FACILITY
FOR BLUE GROWTH
IN THE BLACK SEA

Regional Stakeholder Seminar on Blue Economy

Towards a Common Maritime Agenda for the Black Sea

19 March 2019
Istanbul, Turkey

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Workshop 1
Seizing the opportunities of research and innovation for a thriving blue economy

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Objective 1: Enhance the generation of 'basic knowledge' essential for blue growth in the Black Sea

Challenges

- Difficulties in access to specialised knowledge to ensure a better understanding of blue growth by the interested stakeholders
- Limited coordination between academia and research institutes might prevent implementation of common agreed plans/agendas on scientific knowledge sharing (e.g. Strategic Research and Innovation Agenda)
- Fragmented national funding and limited institutional coordination for the support of key scientific knowledge development

Suggested actions and projects

- Engage funding from private sector
- Develop a Strategic Research and Innovation Agenda (SRIA)
- Link SRIA-national strategies and Common Maritime Agenda
- Creation of a science and industry partnerships
- Learn and share of experience between different sea basins
- Focus on multistressors eutrophication, deoxygenation, acidification, overfishing, lack of biodiversity, invasive species, climate change, litter
- Develop guidance on marine spatial planning and then marine spatial plans in accordance with the Integrated Maritime Policy

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Objective 2: Upgrade the research infrastructures needed to support blue economy activities

Challenges

- Fragmented and inadequate initiatives aimed at observation, monitoring and data sharing
- Limited common/joint structures (e.g. clusters, platforms) for data sharing, e.g. scientific data, relevant communication networks, etc.
- Limited efficiency of the networks of existing research infrastructures
- Difficulties in disseminating ocean literacy and in the launch of commonly agreed and aligned curricula across the Black Sea countries

Suggested actions and projects

- Promote a single Black Sea specific data sharing mechanism
- Establish technology and innovation transfer centers from institutes to industry
- Improve science on the Black Sea marine ecosystem state and its issues
- Improve science partnerships with industry
- Link companies to technological developers, coaching organisations

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Objective 3: Set-up and develop marine and maritime innovation cluster initiatives to boost business innovation in the blue economy

Challenges

- Insufficient coordination between academia, enterprises and authorities, so as to promote faster innovation practices and uptake of advanced technologies
- Economic activities by the blue economy clusters have difficulties in reaching their full potential across the Black Sea basin; limited awareness about clusters being an essential tool to accelerate innovation and joint activities amongst businesses and other stakeholders
- Existing clusters in complementary or synergetic fields to blue economy are actually only slightly connected to the blue economy
- Collaboration and joint activities are limited at regional level for academic institutes active in Blue Economy
- Inadequate cooperation and communication between key public and private stakeholders prevents the development of innovation oriented projects

Suggested actions and projects

- Create national clusters that include more than one particular sector (incl. ICT)
- Network of national clusters and related bodies – to set up a business model with clear indicators and targets)
- Set up business hubs and accelerators
- Dedicated programme for staff exchange and training (small travel grants)

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Workshop 2
Maritime connectivity in the digital era: an engine for blue economy

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Objective 1: Boost cooperation across the Black Sea to ensure greater interconnectivity between ports and inter-modality

Challenges

- Integration of maritime and inland transport must be better balanced and provide for the development of intermodal connectivity within and across Black Sea countries
- Limited coordination exists amongst key stakeholders, preventing the design of a coherent planning for efficient regional transport operations

Suggested actions and projects

- Create a platform for dialogue between public and private stakeholders, so as to address common challenges (regulation, technologies, market analysis) and foster joint solutions to boost Black Sea interconnectivity (e.g. harmonize regulations, harmonize data, etc.)
- Raise civil society's awareness with regards to challenges and opportunities (e.g. financial, employment, infrastructure, value creation, etc.) in the sector, and identify actions to ensure positive effects

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Objective 2: Better develop RoRo shipping and foster more efficient Europe-Asia connections

Challenges

- A greater market analysis and better understanding of current and future market potential is essential as a basis to define effective long-term development strategies for reliable inter-regional transport means, both maritime and inland
- Minimization of operational costs and maximization of the quality of services in order to boost RoRo services and the efficiency of connectivity between Black Sea ports

On-going actions and lessons learnt

- RoRo lines between RO, BG, UA, TR, GE, RU (newly introduced)

Suggested actions and projects

- Further support on-going pilot projects for RoRo lines as a way to foster dialogue between stakeholders, identify regulatory bottlenecks, work on common standards, etc.
- Assess and evaluate RoRo market potential and identify scenarios for maximising the benefits of RoRo development in the Black Sea (taking into account both the EU and Chinese markets)

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Objective 3: Support innovation of the logistics chains and related infrastructures

Challenges

- **Digitalisation is considered as the main challenge to boost innovation with regards to logistic chains**
- Limited development of capacity and skills in innovation is a bottleneck
- “brain-drain” creates difficulties in the adaptability of enterprises and workforce to innovative logistics chains
- Limited financial resources to boost sectoral digitalisation
- Insufficient cooperation at regional level in various fields to develop common standards and coordination tools

Suggested actions and projects

- Projects on capacity building and upgrading of skills on logistics chains and on the digitalisation of the sector
- Set up a network of existing training institutions and/or improve existing ones around the Black Sea countries
- Create a regional platform to share the data, experiences, good practices and updates on logistics chains organisations, management, etc. and on the digitalisation of the sector

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Objective 4: Ensure greater respect of international safety and environmental standards (green ports)

Challenges

- Not fully developed skills and low levels of capacity building as regards international safety and environmental standards to be applied in Black Sea ports
- Difficulties in regional cooperation for the definition and further implementation of common environmental standards
- Difficulties in establishing a regionally approved definition of 'Green port' and further proceeding with the development of a certification for 'Green ports'

On-going actions and lessons learnt

- Several plans mostly at national/local level, including UA's plan to make ports 'greener'

Suggested actions and projects

- Setup a monitoring management system in each port of the Black Sea
- Create a networks of green ports
- Work at smaller scale, pragmatic approach of cooperation
- Regular assessment of the state of the Black Sea ecosystem

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Workshop 3:
An attractive Black Sea region: sustainable coastal and maritime tourism

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Challenges

1. Limited resilience of existing traditional business models by addressing new market demands and identifying high value niche markets within blue economy
2. Innovative initiatives in 'niche' markets are constrained within local level; they rarely reach their full potential at regional level
3. Insufficient use and/or introduction of new technologies and digital tools
4. Limited promotion of sea basin collaboration and coordination among Black Sea countries
5. Not fully spread awareness and transfer of knowledge among Black Sea stakeholders on the sector's difficulties/challenges
6. Inadequate knowledge on possible negative impacts of mass tourism (e.g. land-based pollution, wastewater management)
7. Difficulties in improving the existing regulatory framework and introducing new measures to support the sustainable development of the sector across the region
8. Difficulties in identifying Black Sea areas and sectors in order to assess and further reduce their environmental cumulative impacts
9. Fragmented transport/connectivity among Black Sea countries
10. Limited means to prolong of the tourist season
11. Limited availability of targeted funding (at national/regional level)
12. Not coordinated sharing of good practices and lessons learnt among local communities
13. Limited means to ensure the sustainability and continuity of tourism structures (e.g. businesses, organisations, networks, etc.)
14. Develop training/education programmes on the benefits of sustainable tourism for citizens, tourists businesses, etc.)
15. Limited coordination of practitioners (nationally and regionally) prevent the circulation of good practices, twinning initiatives and spread of innovation tools

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Objective 1: Foster the development of sustainable products and services with low ecosystem impact

Suggested actions and projects

- **Improve 'Black Sea' branding through collaboration with:**
  - Institutions and public authorities (e.g. municipalities) within the Black Sea countries
  - UNESCO/Joint Programming Initiative (JPI)
  - BSEC collaboration with internationally acknowledged travel guides/agencies (e.g. Lonely Planet etc.)
- **Black Sea guides**
  - Launch guides for Black Sea marinas, cuisine, culture, cruise and yachting tourism, etc.
  - Set-up a common website on Black Sea tourism
- **Create/promote touristic routes (wine routes, silk road, bike tours)**
  - Through a network of hostels
  - Promote bike tours through national/international networks e.g. EuroVelo Association
  - Promotion of Art/Young Festivals every year in the Black Sea region
  - Regular organisation of sailing rally at regional level
- **Diving Tourism/Sea bed mapping**
  - Promotion actions for Black Sea's underwater heritage
- **Eco-camp Sites (Network) linked with ecofriendly activities**
  - Development at local scale; development of cooperation mechanisms for landowners

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Objective 2: Scale-up local practices in emerging “niches” to the national and regional levels

Suggested actions and projects

- Sustainable Agrotourism promoting local products (biotech, hydroponics) including water conservation, changing farming systems, etc.

Objective 3: Support the uptake of new technologies (Tourism 4.0) to improve the image of the sea-basin

Suggested actions and projects

- Promote tourism through new technologies (e.g. marketing tools) and further utilise available data
- Development of online platforms

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Objective 4: Foster greater support for cooperation amongst practitioners in the region

Suggested actions and projects

- Create a network for protected areas to be integrated in Eco-tourism

Objective 5: Development of Infrastructure

Suggested actions and projects

- Launch regular competitions and introduce ‘Beach awards/Blue Flags’ for initiatives/projects improving coastal and marine infrastructure

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Workshop 4
Healthy marine environment and fight against plastic pollution

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Objective 1: Support the change of habits of citizens and businesses to address pollution

Challenges

- Not fully developed means to increase public awareness about possible human impact on marine environment and education on alternatives/means to address such issues
- Limited capacity to identify objectives and respective actions for a healthy marine environment
- Limited awareness in the private sector about litter pollution impacts
- Inadequate assessment of the impact of micro-plastics in the sector
- Shortage of eco/environmental tourism
- Limited level of environmental knowledge in tourism sector
- Insufficient understanding of the impacts of production methods/lines to marine environment
- Limited information on the contribution of rivers' pollution to overall marine pollution
- Low levels of knowledge about marine litter's impact on biota
- Inadequate reinforcement measures of existing regulatory measures on land and marine pollution

Suggested actions and projects

- Develop environmental monitoring systems with the active involvement of Black Sea stakeholders (e.g. businesses, research institutions, local authorities)
- Launch studies to assess the impact of micro-plastics and to find alternatives to single use plastics
- Develop actions to share good practices among the regions of Black Sea countries
- Initiatives to raise public awareness on single use plastics

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Objective 2: Develop marine protected areas and foster ecosystem planning to recover biological marine resources and mitigate climate change effects

Challenges

- Limited integration of MPAs into the growing ecosystem-based planning; need to develop 'Green structure'/'Blue corridors'
- Not fully developed management plans for MPAs in the Black Sea basin
- Difficulties in developing a network between MPAs stakeholders around Black Sea countries
- Difficulties in ensuring a coordinated approach between maritime activities across countries
- Low public involvement in decision making procedures for safeguarding and utilising protected zones
- Low levels of public transparency on MPAs management rules
- Limited means for the elaboration of studies related to MPAs connectivity
- Limited availability of scientific data for MPAs – (available data only on fisheries for Natura 2000 areas)

Suggested actions and projects

- Actions/studies to assess marine litter dynamics and fate in the sea both floating and in sediments
- MSP development and further coordination actions to align progress made to marine activities

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Objective 3: Set up common monitoring and observation systems and practices to assess performance of the blue economy contribution towards a litter-free circular economy

Challenges

- Difficulties in providing for consistency on data collection and environmental monitoring at regional level
- Limited means to ensure the assessment as regards the management of floating litter and litter at the bottom of the sea basin
- Inadequate knowledge on plastic dynamics (e.g. specifics in the ecosystems it affects etc.)
- Difficulties in ensuring availability and accessibility of decision makers to up-to-date and coherent data collection
- Low levels of public awareness of hotspots and main sources of marine litter
- Fragmented approach to fight marine litter and improve compatibility of data
- Limited means to provide for the estimation of financial resources needed to combat marine litter problem
- Lack of up-to-date data collection and constant region-wide monitoring mechanisms

Suggested actions and projects

- Improve management of land-fill
- Introduce and upgrade automated monitoring and observation systems
- Establish the measurement of marine litter as a key indicator of good governance among Black Sea countries
- Cooperation actions with fishermen to improve reporting (litter at bottom)
- Conduct research on the future and impacts of plastics within due to Black Sea conditions
- Use of skimmers for the collection of surface litter
- Introduce programmes for ‘green ships’ (‘green flag’ for ships)
- Launch citizens science applications
- Increase pressure to upload to dedicated platform
- Share experiences and good practices from actions in other sea basins

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Workshop 5
Sustainable fisheries and aquaculture

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Objective 1: Improve scientific knowledge, research and advice on fisheries

Challenges

- Limited cooperation between research and educational institutes across Black Sea countries
- Difficulties in the harmonization of methods and assessment tools of stocks at regional level and between Black Sea countries
- Fragmented collection and sharing of socioeconomic data on fisheries
- Few joint regional surveys carried out by multinational teams of scientists
- Limited participation of fishermen to circular economy initiatives

On going actions and lessons learnt

BlackSea4seafish project

Suggested actions and projects

- Establishment of platform/network between academia and fish institutes
- Actions to elaborate on diversification of catches
- Promotion initiatives to illustrate the high added value of the sector
- Definition of a common methodology for assessment of stocks
- Identification and assessment of fisheries communities

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Objective 2: Enhance multilateral cooperation between stakeholders

Challenges

- Difficulties in efficient cooperation between stakeholders (e.g. institutes, businesses, local authorities, etc.) in the fisheries and marine aquaculture sector
- Difficulties in fully addressing Black Sea specifics within the value chain, including national production across Black Sea; need for certification and traceability procedures/standards, etc.
- Uneven development of aquaculture around the Black Sea basin prevents cooperation, sharing of good practices and progress of the sector regionally

On going actions and lessons learnt

BlackSea4seafish project, GFCM WGBS, Flag initiative (RO/BG only)

Lessons Learnt

- Potential cooperation under ENI/CBC
- INTERREG: limitation for non EU Member States

Proposed actions and projects

- Establishment of a regional cluster to provide for stock management of species across Black Sea
- Promotion of 'Black Sea' Brand/development of certification process
- Develop initiatives for sharing training and good practices along the Black Sea

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Objective 3: Make fisheries sustainable and develop sustainably marine aquaculture

Challenges

- Limited joint efforts to develop aquaculture with focus on the protection of marine environment and utilisation of high technologies
- Mostly outdated coastal environmental monitoring systems for sustainable marine aquaculture
- Few linkages within the sector's value chain (catching, production, consumption/management of stocks etc.)
- Difficulties in the coherent fisheries' management in organised markets around the Black Sea
- Limited promotion of the diversification of fishermen's activities, e.g. entrepreneurship and leadership training, nautical and ecological tourism, recycling waste found in the sea, etc.

On going actions and lessons learnt: BlackSea4seafish project, GFCM WGBS, Flag initiative (RO/BG only)

Proposed actions and projects

- Analysis/study to assess the status and implementation of the regulatory framework in the aquaculture sector
- Establishment of fish markets network
- Set-up a platform to monitor data sharing across the entire value chain
- Eco-friendly aquaculture actions at every step of the production including overall promotion and awareness on their benefits
- Programmes for training and education of aquaculture sector (organical, multi-trophical, etc.)
- Research:
  - On vaccination for aquaculture, new species and new technologies for cages – set-up of a platform for data sharing on sanitary issues
  - Aquaculture derived high added value level products (medicine), certification of the whole aquaculture process (Good Aquaculture Products)

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Workshop 6
Blue skills and blue careers of the future

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Objective 1: Constant upgrade skills and competences in accordance with market demand

Challenges

- Development of a coherent lifelong learning system across Black Sea countries
- Limited provision for targeted educational programmes (incl. Black Sea marine environment) in accordance with industry needs to support the development of blue economy
- Difficulties in establishing commonly accepted standardization of programs, skills and diplomas, etc., at regional level
- Difficulties in the full adaptation of educational systems (less theoretical and more practical and business oriented) to meet blue economy market needs
- 'Mismatch' between human resources with regional training and/or academic qualifications and the practical competences needed for the development of blue economy across the Black Sea

On-going actions and lessons learnt

- Demonstration centres on fisheries in RO and TR

Proposed actions and projects

- Develop a regional platform to accommodate sharing of actions and skills needs for Blue economy within the Black Sea
- Set up programmes for internship and VET (e.g. ERASMUS + like programmes) adapted to the Black Sea needs
- Implementation of joint training programs, exchange of students and teachers
- Monitoring of training programs of Black Sea universities and creation of a virtual platform of the best programs.

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Objective 2: Fully develop the ability to understand and uptake advanced technologies

Challenges

- Slow development of research infrastructures on advanced technologies across the Black Sea countries
- Difficulties in the enhancement of specialised vocational training across the Black Sea countries among a wide range of interested parties, i.e. academia, businesses, investors, civil society at large.
- Promotion of training on digitalisation to professionals across the Black Sea countries

On-going actions and lessons learnt

- Business games and demonstration centres

Suggested actions and projects

- Promotion of national demonstration centres on advanced technologies and sharing of good practices
- Introduce Blue Competitions, engaging and serious games for differently skilled audience
- Communication and dissemination campaigns

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Objective 3: Attract young talent and qualified professionals

Challenges

- Inadequate means to combat “brain drain” in the region
- How to ensure a balance between the regional market of maritime sectors and level of salaries
- Poor visibility and limited appeal of the economic activities across the blue economy for the young and talented professionals
- Difficulties in adjusting and/or aligning academic curricula with market needs
- Lack of specific mechanisms and regional planning to anticipate a potential job decrease due to automation shift

On-going actions and lessons learnt

- MARIN - cross-border project on maritime heritage, GOMAR, MENTORES

Proposed actions and projects

- Education as a way to raise interest in maritime issues (including education of teachers)
- Develop mobility programmes
- Improve safety conditions
- Promotion campaigns on blue careers

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Objective 4: Promote full circulation of skills and workers in the Black Sea

Challenges

- Difficulties in overcoming existing legal barriers (e.g. diploma etc.) for full movement of workers
- Difficulties in regional coordination for the development of a common regulatory framework (e.g. for regular training) for the upgrade of blue skills for the human workforce in the Black Sea region
- Fragmented efforts for the reduction of “brain drain” in the Black Sea region

Proposed actions and projects

- Set-up of online platforms
- Communication on initiatives from Black Sea key stakeholders (industry, universities, etc.)

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