine Renewable Energies. Generally this included universities, ports, technology developers, interest groups and public authorities. While most stakeholders were local, there were some experts from the UK, Ireland and Portugal. For a complete list of participants, please refer to Annex I.

How was the workshop structured

Firstly, participants were split into small groups and asked to identify two challenges which they believed had the highest Atlantic added value and urgency. Through this process, two to three general challenges were identified. The room was subsequently split into two to three groups, each of which discussed potential actions to address the identified challenges. Finally, each group briefly presented their actions to the whole room for feedback.

What were the main challenges identified?

Breakout Session 1: Innovation (The Atlantic Area is a pioneer in developing Marine Renewable Energies and needs joint actions to further establish and strengthen this role)

- ▶ **Strategic / Political:** There is a need to integrate existing strategies on Marine Renewable Energies and ensure political support continues, especially in light of big players leaving the market.
- ▶ **Funding:** Funding still remains a major challenge in the development of Marine Renewable Energies, due to the high risk and relatively low project acceptance.
- ▶ **Technological:** The sector still needs to develop and improve the technology, to ensure installing Marine Renewable energies become economically viable.

Breakout Session 2: Ports (Due to the similar structure of ports in the Atlantic area, there is high added value in addressing the challenges through regional cooperation).

- ▶ **Port infrastructure / management:** Ports often still lack the necessary infrastructure to promote the development and deployment of MRE. Due to rigid management structures and Port Authorities focussing on traditional areas, the diversification of port infrastructure can pose a challenge.
- ▶ **Cooperation:** As ports are in competition, sharing of information is not common between involved parties. This makes it difficult for stakeholders to be informed about the possibilities and opportunities related to MRE development in ports.
- ▶ **Marine Spatial Planning:** Ports need to get involved in Marine Spatial Planning (MSP) in order to play an important role in the coordination of MRE stakeholders.

Breakout Session 3: Project Finance (The challenges identified are not specific to the Atlantic, however regional cooperation can provide an effective way to address them)

- ▶ **Risks:** Ocean energy projects have a long maturity and require long term investments, which makes them unattractive to investors. Additionally, technical challenges exist as well, such as the potential risk of curtailment.
- ▶ **Access to finance:** While R&D funding was readily available, innovative commercial projects had trouble mobilising the necessary financial resources, which can be exacerbated by a high administrative burden.
- ▶ **The Valley of Death:** Ocean energy projects faced troubles regarding access to finance, especially related to the last steps on the route to commercialisation. Bridging the gap between the development of a successful prototype and the commercialisation of the technology still presents a major barrier.

***Breakout Session 4: Islands** (While these challenges are not unique to the Atlantic Area, many islands in the area face similar challenges that could be addressed and overcome through cooperation.)*

- ▶ **Strategic / Regulatory:** Currently, islands do not provide sufficient incentives to MRE developers, which in turn leads to them not fully exploiting the potential they have in the area. At the same time, little is done to increase the acceptance of MRE among the population, both regarding social and environmental aspects.
- ▶ **Technological / Economic:** MRE on islands face the same problems as in other places, namely high Capital Expenditure and Levelised Cost of Electricity (LCOE), making it difficult to find investors. Furthermore, island energy demand is highly variable according to the season, making it difficult to operate MRE profitably year round.

What actions were proposed?

A number of actions were proposed in each session, the table below presents the most pertinent ones.

Innovation	Ports	Project Finance	Islands
Set specific objectives for Atlantic regions in the SET Plan	Creating strategic plans to foster MRE infrastructure	Clearly defining risks in contracts, strengthening accountability, publishing guidelines or best practices	Provide a specific framework for Islands
Facilitate access to test facilities through a future Marinet scheme	Making port organization and rules of utilization more transparent	Creating financial instrument specific to the sector	Demonstration projects and knowledge exchange between islands
Create an information sharing and information collection mechanism to draw lessons	Making more information available on the supply chain and MRE possibilities	Improving explanation of access to funding sources	Promotion of opportunities to act as living laboratories
Create an Atlantic ERA-net	Gathering Marine Spatial Planning Authorities, Municipalities and ports through a common platform such as a "MSP Forum"	Implementing 25MW by 2025, 5 * 5 MW farms in the water by 2025, 1 per Member State	Knowledge transfer from the continent to the islands
Perform explicit analysis of performance/ economic study		Creating national strategies and objectives	

3. Annex IA: Spain – List of Actions

3.1.1 Breakout Session 1: Innovation

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Political / Strategic			
Set specific objectives for Atlantic regions in the SET Plan	European Commission and Member States	Atlantic leadership, common objectives	Need to be realistic and credible in the time-scale (things that are difficult but achievable)
Show additional benefits, quantify the time value of energy	TBD	Atlantic leadership, common objectives	Structural funds used in the Canaries for offshore wind (fixed amount of energy)
Create an Atlantic tariff (area for the deployment of technologies)	TBD	Atlantic leadership, common objectives	Split MW and tariffs according to the different technologies
Mitigate risk for the market when big players leave	Academia and industry	Atlantic leadership, common objectives	
Improve information sharing among actors to access data transparency	TBD	Sharing of best practices	
Funding			
Create an Atlantic ERA-net	European Commission	Atlantic leadership, common objectives	

Perform explicit analysis of performance/ economic study	TBD	Knowledge sharing	Existing projects from the International Energy Agency
Create an information sharing and information collection mechanism to draw lessons	TBD	Knowledge sharing	US experience
Create a common insurance scheme and develop tools to counter risks	TBD	Atlantic leadership, common objectives	
Technological			
Facilitate access to test facilities in the future Marinet scheme	TBD	Atlantic leadership, common objectives	
Ensure funding of 2nd gen technology	TBD	Atlantic leadership, common objectives	

3.1.2 Breakout Session 2: Ports

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Risks			
Adapt port rules and legislation to allow for economic incentives	Member State authorities, guidance by the EU	Sharing of best practices	
Implement subsidies for the creation of MRE-linked infrastructure in ports	EU	Sharing of best practices	
Allow for more flexibility regarding land use in ports	Port Authorities	Sharing of best practices	

Create strategic plans to foster MRE infrastructure	Port Authorities, potentially assisted by the EU through guidelines	Sharing of best practices	
Make port organization and rules of utilization more transparent.	Port Authorities, potentially assisted by the EU through guidelines	Sharing of best practices	
Cooperation			
Share information on the state of play and opportunities of MRE among ports, industry and research	Maritime stakeholders, championed by Maritime Clusters	Facilitate transfer of knowledge and expertise	
Define the roles and possibilities of ports depending on their size and location	Maritime stakeholders, championed by Maritime Clusters	Facilitate transfer of knowledge and expertise	
Make more information available on the supply chain and MRE possibilities	Maritime stakeholders, championed by Maritime Clusters	Facilitate transfer of knowledge and expertise	
Marine Spatial Planning			
Gather MSP Authorities, Municipalities and ports through a common platform such as a “MSP Forum”	Port Forums, through the assistance of MS authorities or the EU	Facilitate transfer of knowledge and expertise, sharing models	

3.1.3 Breakout Session 3: Project Finance

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
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Role of port authorities			
Clearly define risks in contracts, strengthening accountability, publishing guidelines or best practices	Developers and Subcontractors	Sharing of best practices	
Invest in energy storage capacity	National Authorities, Network Operators	Raising awareness	
Reinforce of Island grids	National Authorities, Network Operators	Raising awareness	
Allow for more flexibility in contracts	Developers, Network Operators	Raising awareness	
Diversify risks by joint financing between public and private banks	Public (EIB, MS Banks) and Private Banks	Sharing of best practices	
Use capital grants, feed-in tariffs to support high-risk projects		Sharing of best practices, joint initiatives	
Access to finance			
Create financial instrument specific to the sector	Private Banks, potential guidance by the EU	Joint challenges, creating joint solutions	
Improve explanation of access to funding sources	EU, MS Authorities	Joint challenges, creating joint solutions	
Simplify the administrative process of funding sources	EU, MS Authorities	Joint challenges, creating joint solutions	
Create a tax incentive to leverage private equity	EU, MS Authorities	Joint challenges, creating joint solutions	

Create specific funding instruments aimed at scaling up innovative projects	EU, MS Authorities	Joint challenges, creating joint solutions	
Valley of Death			
Implementing 25MW by 2025, 5 * 5 MW farms in the water by 2025, 1 per MS	EU as a spearhead, with regional authorities intervening on a technical level	Pilot project	
Mobilizing revenue support for tidal energy as part of the Atlantic Strategy, through an initial feed-in tariffs and later support from the ERDF	EU through the Atlantic Strategy and MS authorities	Joint initiatives	
R&D support for wave energy as part of the Atlantic Strategy, with revenue support needed in the near future	EU through the Atlantic Strategy and MS authorities	Joint initiatives	
Creating national strategies and objectives	MS authorities with the support of the industry	Joint initiatives	

3.1.4 Breakout Session 4: Islands

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Strategic / Regulatory			
Provide a specific framework for Islands Coordinate with the State to allow fast track processes	Island governments with MS and EU assistance	Exchange of best practices	Linked to Clean Energy for EU Islands Initiative

Create special instruments to easy up the development of MREs Construction of test sites Promotion of opportunities to act as living laboratories	Local and regional stakeholders	Addressing common issues and common opportunities	
Education and training programmes to improve knowledge and skills	Local and regional stakeholders	Exchange of best practices	
Participation of general population Higher electrification of the demand	Local and regional stakeholders	Exchange of best practices	
Technological / Economic			
Demonstration projects and exchange between islands	TBD	Addressing common issues and common opportunities	
Knowledge transfer from the continent to the islands	TBD	Exchange of best practices	

4. Annex IB: Spain – Participating Organisations

ACSM	FEMEPA
Adrian Mendoza Abogado	Fenorte
AENAUTICA	Fundacion Puerto de las Palmas
Area de Economia y Empresas de Casa Africa	General Directorate of the Protection of the Coast and Sea
ASERPA	Grupo Cobra
ASTICAN	Grupo SGS
Autoridad Portuaria de Las Palams	Guardia Civil
Ayuntamiento de Las Palmas	IH Cantabria
Bankinter	Inerza
Basque Energy Cluster	INFECAR
BEX-A	Instituto Español de Oceanografia
Bureau Veritas en España	Instituto Tecnologico de Canarias
Cabildo de Gran Canaria	La Luz Market
Cadiz University	MAREI
Canarias Excelencia Tecnologica	Marine Energy Wales
Canary Rope Access and Training, S.L.	Ministerio Asuntos Exteriores
Capitania Maritima de Las Palmas	Ministerio de Ciencia
CETACAN	Ministerio de Fomento
CETECIMA	MSP Platform
Cluster CET	Naviera Armas
Cluster Maritimo de Canarias	Ocean Energy Europe
Codexca	Ocean Energy Systems
COIICO	OHL
Confederaction Canaria de Empresarios	PLOCAN
CONFEMETAL	Port of Vigo
Consejo Economico y Social de Canarias	Puertos des Estado
Consejo Economico y Social Vasco	Red Electrica de Españ
Consejo Insular de la Energia de Gran Canaria	Resolute Marine Energy
Cuidades Atlanticas	SGS
Decano Territorial del Coine	Sociedad Atlantica de Oceanografos

DG MARE	Sustainable Energy Authority of Ireland
Direccion General de Coordinacion del Mercado Interior y Otras Politicas Comunitarias	TBN
Direccion General de Industria y PYME	TESS Canarias
DNV	Transportes y Gruas Carballo, S.L.
EcoAqua	University of Las Palmas
ECOS Estudios Ambientales y Oceanografia	Vicealmirante Mando Naval de la Armada en Canarias
Elittoral SLNE	Viceconsejero de Economia y Asuntos Economicos con la UE
EMAR Offshore Services	Viceconsejero de Industria
Endesa	Vifemar
Enerocean S.L.	Wavec
Fedeport	ZAMAKONA

5. Workshop Portugal – Summary¹

What was discussed?

The Atlantic Action Plan Consultation Workshop in Viana do Castelo, Portugal discussed the topics Marine Renewable Energies, Ports and Blue Skills. The workshop included four breakout sessions, focussing on four distinct topics, namely:

- ▶ Rolling-out innovative Marine Renewable Energy (MRE) technologies in the Atlantic;
- ▶ Smart ports and marinas to foster recreational boating, leisure and coastal tourism;
- ▶ Ports as blue economy hubs;
- ▶ Boosting blue skills and blue careers through increased cooperation between education and industry, and promoting ocean literacy in the Atlantic Area.

Who was present?

The breakout sessions were attended by both representatives of the private and public sector. The session on Marine Renewable Energies (MRE) included Portuguese, Spanish and European MRE developers and researchers. The sessions on ports and marinas included ports from Spain and Portugal, Portuguese Marinas and tourism stakeholders and the European Boating Industry. The session on blue skills was attended by Portuguese and Spanish universities and research institutes. For a complete stakeholder list refer to Annex II.

How was the workshop structured

Firstly, a number of challenges previously identified in the discussion paper were put up for discussion. Participants were split into small groups and asked to identify the two challenges which they believed had the highest Atlantic added value and urgency as well as any important challenges that were not included on the list. Through this process, two to three challenges were identified. The room was subsequently split into two to three groups, each of which discussed potential actions to address the identified challenges. Finally, each group briefly presented their actions to the whole room for feedback.

What were the main challenges identified?

Breakout Session 1: Marine Renewable Energies (The Atlantic Area is a pioneer in developing Marine Renewable Energies and needs joint actions to further establish and strengthen this role)

- ▶ **Funding:** Funding still remains a major challenge in the development of Marine Renewable Energies, due to the high risk and relatively low project acceptance.
- ▶ **Economies of scale:** This referred to the need to collaborate in order to achieve synergies and foster the development of Marine Renewable Energies.
- ▶ **Knowledge sharing:** There is a need to counteract the fragmentation in the sector and develop joint projects and a general holistic approach of research, industry and education in the sector.

Breakout Session 2: Marinas (The challenges identified are not specific to the Atlantic, however regional cooperation can provide an effective way to address them).

- ▶ **Sector fragmentation / Lack of cooperation:** Marinas as competing SMEs are often not cooperating, although sharing of knowledge and best practices could be beneficial to their development. At the same time, marinas often do not cooperate with other touristic actors, thus missing out on the potential to offer touristic packages and increase their consumer base.

¹ Findings will be circulated to participants for comments

- ▶ **Regulatory issues:** Regulation is often not harmonised, such as in the areas of environmental and planning legislation as well as recognition of skills.
- ▶ **Leases and concession policies:** Most of the EU coastline is owned by national governments, while marine construction is done by private companies, which requires efficient administrative management.

***Breakout Session 3: Ports** (Due to the similar structure of ports in the Atlantic area, there is high added value in addressing the challenges through regional cooperation)*

- ▶ **Role of Port Authorities:** Most port authorities still are focussed on their traditional role as a landlord. However, to successfully establish ports as blue economy hubs, port authorities need to evolve and take on a role as community manager.
- ▶ **Financing of specialized infrastructure:** In some areas of port diversification, such as the development of Marine Renewable Energies, ports need to provide specialised infrastructure for it to be successful. However, this often requires a significant financial investment, which can be hard for ports to mobilise.
- ▶ **Cooperation among ports:** Cooperation among ports is still relatively low, as they are competitors in the field of logistics. For the development of blue economy hubs, cooperation can be beneficial and thus needs to be increased.

***Breakout Session 4: Blue skills** (the Atlantic has the largest blue economies in Europe, and thus the highest need for action on blue skills, with potential common interests in developing common knowledge of skill gaps and promoting the specificities of the Atlantic in terms of ocean literacy)*

- ▶ **Need for a greater alignment between capital strategy & industry strategy:** there is a lack of data on skill gap, leading to skills and jobs mismatches across the Atlantic area.
- ▶ **Attractiveness:** The marine industry needs to increase its attractiveness in order to encourage more young people to follow a blue career.
- ▶ **Ocean literacy:** General ocean knowledge and awareness should be increased to promote the potential and possibilities of the blue economy in the Atlantic (for investors, youth, etc.)

What actions were proposed?

A number of actions were proposed in each session, the table below presents the most pertinent ones.

MRE	Marinas	Ports	Blue Skills
Operationalise the European Technology Platform Develop transversal courses to reduce the gaps between tech and eco challenges Wind: communicate on Atlantic specificities to attract investors and promote economic and social benefits to increase social acceptance Tidal: Create new funding schemes (risk capital scheme, common insurance scheme...) and establish revenue support for tidal (<i>feed-in tariffs</i>)	Create clusters to develop cooperation Create touristic packages (local, regional, national, Atlantic) Creation of Nautical stations, create integrated nautical touristic products Establish common ground for sea professions (skippers, ship repair)	Creation of an Atlantic Port Forum included in the Atlantic Strategy, to share knowledge, learn, tackle problems Creation of blue hubs of excellence, ports as a catalyst for the blue economy EU Project to define the port of the future (diversified, safe data and products, low carbon) (Interreg, Coordination and support action (CSA))	Create a communication strategy to promote careers of the sea Implement literacy actions to give a brand to Ocean and change perceptions Develop a skill set for healthy oceans and respond to the needs of the industry (mapping of current/ future skill sets) Strengthen links between academia and industry Share best practices (such as Blue schools programme in Portugal)

6. Annex IIA: Portugal – List of Actions

6.1.1 Breakout Session 1: Marine Renewable Energies

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Knowledge sharing			
Develop joint demonstration projects to generate investor confidence	Industry	Atlantic leadership, economies of scale	
WAVE/ TIDE: Share mistakes and lessons learnt from R&D, commission a study on lessons learnt from H2020/ Financial Programme 6/7 R&D projects – target Atlantic projects and technologies relevant for the Atlantic context		Synergies and exchange of best practices	Ensure dissemination and actual use of the results
WIND: Share knowledge with citizens on economic benefits to increase social acceptance Increase communication on Atlantic specificities which are not well known to attract investors	Authorities with industry & academia	Common opportunities, Atlantic leadership and potential synergies	
Develop transversal courses to reduce the gaps between technological and economic challenges (not only on tech issues) – create a pool / network of interdisciplinary experts	Academia and industry	Synergies and exchange of best practices	
Operationalise the European Technology Platform: regular conference on economic / technological challenges.		Synergies and exchange of best practices	
Funding			

Create a risk capital funding scheme		Common challenges	
TIDAL: Use Feed in tariffs, potentially funded by EU Funds		Common challenges	
Promote niche applications, e.g. Atlantic electricity grids		Common challenges	
Create a common insurance scheme and develop tools to counter risks		Common challenges	
Economies of scale			
Concentrate efforts of companies, picking winners		Economies of scale	
Ensure common access to support vessels in south Atlantic to increase offshore activity: use it as a common basis of support to reduce time and cost		Economies of scale	

6.1.2 Breakout Session 2: Marinas

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Sector fragmentation / cooperation			
Develop cooperation by creating clusters	Industries, local, regional authorities, tourist agencies	Sharing of best practices, different models	Partnerships along the Portuguese coast, Spain, EBI manifesto
Create touristic packages (on a local, regional, national and even Atlantic scale)	Industries, local, regional authorities, tourist agencies	Sharing of best practices, different models	Partnerships along the Portuguese coast, Spain, EBI manifesto

Create Nautical stations, create integrated nautical touristic products	Local authorities, municipalities, private sector, schools, associations	Create national and Atlantic network of nautical stations	Nautical Stations in Portugal
Regulatory Issues			
Establish a common ground for sea professions (skippers, ship repair)	MS authorities that regulate employment, universities that give diplomas	Facilitate transfer of knowledge and expertise	Erasmus Programme, Vasco da Gama
Leases and concession policies			
Create a local strategy, but harmonise at regional / national level	MS, Regions	Learning from good practices in other MS (PT)	Portuguese initiatives

6.1.3 Breakout Session 3: Ports

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Role of Port Authorities			
Launch an EU Project to define the port of the future (diversified, safe data and products, low carbon) (Interreg, Coordination and Support Action (CSA))	Port Authorities, industry, universities, clusters	Flagship project	Feedback from Ports who have started diversifying
Create blue hubs of excellence, ports acting as a catalyst for the blue economy	Port Authorities, industry, universities, clusters	Promotion of Atlantic ports	
Financing of specialised infrastructure			

Create conditions to attract new stakeholders in ports, encourage partnerships, install incubators for start-ups of the blue economy, allocate dedicated areas to industry	Port Authorities	Promoting Atlantic ports	
Expand data collections beyond traditional (logistics) data, including employment and other social factors, bottom-up approach, show results to the public to generate support	Port Authorities, local authorities	Promote Atlantic ports to investors	
Launch Pilot Projects (IT, Green, Robotics, Data Management, Energy)	Port Authorities	Promoting Atlantic ports to investors	Vigo (seabed mapping)
Cooperation among ports			
Create an Atlantic Port Forum, include it in the Atlantic Strategy, (Interreg), use it for sharing knowledge, learning, tackling problems together	Port authorities, local authorities, end users, clusters (increase cooperation), EC	Promote Atlantic ports	Port Tech clusters Portugal

6.1.4 Breakout Session 4: Blue Skills

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Attractiveness			
Create a communication strategy to show the added-value of the careers of the sea, using all media and a cross-sectoral approach	Clusters, Joint actions (public, private, etc.) at a EU level	Addressing common issues and common opportunities	
Increase cooperation on educational policy Develop Blue schools programme	Port authorities, shipping companies, regional stakeholders	Exchange of best practices	Cooperation between MS Draw lessons from existing experience

Ocean literacy			
Launch a Communication Campaign, such as a literacy action to give a brand to Ocean and change perceptions of investors and the general public			
Skills gap			
Develop a skill set for healthy oceans and respond to the needs by mapping actual/ future skill sets and linking technological and environmental issues	Maritime Clusters (integrating offer & demand)		
Create stronger links between academia and industry			

7. Annex IIB: Portugal – Participating Organisations

A Silva Matos	inanoEnergy
APDL - Administração dos Portos do Douro, Leixões e Viana do Castelo, S.A.	Instituto Politécnico de Viana do castelo
Câmara Municipal de Matosinhos	Interreg Atlantic Area
Câmara Municipal de Viana do Castelo	IPVC
Centro Tecnológico del Mar - Fundación CETMAR	ISQ - Instituto de Soldadura e Qualidade
CMIA- CMVC	Maritime Skills Alliance
Comissão de Coordenação e Desenvolvimento Regional Norte	MDS - Global Insurance & Risk Consultants
Conference of the Atlantic Arc Cities	Nautical Services
DGPM - Directorate General for Maritime Policy	Ocean energy Europe
DGPM/Escola Azul	Petrogal
Direção Geral de Energia e Geologia	PLOCAN
Direção Regional dos Assuntos do Mar da Região Autónoma dos Açores	Port of Porto
DOCAPESCA - Portos e Lotas, S.A.	Port of Vigo
Escola Superior de Gestão de Viana do Castelo	QUALISEG LDA.
European Boating Industry	QUASAR HUMAN CAPITAL
FEUP	REN
FOR-MAR	Risk Consulting Group powered by Herco
Forum Oceano	Turismo Porto e Norte
Gabinete do Investidor CMVC	Universidade de Aveiro
GAL Costeiro Litoral Norte - AMP	Wavec - Offshore Renewables

8. Workshop Ireland – Summary²

What was discussed?

The Atlantic Action Plan Consultation Workshop in Dublin, Ireland discussed the topics Connectivity and Aquaculture. The workshop included four breakout sessions, focussing on four distinct topics, namely:

- ▶ Strategic implementation of European Maritime and Fisheries Fund (EMFF) funding in the blue bioeconomy;
- ▶ Connectivity - Developing Short Sea Shipping (SSS);
- ▶ Development of Innovative Aquaculture;
- ▶ Smart Ports and Connectivity.

Who was present?

The breakout sessions were attended by both representatives of the private and public sector. The sessions on the European Maritime and Fisheries Fund (EMFF) and aquaculture were attended by Irish participants from industry, research and public authorities. The sessions on connectivity included Irish ports, public authorities and research actors as well as three French port representatives and one Spanish Short Sea Shipping expert. For a complete stakeholder list refer to Annex II.

How was the workshop structured

Firstly, a number of challenges previously identified in the discussion paper were put up for discussion. Participants were split into small groups and asked to identify the two challenges which they believed had the highest Atlantic added value and urgency as well as any important challenges that were not included on the list. Through this process, two to three challenges were identified. The room was subsequently split into two to three groups, each of which discussed potential actions to address the identified challenges. Finally, each group briefly presented their actions to the whole room for feedback.

What were the main challenges identified?

Each of the four breakout sessions presented a number of different challenges, from which the most pressing ones were identified.

Breakout Session 1: European Maritime and Fisheries Fund (EMFF) (While any reform to the EMFF needs to be tackled at European level, regional initiatives can nonetheless increase stakeholder involvement)

- ▶ **Financial Instruments:** This included both the lack of capital investment and need for innovative funding for infrastructures as well as insufficient use of the Public Private Partnership approach, and issues related to access to finance for SMEs.
- ▶ **Functioning of the EMFF:** This included the lack of awareness for financing, the lack of clarity of EMFF procedures, the complexity of eligibility criteria and the lack of flexibility for beneficiaries (regarding Community-led local Development (CLLD)).
- ▶ **Stakeholder involvement:** This refers to the need for more exchange and collaboration between stakeholders, e.g. between (potential) beneficiaries to share knowledge and best practices on how to develop joint actions and best access and implement EMFF funding, especially through greater collaboration between academic and industry, and between Member States (and Managing Authorities) on promoting innovative options.

Breakout Session 2: Short Sea Shipping (SSS) (The Atlantic Area can become a pioneer in Short Sea Shipping, especially in light of Brexit. Due to the similar structure of Atlantic ports, cooperation can

² Findings will be circulated to participants for comments

significantly facilitate the development)

- ▶ **Coordination and cooperation:** Facilitating collaborative efforts between stakeholders, sharing knowledge and data, and promoting cooperative projects between ports can facilitate port development.
- ▶ **Promotion in Short Sea Shipping in smaller ports:** Smaller Atlantic ports face specific circumstances, and experience difficulties in receiving attention and funding.

Breakout Session 3: Innovative aquaculture (Atlantic Added value stems from the leadership role of the Atlantic in some forms of aquaculture, a fact innovation can help establish and expand.)

- ▶ **Environmental sustainability:** Both aspects directly related to the environment, such as the use of plastics, as well as other related issues, such as disease reduction and forecasting capabilities were discussed under this challenge.
- ▶ **Regulatory and administrative framework:** This included the administrative burden posed by the lack of flexibility of the regulatory framework, the inadequate processes for granting of licenses, and the impact of land management on access to fresh water resources.
- ▶ **Coordination and cooperation:** This challenge highlighted the need to act jointly to improve forecasting capabilities through observation and data/ knowledge-sharing as well as counteract efforts of anti-farming lobbying.

Breakout Session 4: Smart ports and connectivity (Due to the similar structure of ports in the Atlantic area, there is high added value in addressing the challenges through regional cooperation.)

- ▶ **Cooperation:** There is a need for smaller, Atlantic stakeholders to cooperate to ensure their developments are relevant and their voices are heard on a larger, European level. This also includes sharing experiences, raising awareness and increasing communication efforts.
- ▶ **Smart ports & smart cities:** This challenge included different aspects such as traffic management, promoting decarbonisation, communication between cities and ports, expanding broadband connectivity as well as maximising land use.
- ▶ **Interoperability:** For smart ports to become economically viable, the implemented systems need to be interoperable. This requires coordination between different ports, knowledge sharing on what actions have already been implemented and picking winners.

What actions were proposed?

A number of actions were proposed in each session, the table below presents the most pertinent ones.

EMFF	Short Sea Shipping	Aquaculture	Smart Ports
Establishment of a EMFF roadshow at national level Introduce innovative financial instruments (loan guarantees, capital investments, blending) Create an Industry forum to guide project areas to be funded Create a Marine innovation Platform and a newsletter Improve coordination between national funding agencies	Creation of Atlantic Port Forum, launch an Interreg funded study on setup Study on supply / demand side on an Atlantic scale Transfer of knowledge for digital projects Incentivizing shipping companies, increasing lobbying efforts Coordination with other initiatives: Port Community Systems (PCS), decarbonisation, digital projects	Create a one-stop shop for licensing and promote E-licensing Develop the potential to grow seaweed Implement the recommendations of licensing review Use of biodegradable substrates Motivate support for aquaculture through education and industry-led field trips Increase communication & marketing	Interoperability projects: - Share knowledge on different systems, - Development of interoperable system - Deployment Regional platform for exchange and education Develop a pilot project, mobilize EU funding through joint effort, built on current Coordination Support Action

9. Annex IIIA: Ireland – List of Actions

9.1.1 Breakout Session 1: European Maritime Fisheries Fund (EMFF)

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Functioning of the EMFF			
Ensure better coordination between Funding Agencies (H2020-EMFF...)	EU National funding bodies	Coordination on an Atlantic level, facilitate emergence or transnational projects	
Create an Industry forum to guide project areas to be funded Provide an industry-driven agenda	Industry, Producer Organisations, Development Agencies, researchers	Coordination on an Atlantic level, facilitate emergence or transnational projects	
Simplify processes for smaller grant aid (Community-led local development (CLLD))	Administrative stakeholders and applicants		
Stakeholder Involvement			
Establish an EMFF roadshow			
Create a Marine innovation Platform Newsletter website to create incentives	Academia, Regulators, Ministries, Business Operators, Public	Coordination on an Atlantic level, facilitate emergence or transnational projects	Experience Irish Aquaculture technology & innovation Platform
Ensure incentives for SMEs to participate			
Create common innovation aquaculture sites			
Financial Instruments			

Incentivise cooperative approach Provide additional financial incentives			
Introduce innovative financial instruments (loan guarantees, capital investments, blending)	EMFF Managing Authorities, Banks		Scale of Financial Instruments (viability) Improved access to credit

9.1.2 Breakout Session 2: Short Sea Shipping (SSS)

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Coordination and Cooperation			
Create an Atlantic Port Forum	Development agencies, ports, shipping companies	Coordination of efforts, providing a common Atlantic platform	
Promote transfer of knowledge for digital projects	European Commission, ports	Coordination of efforts	
Coordinate with other initiatives: <ul style="list-style-type: none"> • on decarbonisation • on Port Community Systems • on digital projects 	Industry, Atlantic ports	Promote benefits of SSS	
Promotion of Short Sea Shipping in smaller ports			
Incentivise shipping companies, increasing lobbying efforts	Ports	Developing smaller Atlantic ports	Feed-in tariffs in the energy sector, pilot bonus scheme

Commission a study on supply / demand side on an Atlantic scale	Marine institutes, ports	Provide evidence to mobilise EU support	RFC corridor study
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9.1.3 Breakout Session 3: Innovative Aquaculture

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Environmental sustainability			
Ecosystem services/ Promote the benefits of aquaculture, sell stories, etc.	All	Ecosystem benefits:	Scottish conference
Promote the use of biodegradable substrates (ex: Cotton socks instead Plastic socks, repairable plastics...)	All	Sustainable protein production Further new Eco-friendly products	
Develop the potential to grow seaweed (CH4 reduction, positive impact on CO2)	All	Opportunities for new business sectors	
Administrative burden			
Implement the recommendations of licensing review		Exchange of best practices	Ensure best practices from other EU MS (Scotland) as well as Atlantic partners (Norway) are taken on board.
Implement a standardised processes for decision-making		Exchange of best practices	
Create a one-stop shop for licensing and promote E-licensing		Exchange of best practices	
Establish a flexible license to encourage sustainable practices		Exchange of best practices	

Ensure parallel decision-making		Exchange of best practices	
Low reputation			
Create a champion for the Industry			
Educate media and politicians, increase communication, marketing	All	Atlantic leadership	
Motivate support for aquaculture through education and industry-led field trips	All	Atlantic leadership	

9.1.4 Breakout Session 4: Smart Ports

Actions	Stakeholders	Atlantic Added Value	Lessons learnt
Cooperation			
Develop a pilot project of a smart port, mobilize EU funding through joint effort (coordination through the Atlantic Port Forum), built on current CSA on ports of the future	Ports, Development Agencies	Develop the Atlantic as a leader in smart ports	Ports of the Future CSA
Increase cooperation between smaller stakeholders in Atlantic area to increase their voice	Port authorities, shipping companies, regional stakeholders	Promote Atlantic ports	
Develop an Atlantic strategy in response to the one belt, one road initiative	Ports, European Commission	Ensuring Atlantic ports are not left behind	
Smart ports and smart cities			

Incentivise decarbonisation, promote action on a local level	Local authorities	Giving the Atlantic a leadership role	
Create a Regional platform for exchange and education	Ports and cities	Promoting regional development	
Promote cooperation between ports with focus on environmental friendliness (green ports), promote benefits of this approach	“Green” Atlantic ports	Increasing visibility of Atlantic ports, promoting a leadership role	
Interoperability			
Launch an Interoperability project: <ol style="list-style-type: none"> 1. Share knowledge on different systems, 2. Development of interoperable system 3. Deployment (Motorways of the sea)	Atlantic ports	Promote the Atlantic area as a leader in interoperability	

10. Annex IIIB: Ireland – Participating Organisations

Bantry Harbour Mussels	IMDO
Bantry Marine Research Station	Insight Centre for Data Analytics - UCC
BIM Ireland's Seafood Development Agency	Irish Exporters Association
Bord Bia	Irish Maritime Development Office
Bord Iascaigh Mhara	Irish Shellfish Association
Department of Agriculture, Food and the Marine	MaREI
Department of Communication, Climate Action & Environment	Marine Harvest Ireland
Department of the Taoiseach	Marine Institute
Department of Transport Tourism & Sport	Maynooth University School of Business.
DG MARE	Northern and Western Regional Assembly
DG MOVE	Permanent Representation to the EU
Dublin Institute of Technology	Ports Normands Associés
EMFF Managing Authority	Rosslare Europort
Enterprise Ireland	Science Foundation Ireland (Insight Centre)
European Commission DG MOVE	Shannon Foynes
Expert Group on sustainable aquaculture	Spanish Shortsea Promotion Centre
Galway Mayo Institute of Technology	The Chartered Institute of Logistics and Transport
HAROPA Ports	Údarás na Gaeltachta
IBM Research - Ireland	West-Brittany Chamber of Commerce

