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REPORT 1

ANALYSIS OF BLUE GROWTH NEEDS AND POTENTIAL PER COUNTRY

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Contents

0 Task reminder and objective of the report

The contents of this Report 1 of Task 2 – "Analysis of Blue Growth needs and potential per country" have been structured taking into account the requests specified in Chap. 4 of the Tendering Specifications (TS) and according to the structure proposed within the Inception report, Chap.5.

The objectives of this Task 2, as mentioned in the Tendering specifications, are to **identify the blue growth needs and potential of Mediterranean and Black Sea countries by providing a breakdown of their marine and maritime sectors making up their blue economy and related scenario for growth**.

Tendering Specifications requested to provide this information in user-friendly fiches (i.e. Country fiches) for each of the country included in the scope of the analysis, namely: **Italy**, **Slovenia**, **Croatia**, **Bosnia-Herzegovina**, **Montenegro**, **Albania**, **Greece**, **Malta**, **Cyprus**, **Turkey**, **Romania** and **Bulgaria**[1].

The Tendering Specifications asked also to provide policy recommendations, which could help fulfill the sustainable growth potential of each country Blue economy.

In order to meet these requests, the following documents are provided:

- **Report 1**: it includes 3 page summaries of each Country fiche and related Policy Recommendations; an overall methodology has been also provided in order to give a comprehensive framework of the approach followed for developing all sub-tasks as requested in the TS;
- **Annex 1 - Country fiche guide**: it is an introductive guide providing all information needed for a proper understanding of the Country fiches and related methodology used for compiling them;
- **Annex 2 - Country fiches**: 12 documents (one for each country included in the scope of this Study, plus related Annexes), providing the requested breakdown of marine and maritime sectors of each country and identifying the most promising activities which could make up each country's economy;
- **Annex 3 - Assessment of policies**: all national and regional policies and financial instruments linked to the most promising activities have been analysed in order to identify elements perceived to favour or hinder the sustainable growth.

[1] Spain and France will be entirely developed by ECORYS for all sub-tasks of Task 1 (from 2.1 to 2.9), possibly breaking down the related Country fiches by sea-basin, in order to allow the formulation of Policy recommendation at sea-basin level.

1 Overall approach and methodology

As mentioned above, two main outputs have been produced in this Task 2, namely: (i) a Country fiche for each of the 12 countries involved in this Study and (ii) Policy recommendations in order to grasp the blue potential identified in each country.

1.1 Country fiches

Country fiches have been conceived for identifying blue growth needs and potential, by providing a breakdown of the marine and maritime activities at national level. For developing this task, DG MARE asked to use the methodology developed within the Blue Growth Study and to adapt this approach to current data availability[2]. As a final result, 29 marine and maritime activities have been identified, analysing gross value added and persons employed for each of them as indicators for defining their socio-economic impact on the blue economy of each country[3]. Furthermore, this analysis has adopted a “value chain approach” for the purpose of detecting and assessing all possible activities correlated to the core marine and maritime activities[4]. Following the methodology developed in the Blue Growth Study, the 7 largest, the 7 fastest growing and the 7 marine and maritime activities with most future potential have been identified in each country. Based on the list of the 7-7-7, the most relevant and promising marine and maritime activities have been identified, giving priority to those activities with most future potential (which not necessarily are already well-established)[5].

The most relevant and promising activities have been therefore analysed in detail in order to trace their possible future scenario[6], reporting growth drivers and barriers to growth for each of them[7]. As a general rule, 6 activities have been identified for each Country. However, in some cases, due to the limited dimension of the respective maritime economies (e.g. Bosnia) or following the assessment of the country experts (e.g. Albania), less than 6 activities have been considered as “most promising”.

In order to define also the role of each most promising activity in the national strategic framework, national and regional strategies have been also analysed and possible links to Blue Growth objectives and Smart specialization Strategies have been found[8].

In this Report 1, a max 2-page summary for each fiche has been included, while extensive Country fiches have been attached to this Report 1 in Annex 2

1.2 Policy recommendations

Policy recommendations, included in this Report 1 after each Country fiche summary, have been formulated for **those activities identified as “most relevant and promising”** in the related country, given that these activities represent the “growth potential of each country’s blue economy”. Therefore, answers to the following questions have been provided:

- how to achieve the growth potential (6 most relevant and promising activities) of each country;
- how to remove barriers and strengthen drivers;
- what possible financial sources to use in the next programming period.

[2] For identifying marine and maritime activities The Blue Growth Study used the nomenclature of economic activities (NACE) rev. 1.1, which actually expired in 2007. Starting from 2008, NACE rev. 2 has entered into force, requiring therefore a necessary adaptation of the methodology. See Annex 1 – Country fiche guide (chap. 2) for more details.
[3] See Annex 1 – Country fiche guide (chap. 1) for more details.
[4] See Annex 1 – Country fiche guide (chap. 1) for more details on the value chain approach. See Annex 1 – Country fiche guide (chap. 3) for the identification of the marine and maritime activities and methodology for estimating GVA and employment.
[5] See Annex 1 – Country fiche guide (chap. 4) for more details on the 7-7-7 and on the selection of the 6 most promising.
[6] See Annex 1 – Country fiche guide (chap. 5) for more details on the analysis on the growth scenario.
[7] See Annex 1 – Country fiche guide (chap. 6) for more details on growth drivers and barriers to growth.
[8] See Annex 1 – Country fiche guide (chap. 7) for more details on the analysis of marine and maritime strategies.

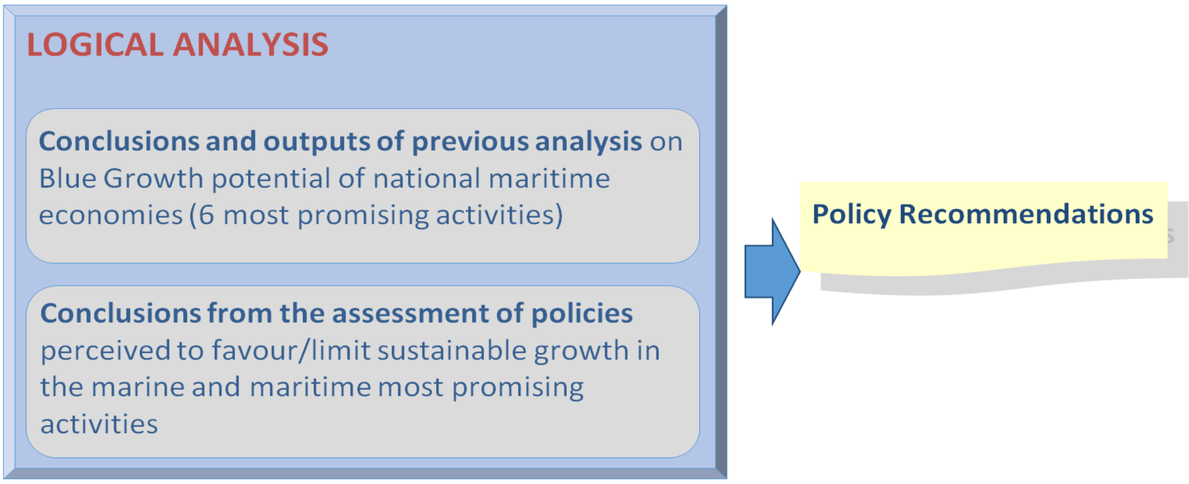
In order to correctly formulate these recommendations, a Logical analysis has been carried out, taking Country fiches findings and the "Assessment of national and regional policies" (Annex 3 of this Report 1) as the main basis for developing this task.

More specifically, **Country fiches** identified the most relevant and promising activities in each country, analysing in detail their value chains, infrastructural scenario and growth potential. For the same activities, growth drivers and barriers have been also identified and an analysis on the strategies at national and regional level allows also to define part of the political effort for developing/reinforcing the most promising activities identified.

If part of the political effort has been defined by strategies, a remarkable part of this effort is detectable from multiple policies and financial instruments adopted at national and regional level whose aim, among others, is to further develop the most promising activities. Hence, the "**Assessment of national and regional policies**"[9] has the main objectives of identifying these policies, describing them and reporting the elements perceived to favour/hinder the sustainable growth of each country's most promising activities.

In order to confirm/corroborate these findings, stakeholders' perception on the elements favouring/hindering the sustainable growth of most promising activities has been also reported[10].

The **Logical analysis** of these two elements (i.e. Country fiches + assessment of policies, corroborated by stakeholders' perception) has formed the basis for formulating the Policy recommendations included in this Report.



[9] Annex 3 - Assessment of national and regional policies
[10] *Ibidem.*

1.3 Limits to our analysis and solutions adopted

➲ Methodological solutions adopted for the compilation of the Country fiches

As requested by the TS, the methodology of the "Blue Growth Study" has been used for compiling the Country fiches and for carrying out the different steps of the analysis. On the other hand, it emerged that:

- The Blue Growth study was based on NACE rev. 1.1 and this classification has been replaced by NACE rev. 2, where different economic activities are available.
- Because NACE rev. 2 has been adopted since 2008, only 3-year time series are generally available (2008-2009-2010)

In order to solve these limits and define a homogeneous methodology for compiling the requested Country fiches, as requested by DG MARE, methodological solutions needed to be shared with ECORYS and its consortium, involved in similar projects in other EU sea-basins.

Following several working sessions, three documents were presented and discussed, namely:

- the Country fiche template
- related methodology to compile the Country fiche;
- Methodology to allocate NACE activities to Blue Growth maritime economic activities (MEAs) and methodology to calculate gross value added (GVA) and number of persons employed (EMPL) for each maritime economic activity.

The first two documents – previously agreed with ECORYS – were shared with DG MARE, which approved them in the Inception Report. The methodology to allocate NACE activities were discussed and agreed only between COGEA and ECORYS. DG MARE provided first set of comments on this methodology which have been improved accordingly.

Therefore, **solutions** adopted for the compilation Country fiches are the followings:

- Development of common country fiche template which can be compiled for all countries;
- Development of common methodology – easily reproducible – to allocate NACE rev.2 to MEAs;
- New list of MEAs (29 activities instead of 27);
- Three-year time series will be used for calculating the CAGR (compound of annual growth rate)[11];

➲ Limits as to data availability and solutions adopted

EUROSTAT database has been used for collecting data needed for compiling the Country fiches. In many instances and especially for some specific MEAs data were not available for different reasons, namely:

- Confidentiality issue: usually, GVA and EMPL are not provided in case the number of enterprises composing the NACE code is < 3;
- Data gap: for a given year data are not available for some NACEs in a given country;

In order to cope with these limits, the following solutions have been adopted:

- An in depth survey at country level in National statistics offices have been carried out, asking to related staff involved in structural business statistics the availability of data, both as regards those flagged as "confidential" and those not available. In some cases, gaps were filled.
- When these data were not available at all, specific proxies were elaborated by the related Country experts. All cases in which these proxies have been used have been specified in the related Country fiche.

[11] Structural business statistics (SBS) have been used for collecting needed data for developing country fiches. At the time of writing – and therefore also when country fiches were compiled – only three-year data were available with NACE rev. 2 codes.

2 Blue growth needs and potentials per country

2.1 Albania

Albania's coastline length is 362 km and has six islands (all are very small and uninhabited).Top three most inhabited qarks (i.e. administrative units) of Albania are all included in the coastal are – they are Tirana[12] (756.675), Durrës (263.711) and Vlorë (181.346). Gross Domestic Product of maritime areas was EUR 6.384 million in 2010, which is 72% of Albania. Persons employed in maritime areas were 728.239, which is 63% of the total employed persons in Albania (2011).

For Albania there are no data reported or available for maritime activities defined by our methodology, consequently it is not possible to provide the ranking order of the 7 largest and the 7 fastest growing marine and maritime activities.

4 Most Promising Marine and Maritime Activities

The 4 most promising marine and maritime activities in Albania are: **Marine aquaculture, Coastal tourism, Passenger ferry services and Fishing for human consumption**

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Marine aquaculture	+	+	+	+	+	+	++++++
Coastal tourism	?	+	+	+	+	+	+++++
Passenger ferry services	0	+	+	+	+	+	+++++
Fishing for human consumption	0	+	+	+	+	-	+++

[12] The qark of Tirana has been considered as coastal despite the position of the city. More detailed data are not available

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Marine aquaculture				
Aquaculture has been selected as one of the most relevant and promising marine and maritime activities because it is expected to grow in the future, triggered by domestic and regional market demand. Further investments are foreseen by the private sector - some with public support, e.g. IPARD Program. Aquaculture in Albania is developed on seaside mainly in Saranda and Vlora and in lagoons. Marine aquaculture in Albania has marked great growth over the last decade, despite slow recent growth constrained by the flat domestic market demand and by constraints to access to EU market. Domestic consumption will increase in the future, in particular thanks to the increased demand triggered by tourism development that will further push the sector growth.				
R&D (-), smart infrastructure (-), access to finance (-), maritime cluster (+)	More support measures for aquaculture and fishery are attended from National Strategies EU pressure	Fish production grew from 1.250 t in 2012 to 1.300 in 2011	23 enterprises, most of which licensed in recent years	There are concerns for the negative environmental impact in some aquaculture zones in Albania – environment impact assessment is needed
Coastal tourism				
Tourism (and coastal tourism represent the main component) continues to be seen as an important sector in the economy of Albania providing jobs, local incomes and making contributions to Government revenues. The direct contribution of Travel & Tourism to the national economy in 2011 was 6,2% of GDP. Improvement of territorial planning is expected, for the purpose of strengthening law related to illegal construction. Bigger investments are expected by large businesses (e.g. resorts) – some of such investments have already been initiated. While overall support infrastructure has improved significantly over the last years (e.g. new roads), still, further public investments are needed, but is expected that such investments will be modest in the coming years due to high debt representing strong fiscal constraint.				
R&D (-), access to finance (-), education, training and skills (-), Smart infrastructures (-), public engagement (+)	National Strategic Document of Tourism for 2013 – 2020 (draft, still to be approved) EU pressure	51.000 persons were employed in the sector in 2011, the 5,5% of total national employment	Many small companies as hotels, travel agencies, passenger transport services Expectations from policy makers and EU support	In the near future, this sector is expected to be sustainable. Attention from policy-makers will further positively affect sector sustainability
Passenger ferry services				
The passengers' transportation traffic by ships has increased year by year. In 2011, around 1,16 million passengers were transported in four ports, compared to 1 million passengers in 2007. Most important node is Durres, also due to investments in the new passengers' terminal. Moreover, it is expected that tourism growth in the future will trigger the demand for passenger ferry services. The draft of the Strategic Document of Transportation for 2013-2020 considers three future challenges related to maritime transport, which are: integration of different kinds of transportation, modernization of ports and increasing security of life in sea and protection of maritime environment. Also the increasing number of operators creates conditions for improvement in services making them more attractive for passengers.				
R&D (-), access to finance (-), smart infrastructure (+), maritime spatial planning (-)	National Strategic Document of Transportation for 2013 – 2020 (draft, still to be approved) Pressure for Conformity EU standards	Increasing demand for passenger services is expected	Many expectations from policy makers and EU support Four Albanian ports among which Durres designated to be a containers, general cargo and main ferry terminal	National Strategy is aimed at increasing security of life in the sea and protecting the environment
Fishing for human consumption				
Estimates of the main economic parameters show that Albanian fleet's production stands at around 6.900 tonnes, with a value which exceeds 10 million euro. The production is achieved through approximately 858 operators working in the fish sector. The fishing fleet is oriented mainly on trawl fishing with about 62% of the fishing boats. Increasing of fish consumption in the domestic market (fish per capita supply has increased by 10 times since early transition period in Albania) and expansion of demand from international markets, especially EU, creates opportunities for a sector growing. This consumption trend has given a boost to fishing which has marked a remarkable growth over the last decade (despite a stagnation in the last years). There is need for systematic environmental monitoring. Investment in new modern fishing fleet is necessary to shift fishing from species which are overfished to explore species which are not fished and that represent high stocks				

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
R&D (-), smart infrastructure (-), public engagement (+), maritime spatial planning (-)	More support measures for aquaculture and fishery are attended from National Strategies EU pressure	Approximately 858 operators working in the fish sector	The sector is composed by 6 main companies engaged in processing, 45 private companies that carry out processing/trade activities for fish and fish products. Also restaurants, hotels, fishmongers, local and private markets	The overfishing abuse has characterized this sector during the last 2 decades. An environmental impact assessment is needed. However, the legal environmental base has improved during the last years through some EU funded projects

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Marine aquaculture

The achievement of two main objectives could boost the sector allowing to fulfil its growth potential: (i) the **development of the internal demand** and (ii) the **opening of EU market doors to Albanian production**. Of course the activity presents remarkable barriers to achieve these objectives. The first one is represented by the poor quality and the lack of certifications basically all along the value chain (from the production to processing). The main effort to be done is the **adoption of quality system** also in line with EU standards. This improvement not only will contribute to increase the quality of products opening possible market scenarios at national and international level.

A specific support is envisaged in the EUSAIR for this purpose, meaning that a synergic action at sea-basin level – involving for example all littoral countries in the Adriatic and Ionian sea-basins – can be implemented, aimed at developing **common quality standards** or a **sea-basin product label**.

Within the context of the EUSAIR, Albania marine aquaculture could learn from neighbouring countries, **absorbing innovations** and **benefiting from already developed research** in the sector. Besides quality labelling, main objectives to be achieved by the Albanian marine aquaculture benefiting from the sea-basin cooperation are:

- **Introduce new species** also taking into account attitudes of possible partner countries; research projects could be launched (also at international level) of identifying these species and assessing the feasibility of introducing these species in Albanian farming
- **increase the value added of production**, strengthening the processing sector and introducing HACCP certificate; as a first step, an effort by the central government is recommended in order to make HACCP rules mandatory also for all processing activities;
- develop **MSP and ICZM** for optimising the use of marine and coastal spaces; effort from the central government is recommended.

Possible financial sources

The adoption of the EUSAIR would entail a necessary alignment of funding to its objectives. In this sense, the recommendations forwarded above could be concretely, implemented given that these objectives match with EUSAIR's priorities.

IPA funds and ETC programmes are possible financial sources for funding these proposals. HORIZON 2020 could fund transnational research projects.

Coastal tourism

Despite the activity has a huge potential, there are several elements hindering the sustainable growth of coastal tourism in Albania and many of them need a specific intervention of the central government to be solved. It is recommended to adopt a **sustainable development** plan of the activity, aimed at addressing important environmental gaps currently underrated.

First of all, the adoption of specific legislative measures should be in order to regulate **building in coastal areas.** As a matter of fact, the illegal building is a common practice in Albania which is increasingly deteriorating the seaside heritage of the country. This practice needs to be abandoned also for avoiding to lose the most important coastal tourism attractor (i.e. the coasts) and for limiting anthropization which is one of the main cases of coastal erosion.

The second concern is the sewages which in some cases are not treated and are leaked directly in the sea, often in important tourism areas. Investments for coping with this threat needs to be allocated in order to build specific treatment plants and develop a **wastewater management plan** for coastal areas. Sources for this type of projects could be the IPA fund, but also the European Bank for Reconstruction and Development and the EIB finance this type of infrastructural investments.

The third concern regards transport system. The development of coastal tourism requires adequate infrastructural facilities (road and rail, but also airport connections) for ensuring **tourists mobility** in the coastal areas and with hinterland. Significant investments should be allocated for improving road and railway connections, also by using IPA funds.

Specifically as regards the activity per se, the EUSAIR represents an important opportunity for capitalising the Albanian growth potential given that specific interventions have been envisaged in the forthcoming strategy which perfectly fit to coastal tourism in Albania. It is therefore recommended to strengthen **cooperation in the sea-basin within coastal tourism**, taking into account Albania's priorities in this sector which are:

- Increasing the **quality of the tourism offer** and more specifically of accommodation standards, aligning them to EU rules (e.g. ETQ quality label);
- Strengthening **promotional action for enhancing the attractiveness of Albania** to international tourists' flows. At present, most of coastal tourists are Albanians resident abroad coming back to visit their own country and by few neighbouring countries. The development of an "integrated Adriatic tourism package" involving more countries of the area could generate new flows. Synergies with other leisure activities (cruise and yachting) should be reached also at macro-regional level, in the perspective of increasing the overall attractiveness of the country.

Possible financial sources

The adoption of the EUSAIR would entail a necessary alignment of funding to its objectives. In this sense, the recommendations forwarded above could be concretely implemented given that these objectives match with EUSAIR's priorities.

IPA fund could finance the construction of wastewater treatment plants and the construction of infrastructures for tourists' mobility.

Infrastructural investments can be also funded by the EBRD and the EIB.

Passenger ferry services

More than for internal mobility, passenger ferry services can be considered functional for the development coastal tourism and only to a minor extent, for ensuring movement of Albanian workers to neighbouring countries. Port of Durres is by far the main port in Albania (and the Gateway of Corridor VII) but also Vlore plays an important role in terms of passenger services.

While investments have been allocated in the port of Durres for creating a terminal dedicated to passenger movements, the same investments have not been planned in other ports. Especially in Vlore, infrastructures are out-of-date and docks are uneven, and this represents a concrete barrier to the development of coastal tourism in this area (South of Albania) where coastline is highly attractive. Owing the updates in the port of Durres, it is recommended to develop the same facilities and **modernise infrastructures also in the south** (Vlore). A strategic effort should be needed at national level, which however could be funded by the IPA.

National effort should be deployed also for the purpose of **developing a maritime cluster**, involving ports and companies operating in the sector. A strategic plan at national level is therefore recommended to be adopted in order to define complementarities between the four Albanian ports and plan possible specialisation map.

Possible financial sources

IPA fund could finance the development of infrastructures. National strategic plan for the development of logistics is recommended and no financial provisions are entailed at first stage.

Fishing for human consumption

As mentioned for marine aquaculture, also for the fishing sector, the growth potential can be fulfilled by (i) **developing the internal demand** and (ii) **accessing to EU market.** Also in this case, the introduction of **quality certification systems** at all stages of the production (from first sale to processing) would facilitate to achieve both objectives. Indeed the EUSAIR context is the most appropriate tool for streamlining the capitalisation of financial resources available (see marine aquaculture above).

On the other hand, the EUSAIR will give a significant contribution to cope with the Adriatic overfishing, reaching **cooperation among littoral states for the sustainable management of fishery resources**. Specifically as regards Albania, overfishing, and in some cases, use of illicit means to fish have heavily damaged the sector sustainable development and environment which represents a constraints for future development. There is need for **systematic environmental monitoring**, preferably to be developed at sea-basin level. For this reason, the inclusion of Albania in an overall cooperation context in the fishery sector could facilitate capacity building of the country in this sector. The EUSAIR is the natural environment to reach this cooperation.

Among possible actions to be scouted, **diversification of caught species** – avoiding or regulating those overfished also through quotas – could be supported at sea-basin level, involving all countries in the area and relevant transnational actors (GFCM).

The country fiche put also into evidence the **lack of financial resources** for concretely regulating the sector. In few words, any type of intervention (e.g. modernisation of the fleet, diversification of activities, funds for financing possible fishing ban, etc.) are hampered by the lack of economic resources. Indeed, specific guarantee schemes for funding these actions could be included in ETC cooperation programmes or in IPA funds.

Possible financial sources

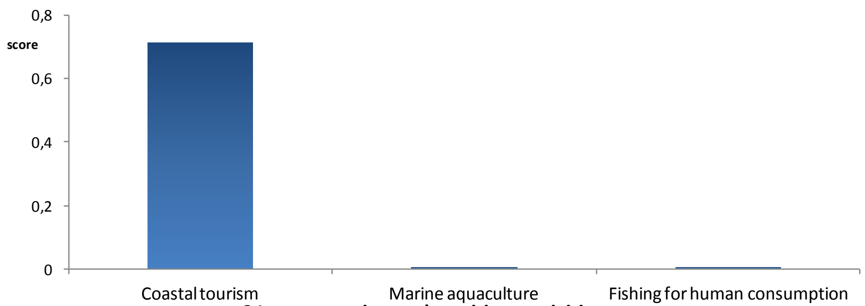
The adoption of the EUSAIR would entail a necessary alignment of funding to its objectives. In this sense, the recommendations forwarded above could be concretely implemented given that these objectives are included within EUSAIR’s priorities.

IPA fund and ETC programmes could be the possible financial sources for funding these proposals. HORIZON 2020 could fund transnational research projects.

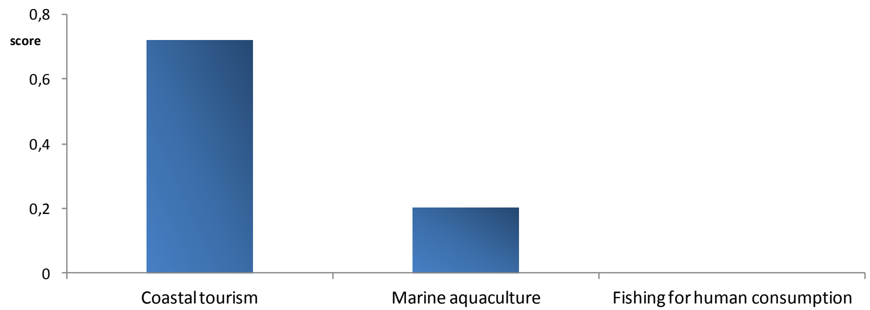
2.2 Bosnia and Herzegovina

The whole Bosnia and Herzegovina (BiH) is composed by two entities: Republika Srpska and Federation of Bosnia and Herzegovina. Coastal area is located in the Herzegovina-Neretva Canton of Federation of Bosnia and Herzegovina. Bosnia and Herzegovina coastline is 21,2 km, it accounts for a very small percentage of the total coastline length of the EU-22 costal in MS. The coastline of the Bosnia and Herzegovina maritime area is part of only one Municipality: Neum. No census has been conducted in BiH since 1991 and there are not adequate statistical data available, it is planned to be organized in October 2013.

3 largest and 3 fastest growing marine and maritime activities



3 Largest marine and maritime activities



3 Fastest growing marine and maritime activities

2 most promising marine and maritime activities

The 2 most promising marine and maritime activities in Bosnia and Herzegovina: **Coastal tourism and Marine aquaculture**.

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Coastal tourism	0	0	+	+	0	+	+++
Marine aquaculture	0	0	0	+	0	+	++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Coastal tourism				
The main maritime activity in Bosnia and Herzegovina is Coastal tourism; it is the largest activity and its potential of growth is high through a better organisation of the sector and cooperation with other tourist areas in Bosnia and Herzegovina or Croatia. The role of maritime area over the total national economy is very small. There are not exact figures on the role of the maritime economy. According to estimates (Strategy for development of tourism of Bosnia and Herzegovina), the GDP of Bosnia and Herzegovina maritime area is less than 1% of the total Bosnia and Herzegovina GDP.				
R&D (-), access to finance (-), education, training and skills (-), integrated local development (+)	A strategy for tourism has been defined at national level	The total number of nights spent by tourists highly grew between 2007 and 2012 for all Bosnia and Herzegovina (+23%)	There are 18 registered hotels, over 20 small accommodation providers and a number of unregistered accommodation providers.	No specific reference was found
Marine aquaculture				
The marine aquaculture has a limited economic importance (only two companies) but have potential of development with increase of volume, quality and innovation. The role of maritime area over the total national economy is very small. There are not exact figures on role of the maritime economy. According to estimates (Strategy for development of tourism of Bosnia and Herzegovina), the GDP of Bosnia and Herzegovina maritime area is less than 1% of the total Bosnia and Herzegovina GDP.				
R&D (-), access to finance (-), maritime spatial planning (-), integrated local development (+), public engagement (-)	A strategy for local development has been defined at the level of Neum municipality. It covers tourism and marine aquaculture through space planning.	Two fish farming companies. The total production of sea fish in 2008 was 178 tons. That was 2% of the total fish production, the rest of the production is inland.	There are two fish farming companies: ‘ANCORA commerce’ (1.500 m2) and ‘KARAKA maricultura’ (2.100 m2) located in Neum, they produce fish and shellfish.	The impact of marine aquaculture on environment is limited and lower than the one of fishery which impacts fish stocks.

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Coastal tourism

Because of the very small size of the activity and given the limited coastline, coastal tourism should not be conceived within an overall strategic framework at national level, but it is preferable to plan possible actions at sea-basin level. The EUSAIR perfectly fits to this need and therefore, limited to the Neum area, it is recommended to:

- **Insert Neum destination in wider tourism area**, considering it more as an Adriatic destination and strengthening links with Croatia in order to include the Herzegovinian city as a potential destination of tourism packages; also in this case, the EUSAIR envisages the development of a common Adriatic-Ionian brand, which could help to include the city and its area in wider tourism offer;
- **Increase the accommodation quality level**, aligning to EU standards and adopting EU quality certification systems; also in this case the EUSAIR umbrella could help to meet this purpose.

At national level, the only recommendation provided is to **develop road and railway connections**, linking Neum area to other coastal tourism destinations, especially for the purpose of strengthening links to Croatia.

MSP and ICZM should be also developed in order to mitigate divergences with aquaculture activities as regards the use of marine ad coastal space.

Possible financial sources

The adoption of the EUSAIR would entail a necessary alignment of funding to its objectives. In this sense, the recommendations forwarded above could be concretely implemented given that these objectives match with EUSAIR's priorities.

IPA fund and ETC programmes could be the possible financial sources for funding these proposals.

Marine aquaculture

The activity is very small and presents divergent interests with respect to tourism activities. As a short-term objective, MSP is needed to solve/mitigate these "conflicts" with coastal tourism operators.

No policy recommendations are provided at national level. At sea-basin level, two main recommendation are provided to fulfil the growth potential of the sector:

- Within the context of the EUSAIR, exchange of expertises and practices (**absorbing innovations** and **benefiting from already developed research** in the sector) should be supported in order to introduce innovation in farming activities. Given the small size of the sector, it is not reasonable to expect large increase of the production levels e.g. for exporting to the EU market. But links with coastal restaurants or other HO.RE.CA. activities could be supported in order to taking advantage from the possible development of coastal tourism;
- the introduction of **quality certification systems** could help to increase the production quality and the profitability of the activity. The alignment of quality standards of production to a possible "Adriatic label" represents a possible action to undertake at macro-regional level.

In both cases, the EUSAIR encompasses this type of actions.

Possible financial sources

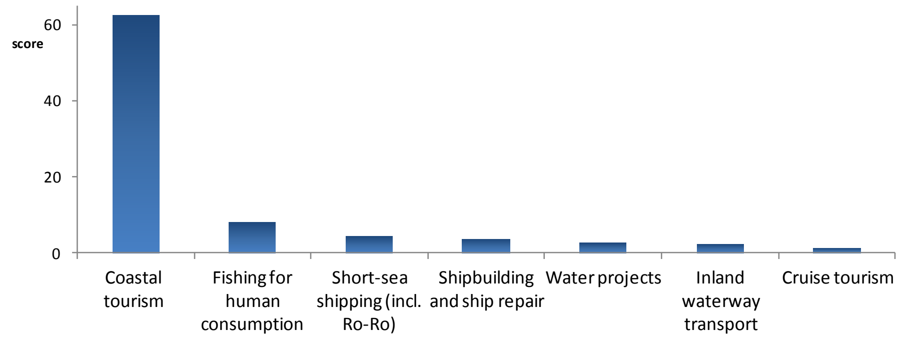
The adoption of the EUSAIR would entail a necessary alignment of funding to its objectives. In this sense, the recommendations forwarded above could be concretely implemented given that these objectives match with EUSAIR's priorities.

IPA fund and ETC programmes could be the possible financial sources for funding these proposals.

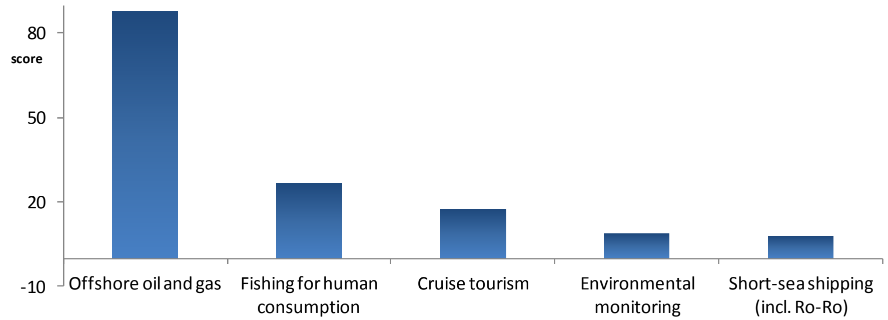
2.3 Bulgaria

Bulgaria's coastline is 378 km in length and represents 0,30% of the total coastline length of the EU-22 coastal Member States. The coastal zone (within a range of 10 km from the coast) covers an area of 2.950 km^2, representing 0,71% of the coastal zone of the EU-22 Member States. There are five small islands in Bulgarian territorial waters – the largest, with an area of 0, 66 km^2, is the St. Ioan Island.
Bulgaria's coastal regions are responsible for 13% of the nation's gross value added. In absolute terms coastal regions produced EUR 4.029,8 million of gross value added (GVA) compared to a national total of EUR 31.044,1 million.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising Marine and Maritime activities in Bulgaria are: **Coastal tourism, Offshore oil and gas, Fishing for human consumption, Short-sea shipping (incl. Ro-Ro), Inland waterway transport and Water projects.**

Scores assigned for Blue Growth indicators for future potential:

Marine and Maritime Activity	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Offshore oil and gas	+	+	+	+	+	+	++++++
Coastal tourism	0	+	+	+	+	+	+++++
Fishing for human consumption	0	+	+	+	+	+	+++++
Inland waterway transport	0	+	+	+	+	+	+++++
Water projects	0	+	+	+	+	+	+++++
Short sea shipping (incl. Ro-Ro)	+	+	-	+	+	+	++++
Shipbuilding and ship repair	+	+	0	0	+	+	++++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environment sustainability
Coastal Tourism				
Coastal tourism is a large and a fast growing sector, and has been an important driver of local economic growth over the last decade. The coastal tourism activity encompasses about 80% of the total tourism sector and around 10,5% of the total national GVA. It has been selected as the largest marine and maritime activity compared within the entire blue sector. Development of the tourism sector is expected to follow the general trend of economic development of the country with a moderate increase in sector income. Since 2010 the number of bed places and the level of sector employment have increased in the Yugoiztochen NUTS 2 region, whereas in the Severoiztochen region these indicators have decreased. The southern region has better potential for future development due to improved infrastructure (highways, new wastewater plants etc) and specific climatic conditions. A lot of cultural and historical attractions are still not fully exploited so the sector offers significant potential for future development. Implementation of MSP and ICZM could benefit the effective management of spaces and the development of the economic activity in close synergy with other activities.				
R&D (+), access to finance (-), smart infrastructure (-), training and skills (+), integrated local development (+)	Supported at Local level by Regional governments	This sector provides work places for almost 110 thousand people in the maritime area of Bulgaria. Important sector on both economic (60,4% of overall blue GVA) and social (72,1% of blue employment) levels	The sector is regulated by Ministry of Economy and Energy and the Tourism Agency. The governance of the sector is composite: it is based on private actors organised in several social and economic associations that maintain close relationships with the Bulgarian government	National strategies and macro regional action plan for the Black Sea aim to increase protected areas and improve conservation of species, introduce sustainable practices and eliminate harmful practices promoting ecosystem approach to all human activities
Offshore oil and gas				
Offshore oil and gas is the fastest growing maritime activity of the country. The strategic location of Bulgaria on the Black Sea has made it a transit point for Caspian Sea oil exports headed towards European refineries. Bulgaria is also a transit route for gas exports from Russia to Turkey and the EU. While oil is imported through Bourgas port, oil and gas exploration in the country occurs mostly in the northern part of the Black Sea. From the Bourgas port, both the oil terminal and refinery are further connected to many cities in Bulgaria through pipelines. The main drivers of future development are related to the abundance of local resources, opportunities for application of innovative technologies, and to the development of business infrastructures. A rapid increase is expected also due to the start of the new gas transportation project, South Stream. Offshore oil and gas was chosen among the most promising marine and maritime activities due to its important role in the national economy. It receives significant investments for development and innovation of the main drilling fields, deep-sea drilling, and for the South Stream project which will ensure the supply of natural gas from Russia to the EU. Implementation of MSP and ICZM could benefit the effective management of spaces and the development of the economic activity in close synergy with other activities.				
R&D (+), smart infrastructure (+), public engagement (+), maritime spatial planning (-), integrated local development (+)	Very important issue at MS and EU level A National Energy Strategy is provided	This activity generates around 15% of overall gas consumption at prices 30% lower than that of imports, the employment is ca. 250 people which represents only 0,02% of blue employment	The main players of the sector are multinational/international companies receiving concessions for oil and gas extraction in the country's territorial waters. This sector is regulated by the Ministry of Economy and Energy	A National Energy Strategy is set up until 2020 with the aim to reduce greenhouse gas emissions, increase the share of renewable energy sources in the total final energy demand and improve the energy efficiency
Fishing for human consumption				
Fishing for human consumption is an important maritime activity at the moment, but its potential for growth is relatively limited due to the constraints on fishing in the Black Sea (quotas for turbot and sprat). The main commercial fish species is sprat catches of which form 80% of the total landings in Bulgarian Black Sea waters (in 2011: 4.551 tonnes). Another important species is the benthic gastropod Rapanavenosa, with annual catches of around 3.900 tonnes. Other species are anchovy, horse mackerel etc, but their catches vary significantly from year to year. It is expected that the sector will show modest growth due to increased demand for fish products and new possibilities for investments. The application of an ecosystem-based approach (EBA) and maritime spatial planning can strongly contribute to promoting the sustainable growth of the sector and the sustainable use of marine resources				
R&D (+), access to financing (-),	Important issue at EU level	This sector register 5,1% of overall	The sector is regulated by the	The Strategic Action Plan for the Black

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environment sustainability
education, training and skills (+), integrated local development (-), public engagement (+)	EU regulations on fishing quotas Development supported by National Strategies	blue GVA and 9,7% of blue employment	Ministry of Agriculture and Food also though the National Agency for Fisheries and Aquaculture. Private players are concentrated in the fishing sector and fish processing industry. Various sectoral associations play an active role	Sea Biodiversity and Landscape Conservation Protocol aims to maintain the Black Sea ecosystem in good ecological state and its landscapes in favourable conditions
Short Sea Shipping (incl. Ro-Ro)				
This activity represents the third largest blue economy of the country Short-sea shipping of goods is a significant economic activity in Bulgaria. It depends highly on oil transportation (especially for the Russian Federation), as liquid cargos constitute a 44% of the total amount of transported cargos. In total there are 22 ports related to short-sea shipping. This sector is focused on the maintenance of the Black Sea and Mediterranean Sea lines. The future growth of the short-sea shipping strongly depends on future investments (mainly renewal of the aging fleet) and on the development of business infrastructure (incl. construction, reconstruction and modernization of different terminals). Implementation of MSP and ICZM could benefit the effective management of spaces and the development of the economic activity in close synergy with other activities.				
R&D (+), smart infrastructure (+), integrated local development (+), access to finance (-), maritime clusters (+), public engagement (+)	Environmental and safety issues very important for the EU National Strategy for development of transportation system is provided	This sector brings 6,5% of overall blue GVA and 4,6% of blue employment	The main ports related to Short-sea shipping belong to the state, while vessels are privately or state-owned. Various associations and Marine Cluster operate in the sector	The National Strategy is focused on the creation of an efficient transport system synchronized with EU transport corridors connected also with environmental sustainability by reducing the European greenhouse emissions
Inland waterway transport				
The Danube River is the only domestic inland waterway, which is linked to the Black Sea. The Danube River is included in the general scheme of the European Inland Waterways (Pan-European Transport Corridor VII) connecting Western and Eastern Europe by the Rhine-Main-Danube Canal, thus enabling direct navigational links between the Black Sea and North Sea with convenient access to many European countries and their industrial centres. In general the role of this mode of transport in the national transport system has shown a stable increasing trend over the period of 2003-2013; however its unexploited potential is believed to be huge. The support of inland waterways will contribute strongly to diversification of the transport sector in Bulgaria. The implementation of intermodal transport conception is among the important goals related to inland waterway transport development. One of the main prerequisites to achieve this goal is availability of special technical facilities and depots, in which easy and quick change of the transport mode for containerised cargoes is possible. Implementation of MSP and ICZM could benefit the effective management of spaces and the development of the economic activity in close synergy with other activities.				
R&D (+), smart infrastructure (+),access to finance (-), integrated local development (+), public engagement (+)	Strategy for development of transportation system of the Republic of Bulgaria until 2020 is provided Relevant issue at EU level	The inland transport sector represents 6,1% of total blue GVA and it provides 1,7% of blue employment possibilities	The vessels owners are private companies and are the main actors. Besides the Ministry of Transport, IT and Communication, other relevant actors in the governance system are: the International Commission for the Protection of the Danube river, the Danube Commission and the DABLAS Task force	It is applied the same environmental regulation designated for the short sea shipping activity
Water projects				

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environment sustainability
The “water projects” activity is linked with activities for waterway maintenance (especially in the Danube river sector) and improved access to maritime ports in the Black Sea. The activity in Bulgaria closely interacts and supports the water transportation sector development and it is aimed at improving navigational gauges in the Danube River, and at building 192-kilometre navigable canal Rousse–Varna, that will connect the lower Danube with the Varna lakes and the Black Sea. Water projects are also connected to the stable funding and successful implementation of activities for modernisation and enlargement of the Varna and Bourgas ports. Innovations and competitiveness in the area of water projects is expected to increase in order to support more sustainable alternatives to the conventional land transportation. Action-oriented research and activities as regards ports infrastructure construction and maintenance are closely connected to the need for transport sector diversification. Implementation of MSP and ICZM could benefit the effective management of spaces and the development of the economic activity in close synergy with other activities.				
R&D (+), smart infrastructure (-), access to finance (-), integrated local development (-), education, training and skills (+)	Very important issue at the MS and EU level	Water project sector represents 4,8% of the overall blue GVA and 2,4% of all blue employment	Main stakeholders are: Ports Infrastructure, Company and Agency for Exploration and Maintenance of the River Danube and Ministry of Transport	The national level legislative acts regulate this activity, while the Strategic Action Plan for the Black Sea Biodiversity and Landscape Conservation Protocol has cross-border implication

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Coastal Tourism

As emerged in the country fiche, the main obstacles for sector development are related to extreme territorial concentration combined with product uniformity and gaps in marketing. Product diversification, improved marketing policies and the development of alternative tourism will ensure sustainable growth in the mid and long term.

Potential alternatives to traditional tourism products and to traditional and already overdeveloped resorts, such as cultural, eco, health, adventure tourism, etc. should be stimulated. A lot of cultural and historical attractions are still not fully exploited so the sector offers significant potential for future development.

- **At national level**, it is recommended to support a **diversification of the offer**, developing other unexploited forms of tourisms. Actually the National Strategy for Sustainable development of Tourism supports the diversification of the activities but concrete measures should be put into practice also by introducing this activity in the new ERDF programming. Two types of actions should be therefore explored: (i) identification of new forms of tourism and new attractors– both in the hinterland and in coastal areas – and (ii) strengthening synergies with other maritime activities, developing a an integrated coastal tourism development plan.
- At **international level**, the main action to be undertaken is to create **integrated promotional actions** including all (or at least more than one) littoral countries. In the light of this, a first possible action to develop is to increase quality standards of accommodation services, aligning them to European levels. This could help to create a "**qualitatively standardised offer"** in the Black Sea and develop a possible **common tourism brand**, mitigating competition between neighbouring countries and **widening the range and types of potential tourists flows**.

  A macro-regional strategy could help to develop these actions.

At national level, in order to strengthen the Coastal tourism potential, **training and education in vocational schools,** specialised in accommodation, services should be improved, increasing the overall quality standards of tourism offer.

One of the main barriers to remove is the lack of **specific regulation for building activities in coastal areas**. A new law is currently under preparation but the issue should be tackled as soon as possible in order to ensure the sustainability of the sector also under an environmental point of view.

Possible financial sources

Obviously, the involvement of private financial investors for financing infrastructural improvements could take place only creating the basic conditions for attracting these investments (fiscal benefits, PPPs, etc.).

Possible financial sources for the proposed recommendations:

- The ERDF/ Cohesion fund for the diversification of the tourism offer;
- the ESF (but also the ERDF) could finance training and education initiatives.

Integrated promotional actions could be developed under the ETC umbrella but could be also financed by the ERDF.

Offshore oil and gas

Besides the possible impacts deriving from the South Stream project, the growth potential of offshore oil and gas is also represented by the unexploited (but ascertained) reserves in the Exclusive Economic Zone of Bulgaria. The key importance of the sector for the national energy supply put it into the top priorities of the Country. It has emerged from the Country fiches that there is a need to **rationalise procedures of concessions** in order to widen the number of international companies to take part of exploration/exploitation activities.

Under an environmental perspective, it is recommended to adopt **specific environment monitoring rules and tools could be adopted at national level**, in order to (i) continuously check and assess the environmental impact of the activity and (ii) mitigate possible diverging interests represented by other marine/maritime activities. The feasibility of adopting common rules **at sea-basin level** for this purpose should be also explored, given that a wider extension of the monitoring system entails better results and higher safety levels.

Indeed also in this case, as a long-term solution, the development of a macro-regional strategy could help to better address this issue and increase the level of cooperation in this sector.

The presence of all oil and gas value-chain stages in Bulgaria (exploration, development and production) ensures a good basis for introducing innovations and develops new, innovative and environment-friendly technologies for both the exploration and exploitation activities. It is recommended to **increase the financial investments at national level in research activities** for:

- identifying **new oil & gas fields** and **attracts investments**;
- improving the **level of expertise** and know-how of personnel;
- developing **environmental-friendly technologies** (also by means of international research projects).

Possible financial sources

Environmental monitoring tools and other international research activities (i.e. environmental-friendly technologies) can be developed by using funds from the Horizon 2020, since it can be intended as research activity.

The improvement of the level of expertise of personnel could be funded through the ESF and by the ERDF.

Fishing for human consumption

The fishery sector incorporates several activities - fishing, processing, marketing, servicing and trade - that are carried out by a large number of enterprises in the coastal area with significant potential for future development. The investment opportunities are related to the use the European Maritime and Fisheries Fund to develop artisanal, traditional and small-scale fishing, switching to **environmentally sustainable fisheries** (discard ban implementation). In terms of marketing, in order to improve the profitability of the sector at all stages of the supply chain, it is recommended to **stimulate the development of innovative products by the processing sector**, improving **marketing strategies** and providing innovative business advisory services. Fish quality and inspection is another area that presents potential for development as the national food (fish) quality system needs to be improved, in order to supply the market with higher quality products. The important drivers for future development lay in the long-term traditions in fish catching and fish processing industry and the opportunities to recruit well-trained staff.

The most relevant barrier to remove for the sustainable growth of the sector is linked to the limited access to the EU funding (former EFF). This barrier, as emerged in the Country fiche, originates from different causes (misinformation on funding opportunities, lack of expertise in project planning, excessive administrative burdens for accessing to funds). In order to overcome this barrier, at **national and EU level**s, it is recommended to:

- **launch a promotional campaign** aimed at informing stakeholders about funding possibilities and requirements for accessing them;
- **simplify procedures** for accessing to EU grants;
- increase the "**euro-planning" expertise** by introducing specific training courses.

Although the work force is well trained, different training programmes can be developed – for example aiming at improving interactions between fishermen and scientists. For this purpose, life-long learning programmes for fishermen should be launched.

Possible financial sources

In order to fulfil the growth potential of the sector, the EMFF is the natural source of funding.

As regards promotional campaign and procedures simplification, these actions should be developed at national and EU level in close synergy, but no specific sources of funds have been identified.

As regards the increase of "euro-planning expertise", the ESF is a possible source of funding.

Life-long learning and training programmes could be also funded by the EMFF and the ESF.

Short Sea Shipping (incl. Ro-Ro)

The future growth of the activity is closely linked to construction, reconstruction and modernisation of a deep-water container terminal and a Ro-Ro terminal, a grain terminal, a liquid chemicals terminal, and a cement and clinker terminal, and modernisation of the passenger and Ro-Ro terminals according to the updated general plan for the port of Varna to 2020, approved in 1999.

Therefore, short-sea shipping development is linked to the extension and modernisation of port infrastructure and capacity and because of the strategic importance of the Varna and Bourgas ports. Therefore:

- **at national level**: the development of **infrastructural facilities** is therefore recommended for increasing the competitiveness of the two ports in short sea-shipping activities. **Intermodal connections**, which are actually developed, should be updated also in close relation to the development of other maritime transport mode (inland waterway); specialisation of the two ports should be envisaged at national level in order to avoid competition between them;
- **at international level**: synergies at sea-basin level should be enhanced in order to develop integrated offer of transport, providing specialised services in different ports. Synergies with Romania should be explored. The **strengthening of the Motorways of the seas in the Black sea** and also to Bourgas and Varna should be envisaged.

The overall lack of funding and the fleet ageing are the two most relevant barriers to the sustainable growth of the activity. In order to cope with this barriers, it is recommended to strengthen the role of maritime short-sea shipping in the **Transport Operational programme**, which at present (2007-2013) is only focused on the inland waterway transport. Therefore, for the next programming period 2014-2020 it is recommended to allocate **specific measures for funding modernisation of the fleet** and **financing the sector** in general.

Possible financial sources

The ERDF and the Cohesion Fund are the two sources of funds which should be used for financing the modernisation of infrastructural facilities. More in general, these two sources could finance the overall development of the activity.

Inland waterway transport

Inland waterways are seen as underdeveloped and their unexploited potential as a freight transport mode is believed to be huge in Bulgaria. The support of inland waterways (basically the transport corridor Rhine –Main- Danube- Black Sea) will strongly contribute to diversify the transport sector in Bulgaria. The implementation of intermodal transport conception is among the important goals related to inland water transport development. One of the main prerequisites to achieve this goal is the availability of special technical facilities and depots, in which easy and quick change of the transport mode for containerised cargoes is possible.

The development of **intermodal connections** is therefore the condition *sine qua non* this mode of transport could express its potential. Therefore:

- **At national level**, it is recommended to **improve and modernise infrastructural facilities** of the Danube ports, investing in intermodal connections. Ro-Ro facilities should be developed. Bulgaria has adopted (through the Transport Operational programme) a **navigation information system** with the purpose of increasing security of navigation in waterways. It is recommended to reinforce the system, also in close coordination with Romania.
- At **international level**, under the umbrella of the EUSDR (Pillar 1), only the improvement of a navigation section has been envisaged. Actually, specific actions for developing an efficient system of multimodal terminals at river ports along the Danube have not been envisaged. Therefore, looking at the needs to be met for fulfilling the growth potential of the sector, it is recommended to fill this gap and support the enhancement of intermodality (transhipment and Ro-Ro) in fluvial ports.

Bulgaria has well-experienced personnel in inland waterways transport. This added value should be reinforced by **strengthening the training of work force** and adoption of life-long education programmes.

In order to remove barriers to sustainable growth, it is recommended to:

- support the **modernisation of the fleet** by planning specific measures devoted to this objective in the Transport Operational Programme;
- develop **integrated strategies at local level** to coordinate the development of the inland waterway transport with other possible needs (i.e.

possible construction of hydro-energy complexes);

- Improvement of **prognostic services** so that management and logistics of transport operations in low water season will be more predictable.

Possible financial sources

The ERDF and the cohesion funds are the two sources of funds which should be used for financing the modernisation of infrastructural facilities as well as the overall funding of the sector (also as regards the modernisation of the fleet, through the Transport Operational Programme).

Workforce training can be funded by the ESF and even in this case through the Transport Operational Programme.

Water projects

Water projects is connected to the stable funding and successful **implementation of activities for modernisation and enlargement of the Black Sea ports in Varna and Bourgas**, improvement of navigational gauges in the Danube River and possible inception of a large project related to the construction of a navigable canal Rousse–Varna, that will connect the lower Danube with the Varna lakes and the Black Sea.

Water projects’ activity has been considered as a relevant tool to assist development of other maritime activities and therefore it has been considered as most promising in Bulgaria. Its growth is basically linked to the development of other maritime activities. No recommendations have been provided to this regard.

The main barrier identified for the sustainable growth of water project activity regards the lack of MSP and ICZM for an optimised management of spaces. At national level, efforts should be done for adopting an adequate planning in order to create the convenient environment for the development of the blue economy.

Possible financial sources

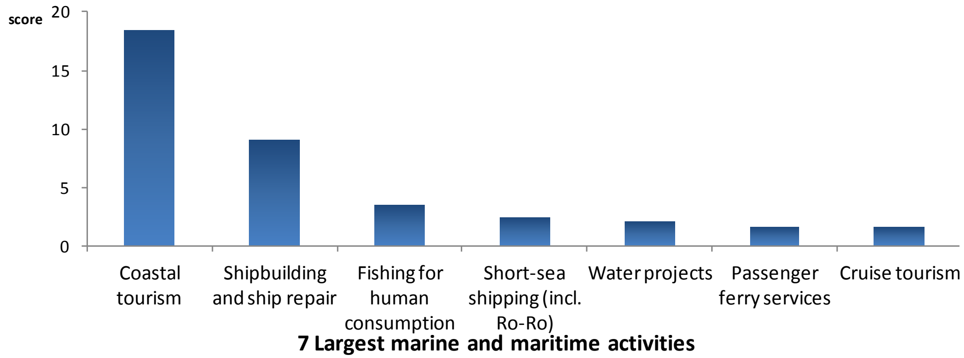
Obviously, the involvement of private financial investors for financing infrastructural improvements could take place only by creating the basic conditions for attracting these investments (fiscal benefits, PPP, etc.).

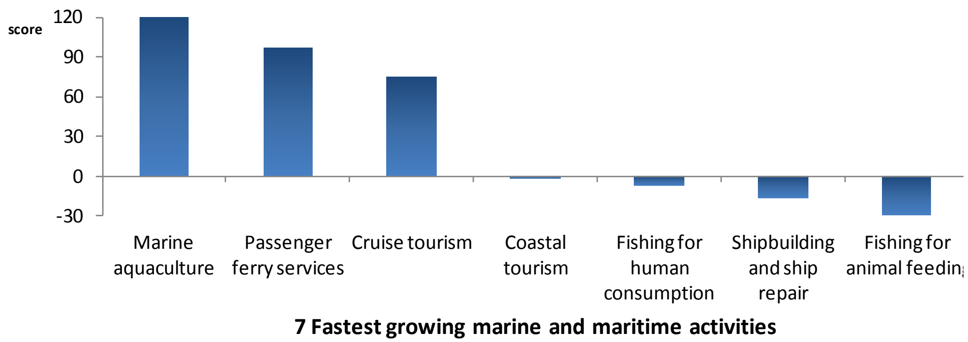
As regards the development of MSP and ICZM, no financial sources are needed to be identified, since it concerns only planning activities.

2.4 Croatia

The total coastline of Croatia is 5.835 km (1.777 km for mainland and 4.058 km for islands). There are 1.244 islands, islets and reefs covering 3.259km², the largest islands (more than 100 km²) are Cres, Krk, Brač, Hvar, Pag, Korčula, Dugiotok and Mljet. Large cities are located on the coast: Dubrovnik, Split, Zadar, Rijeka and Pula. The total GVA of coastal area in Croatia is 12.399 M€ (2010), which accounts for 33% of national GVA.

7 largest and 7 fastest growing marine and maritime activities





6 most promising marine and maritime activities

The 6 most promising marine and maritime activities in Croatia are: **Coastal tourism, Cruise tourism, Passenger ferry services, Short-sea shipping (Incl. Ro-Ro), Yachting and marinas and Marine aquaculture.**

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Coastal tourism	0	+	+	+	+	+	+++++
Cruise tourism	0	+	+	+	+	+	+++++
Passenger ferry services	0	+	+	+	+	+	++++
Short-sea shipping (incl. Ro-Ro)	0	+	+	+	0	+	++++
Yachting and marinas	0	0	+	+	+	+	++++
Marine aquaculture	+	+	0	+	0	+	++++
Shipbuilding and ship repair	0	+	+	+	+	0	++++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Coastal tourism				
Coastal tourism is the most relevant and largest maritime activity in Croatia and the major blue sector in term of employment. This activity, even if it faced a slight decrease between 2008 and 2010, has still high potential of growth in Croatia. This growth is mainly based on the development of international tourism (+16% nights spent by foreigners) while domestic tourism decreased by 19%. In recent years, competitiveness of this activity registered a strong increase especially if compared to neighbouring competitors (Italy and Greece) also due to political support (local, national and international levels) through space management, construction of infrastructure, promotion/communication, investments, compliance with international standards, etc. Furthermore, tourism is identified as a strategic sector by the National authorities and a specific strategy has been defined. One of the objectives of national authority is to integrate the development of tourism in the sustainable development of Croatia, allowing to manage the entire territory in a sustainable way.				
R&D (+), smart infrastructure (-), education and skills (+), access to finance (-),public engagement (+)	National Strategy is provided in order to support the tourism sector until 2020 Sector supported at Local level	Coastal Tourism represent the most important sector on both economic (43,5% of all blue GVA) and social (46,6% of overall blue employment)	The main players of the tourism sector are: national authorities as the Ministry of Tourism, ports, International organization and several SME (2.482) connected to the tourism sector	As most of the Croatian coastal area, going from Rijeka to Dubrovnik, is recognised as a part of the World Heritage by the UNESCO, policy of protection of habitats are particularly important in the coastal area
Cruise tourism				
The cruise sector represents the third fastest growing maritime activity. Cruises are operated by international companies and Croatia is one destination in the Mediterranean cruises. While this activity is very recent in Croatia, 802 cruise vessels have been in Croatia in 2012 and the number of passengers reached 1,15 million. A further growth could be expected with the development of stops in other seaports and a better planning of the activity between the different seasons. The increase of the boat size implies adaptation of the infrastructures in the seaports. The main area benefiting of these growth is the city of Dubrovnik, which is a stop on international cruises in the Mediterranean Sea. The potential of growth in Dubrovnik is to attract clients from January to December and it could become a home port for cruise vessels with air connections for passengers from whole Europe. Some investments planned in Zadar seaport, which mainly focuses on passengers and cargo, also include a terminal adapted for cruise vessels. This would lead to a diversification of the seaport and development of cruising in the Central Croatia.				
R&D (+), Access to finance (-), smart infrastructure (+), education, training and skills (-) Integrated local development (-)	Significant issue at basin level Local economic relevance	This sector accounts for 4% of overall blue GVA and employment	Local authorities, international cruising companies, major cruise welcoming ports: Dubrovnik and Split Ports, more than 500 SME and, further, Zadar seaport	Cruising activity has no major negative impacts on the environment in Croatia, its regulation is in compliance with international directives
Passenger ferry services				
This maritime activity ranks second in Croatia among the fastest growing and is the sixth largest maritime activity in Croatia (2.650 jobs).Furthermore, from a social point of view, passenger ferry services play an important role in the territorial development of Croatian thanks to the connection between the main land and the islands. Ferry connections are necessary for these areas to stay attractive for business and inhabitants who do not work on the islands. The total number of passenger is increasing in Croatia (+1,6% between 2007 and 2011). In the same time, the number of vessels is decreasing and the GT of the fleet is increasing. This means that passenger transport is performed by larger vessels and that the sector is looking for more efficiency. This maritime activity is mature and the growth potential is not as high as for nascent marine and maritime activities. However, ferry passenger services are very relevant in Croatia and the growth potential is significant.				
R&D (+), access to finance (-), smart infrastructure (+), maritime spatial planning (-), integrated local development (+), public engagement (+)	Important sector at MS and Local level Ongoing construction of a maritime National strategy Significant activity at Local level	This sector register 4,1% of overall blue GVA and 4% of blue employment. This activity is very important for social inclusion of the rural communities	There are 4 major companies, passenger seaports (incl. cruises) are Split, Dubrovnik, Zadar, Korcula, Cres, Jablanac, Supetar, Preko	Ferry services transport has less impact on environment than others tourist transportation. Croatian National Strategy for maritime transport will be available in 2014

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Short-sea shipping (Incl. Ro-Ro)				
Short sea shipping sector is the fourth largest maritime activity in Croatia and has been selected within the most relevant and promising marine and maritime activities. Even if it has decreased between 2008 and 2010, this maritime activity has strong potential in Croatia thanks to the ports of Rijeka and Ploče. However, the future development of this activity is highly related to the growth of Croatian and Balkan economies, the cooperation with neighbouring countries and the connection of the seaports to other transport networks (rail, road). Total traffic flows in Croatian seaports reached 21,8 million tonnes in 2011: this was mainly due to international traffic (84% of traffic), while most of the maritime freight in Croatia is transported through short-sea shipping (82%). Investments are needed in infrastructures, notably in the interconnectivity with rail and roads. A national strategy is under development for maritime transport in Croatia (available in 2014).				
R&D (+), smart infrastructure (+), public engagement (+), maritime spatial planning (-), integrated local development (-)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping National Public engagement	This sector produce10,9% of overall blue GVA), The total of blue employees is 3.266	Short-sea shipping's stakeholders are: Rijeka, Ploce, Zadar, Split, Sibenik, national authorities and 700 companies connected	Croatian National Strategy for maritime transport will be available in 2014
Yachting and marinas				
Yachting and marinas activity is not particularly competitive in Croatia due to a lack of organisation of the sector at national level but also at local level. In 2012, 176.030 vessels used sea moorings in Croatian marinas, 63% were sailboats. Marinas represent 63% of nautical ports in Croatia. There have been 4 new nautical ports built between 2007 and 2012 (+4%) and the number of mooring has increased by 10% to reach 17.454 in 2012, In the same time, the number of sailboats increased by 26%.Yachting and marinas has a large growth potential in Croatia. The objective of national strategy for nautical tourism (2009-2019) is the creation of 15.000 new moorings and the construction of 15 new high-quality locations. The expectation of growth of the sector is 9.8% between 2007 and 2019 while GDP growth rate in Croatia is expected to be 5%. According to the strategy, the total income of nautical tourism will be EUR 2 billion in 2018.				
R&D (+), access to finance (-), education, training and skills (+), integrated local development (-), public engagement (+)	Nautical tourism is identified by National Authority as a strategic area for tourism in Croatia	The employment is on a growth trend with an increase of 26% of the sailboats between 2007 and 2012	Main players are: policy makers, small municipalities, 98 nautical ports, etc.	The activity has limited impacts on environment, especially for the use of sailing boats. In terms of environment sustainability, the activity has a significant potential
Marine aquaculture				
Marine aquaculture, even if it has a limited economic importance, is the fastest growing maritime activity in Croatia between 2008 and 2010. While the production of seabass and seabream is on a growing trend, most of the other productions are stable or decreasing (pelagic fish, oyster and mussels). Total production in Croatia amounts to between 6.000 and 12.000 tonnes each year. The farming activities are wide-spread in all Croatian coastal counties with a higher concentration in Zadar county. Most of farms are small enterprises and family-run businesses. The strategy set up in 2002 planned a large growth which has not been reached yet. A new strategy shall be defined with adapted goals considering the change of context since 2002, notably the access to the EU. The National Strategic Plan defines sectoral objectives for the period 2014-2020. Concerning aquaculture, the objectives are to promote sustainable development of the sector, increase the production and strengthen the competitiveness.				
R&D (+), smart infrastructure (+), access to finance (-), education and skills (+),	Important issue at national level. National Strategy is defined for this sector	Limited economic importance (2% of Blue GVA and 0,16% of blue employment)	Main players are many farms located along Croatian coastline. 30 companies for sea bass and sea bream, 5 companies for tuna production, research institutes, universities, etc.	The impact of marine aquaculture on environment is limited and lower if compared with fishery impact on fish stocks

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Coastal tourism

The potential of growth of coastal tourism can be achieved only by extending potential users (new markets), developing new consumer segments, and increasing standards of the offer (especially accommodation). Significant efforts have been implemented at a political level (Croatian Tourism Development Strategy until 2020), especially aimed at increasing the overall quality of tourism offer and differentiating products.

The Country fiche pointed out the huge potential in terms of differentiated offer which could be provided by Croatia in terms of tourism. A possible approach for maximising this potential is to develop **at national level a holistic strategic plan** aimed at **integrating different form of tourism** available in Croatia (coastal, yachting, cruise, etc.). **Linkages between different coastal tourism and "accidental" activities** (passenger ferry services, but also intermodal connections) should be also encompassed in a wider perspective, identifying relevant nodes to be strengthened because of their relevance for the development of coastal tourism.

Gaps identified in the National strategy can be filled also by supporting the adoption of a **macro-regional approach** (see the EUSAIR). Especially for coastal tourism in the Adriatic sea basin, where strong competition characterises the sector, the strategy can help to reduce competitions between littoral states, identifying common needs and explore the feasibility of organising a common offer with shared standards.

One of the main barrier identified concerns the **insufficient road and railway transport**, which are deemed essential for extending potential benefit of the coastal tourism development beyond the coastal area. It is recommended to identify strategic "hotspots" all along the Croatian coastline and optimise connections with main internal nodes and other potential inland attractors.

The development of **maritime cluster** especially focused on coastal tourism should be supported. Also in this case, the EUSAIR supports this type of actions and would facilitate access to funding.

For the purpose of limiting possible conflicts between maritime activities for the management of spaces, it is also recommended to **adopt MSP and ICZM** all along the coasts and in marine spaces, also considering that all activities are still at a nascent stage and better results could be achieved if an adequate space planning will been implemented first.

Possible financial sources

Strategic development of maritime activities around coastal tourism would not need specific funding. On the other hand, infrastructures improvement and the support to the creation of a maritime cluster could be financed by the ERDF and by the Cohesion fund.

Territorial cooperation programmes could also support the development of macro-regional approach for maximising the Coastal tourism potential.

Cruise tourism

The activity is still at a very nascent stage. As mentioned in the Country fiche, there are two ways to develop the activity: (i) a better planning of the traffic to reduce seasonality and (ii) the development of the activity in new/old ports. The main objectives for Dubrovnik (the most important cruise destination) are to attract flows from January to December and, as a long-term perspective to become a home port for cruise vessels. The main limit for fulfilling this potential is the scarce air connections during winter which do not allow to further extend its activity.

As regards new ports, two potential spots are Split and Zadar. The port of Split is in process to develop its activity with an expansion of the area dedicated to ferry and cruise vessels, in order to support the growing tourism industry. This will allow the port of Split to welcome more cruise ships and will have impact on tourism in all the area round the city. Some investments have been planned in Zadar seaport, which mainly focuses on passengers and cargo, but also includes a terminal adapted for cruise vessels. This would lead to a diversification of the seaport and development of cruising in the Central Croatia.

In order to overcome these limits, a **strategic planning for the development of the cruise sector** in Croatia is recommended to be adopted at national level. The sector could be encompassed in a wider strategy for maritime tourism (also including yachting and coastal), which could emphasise links between different activities and generate mutual externalities.

Cruise tourism is an activity which could be addressed at sea-basin level (see the EUSAIR), which could **mitigate competition between different ports of call** and potentially create a **structured offer and specific cruise itineraries**. Because of the specificity of the sector, cruise tourism is recommended to be also addressed at sea-basin level and the EUSAIR is the natural context to develop cooperation in this sense.

Possible financial sources

Strategic development of cruise tourism (also linked to coastal tourism, see above) would not need specific funding. Infrastructural developments have been implemented.

Territorial cooperation programmes could also support the development of macro-regional approach for maximising the cruise sector potential.

Passenger ferry services

The growth of passenger ferry services in Croatia is linked to other activities (mainly tourism) but also to the high number of inhabited islands. In this sense, it is recommended to:

- **Develop connections at international level** with Italy and on a North-South axis from Rijeka to Greece (including Montenegro and Albania). This could be achieved in a wider planning at sea-basin level (EUSAIR) and within the overall context of Motorways of the Seas. In this perspective, cooperation initiatives and international projects aimed at identifying potential routes to strengthen should be implemented;
- At national level: **connections with islands** should not be affected by seasonality, but should be ensured all along the year. This would play an important role in the attractiveness for the living in islands.

In both cases, infrastructural investments should be allocated in order to **develop specialised terminals exclusively dedicated to passengers**. At present, infrastructural investments have been planned in Zadar and Dubrovnik.

The main barrier identified in this sector is the general lack of funding for financing the development of infrastructures. The accession of Croatia in the EU will allow the use of new funding opportunities (ERDF and Cohesion funds) which could definitively boost the finalisation of planned facilities.

Possible financial sources

As mentioned above, infrastructures can be funded by the ERDF and the Cohesion fund. The development of new connections at international level is recommended to be planned at sea-basin level, in close cooperation with Italy, Slovenia, Montenegro, Albania and Greece in order to identify possible new routes.

Despite the support of the EUSAIR, the development of connections with islands is recommended to be planned at national level, within an overall transport strategy.

Territorial cooperation programmes could also support the development of macro-regional approach for maximising the sector potential.

Short-sea shipping (incl. Ro-Ro)

This maritime activity has strong potential in Croatia thanks to the ports of Rijeka and Ploče. However, the future development of this activity is highly related to the growth of Croatian and Balkan economies, the cooperation with neighbouring countries and the connection of the seaports to other transport networks (rail, road).

Specifically as regards the development of **intermodality** which is the key characteristics of short-sea shipping, some investments are planned in Rijeka and Ploče:

- In Rijeka, it concerns the upgrade of the rail connectivity and the extension of container terminal (from 328 m to 628 m);
- In Ploče, it concerns a new cargo terminal (dry bulk cargo terminal and container terminal) in relation with the project of Pan-European VC Motorway Corridor (build in Bosnia and Herzegovina and North Croatia).

Besides infrastructural investments, the main objective to achieve for fulfilling the growth potential of the activity is to define – at sea-basin level – a possible "**port specialisation map**" of the Adriatic, which would define **roles and competences of strategic nodes** and would mitigate competitions. Cooperation between seaports would be also needed for harmonising tariffs and planning infrastructures.

Possible financial sources

Infrastructures and investments in intermodal connections can be funded by the ERDF and the Cohesion fund.

Coordination among ports' specialisation in the area is recommended to be planned at sea-basin level, in close cooperation with Italy, Slovenia, Montenegro, Albania and Greece. The EUSAIR could represent the adequate umbrella under which this cooperation can be pursued.

Territorial cooperation programmes could also support the development of macro-regional approach for maximising the sector potential.

Yachting and marinas

The objective of national strategy for nautical tourism (2009-2019) is the creation of 15.000 new moorings and the construction of 15 new high-quality locations. This is a remarkable pre-condition for boosting the sector development. Linked with coastal tourism, the sector has a significant growth potential which can be fulfilled by adopting an **integrated strategy for the development of maritime tourism** (see coastal tourism and cruise tourism)

However, the Country fiche put into evidence the existence of conflict of interest for the space management in the ports. It is recommended to boost the **adoption of MSP and ICZM** in order to optimise spaces use and mitigating conflicts.

Other barriers to growth have been identified in the Country fiche. In particular, the recent decreasing demand for yachting services needs to be faced with new and more **targeted promotional campaigns** aimed at increase the visibility of Croatia as a leisure destination. But again, as mentioned above, these actions should be encompassed in a wider strategy including all tourism forms.

Another barrier identified is the **lack of cluster**, compensated by a **good marinas network**. The feasibility of strengthening the network and including it in a wider maritime tourism cluster is recommended to be supported.

Finally, as already mentioned for cruise and coastal tourism, the development of yachting and marinas could not disregard the Adriatic context. **Cooperation at sea-basin level** should be strengthened in order to maximise the potential of the area in this activity, creating an integrated Adriatic offer and common tourist packages, even in close relation with other tourism.

The EUSAIR is the natural environment for developing this type of cooperation.

Possible financial sources

Infrastructures investments for developing new marinas can be funded by the ERDF and the Cohesion fund.

Promotional activity of the sector can be sought within an overall tourism promotional campaign funded by the ERDF or the Cohesion Fund. Indeed, priority should be given to the development of a holistic strategy for the development of maritime tourism.

Marine aquaculture

There are many reasons for considering Croatian marine aquaculture as a promising activity. The first is the recent access to the EU market which generates potential demand of product very competitive in terms of quality/price ratio. In order to get the best from this opportunity it is recommended to:

- Incentivise **investments in new plants** in order to increase productions; the EMFF will be a remarkable source of funding for this purpose;
- Strengthen links between the **research activities and the businesses** in order to facilitate the know-how transmission and explore possible production diversification and introducing new species demanded by the EU market;

- Support the **cooperation among producers**, incentivising the starting of POs, associations, etc. The possible creation of a fishery maritime cluster should be also considered since it could increase synergies among producers at different levels (hatchery producers, farmers, shellfish farmers, etc.).

The Country fiche put into evidence the existence of conflict of interest for the marine space management. Despite specific planning have been developed in the country for regulating licenses and spaces for marine farms, it is recommended to boost the **adoption of MSP and ICZM** in order to optimise spaces use and mitigating conflicts also with other maritime activities.

Finally, marine aquaculture plays a remarkable role within the forthcoming EUSAIR, since it has been seen as a **sustainable way for diversifying fishing activities** and reducing the overexploitation of fishery stocks. Within this context, the role of marine aquaculture in Croatia could receive a significant boost in terms of quality and promotion. As a matter of fact, the objective of developing a specific labelling for the Adriatic and Ionian production could generate significant advantages for the sector.

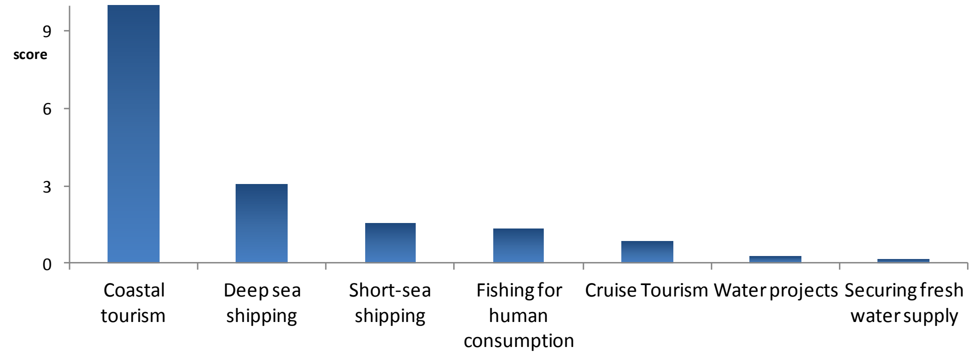
Possible financial sources

The EMFF is the main financial source for funding the overall development of the sector. All actions recommended could be covered by this fund.

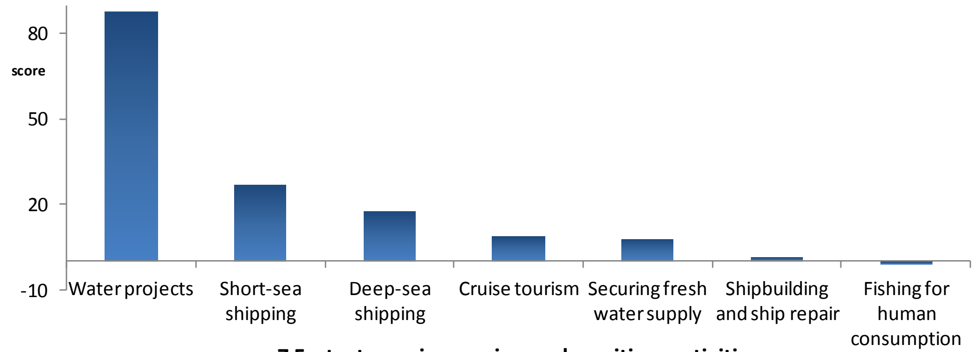
2.5 Cyprus

Cyprus is located in the Eastern Mediterranean and constitutes the third largest island in the Mediterranean. Cyprus has a coastline of 782 km, representing 0,54% of the total EU-22 coastline. Respectively, the island's coastal area (with a range of 10 km from the coast) covers 9.251km^2, representing 0,67% of corresponding EU's coastal area.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising Marine and Maritime activities in Cyprus are: **Deep sea shipping, Securing fresh water supply, Marine aquaculture, Coastal tourism, Cruise tourism and Offshore oil and gas.**

Scores assigned for Blue Growth indicators for future potential:

Marine and Maritime Activity	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Deep-sea shipping	+	+	+	+	+	+	++++++
Securing fresh water supply	+	+	+	+	+	+	++++++
Marine aquaculture	+	+	+	+	0	+	+++++
Coastal tourism	0	+	+	+	+	+	+++++
Cruise tourism	0	+	+	+	+	+	+++++
Offshore oil and gas	0	+	+	+	+	0	++++
Environmental monitoring	+	?	0	+	+	+	++++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Deep sea Shipping				
Cyprus' Deep sea shipping is the second largest blue activity of the country. There are six Cypriot ports; Larnaca and Limassol serve the largest percentage of sea cargo. Cyprus has the third largest fleet within the European Union and is classified as the 10th largest merchant fleet globally and the largest third-party ship management center in Europe. The approval by the European Union, in 2010, of the new expanded Cyprus's tonnage tax system, generates a competitive business environment, which is expected to attract new ships in the Cyprus registry and can affect the size of the shipping cluster. In this context demand for specialized ship management services can be increased and consequently the number of employees in the sector.				
R&D (-), access to finance (-), smart infrastructure (+), maritime clusters (+), integrated local development (+)	Issue important at National and EU level Environmental and safety issues Important role has the maritime administration	Important sector on both economic (17,6% of overall blue GVA) and social (11,4% of blue employment) levels	Ship owing and management companies are major players of the sector, generating the demand for supportive services as ship insurance companies, ship chandlers, bunkers, port operators and logistic companies	The maritime administration, as being responsible for the implementation of shipping policy and enforce laws and regulations and monitor the safe and secure performance of the sector
Securing fresh water supply (desalination)				
Desalination emerged as the seventh largest activity in Cyprus. It has developed during the last years after the severe drought problems of the island. Cyprus faces the problem of limited water resources, which became more intense in the 1990's due to drought. At the same time, there is excess demand for drinking water consumption and for use in agricultural activities. Part of demand is satisfied by the operation of desalination plants. Currently, there are permanent and mobile desalination units for serving all the areas of the island while there are studies and further planning for the expansion of existing plants and the construction of new ones. The development of desalination units presents positive growth rated mostly due to the number of implemented projects for securing uninterrupted supply of water both for human consumption and commercial reasons.				
R&D (+), smart infrastructure (+), maritime clusters (+), access to finance (-), integrated local development (+)	Issue very important at MS level Environmental pressure on this issue	The activity employs a limited number of persons: only 0,23% of the total of blue employment	At present there are 5 major desalination plants, several services companies, Policy Makers and main stakeholders of the Council of Ministers	Research on the field focuses on the development of new methods of desalination aiming at increasing energy efficiency of the method and reducing environmental side effects
Marine aquaculture				
Mariculture is the main type of aquaculture in Cyprus and it is carried out in the southern coast of the island, major species cultured are gilthead seabream and European seabass. In terms of geography, the activity is mostly concentrated in the eastern of Limassol. It is an important activity in Cyprus showing increased rates of growth during the last 10 years. Offshore aquaculture can contribute further to the sustainable development of the regional sector and especially the establishment of farms in deeper waters, since it could respond to the current state of limited space, limit potential conflicts regarding coastal uses and can contribute to the preservation of widely consumed species.				
R&D (+),smart infrastructures (+); training and skill (+); integrated local development (-)	Development supported by national strategies	Totally 260 persons were employed in the sector from which more than 90% to mariculture. The value of production reached 32 million euro	Main Player of the sector are Kimagro Fishfarming Ltd, Seawave Fisheries Ltd, Blue Island Fish Farming Ltd, Telia Aqua Marine and the Marine Aquaculture Research Station	High importance is given to the sustainability of the sector and thus environmental assessment is required in the context of securing people's health and protection of the environment by a legislative Regime
Coastal tourism				
Coastal tourism ranks first among the largest economic sectors in Cyprus, with significant contribution to national GDP (10%) and more than 40.000 people employed in the sector. Cyprus is a major tourism destination in Europe and especially in the Mediterranean. The Cypriot Tourism Organization (CTO) has developed a strategy for the diversification of the domestic tourist product aiming at offering differentiated services, promoting new forms of tourism such as maritime tourism etc. Major source markets for the Cypriot tourist product are Europe and Russia.				
R&D (-), maritime clusters (-), public engagement (+), access to finance (-), smart infrastructure (+)	Strategic Plan for Tourism, 2011-2015 Supported at local level by regional	Important sector for economy (45,2%% of overall blue GVA and 59,9% of blue employment)	Activities are overviewed by the public authorities who set the relevant regulations. Regional Tourism Boards are responsible for promoting the	Environmental programs are implemented such as Blue Flag and all European environmental directives

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
	governments		activity, in which all stakeholders participate	
Cruise tourism				
Despite the global economic crisis, the cruise industry continues to show steady growth. Cyprus is among the major port of calls in Europe, welcoming more than with 380,7 thousands cruise passengers in 2010. Cyprus serves the European cruise industry mostly as destination market. Although, the island has many advantages, its geographical location in the center of Eastern Mediterranean and its proximity to major cruise destinations such as Greek islands and Israel, has not yet managed to become homeport destination. During 2010, 45 cruise ships included Cyprus in their itineraries, resulting to 276 calls. Forecast on the cruise sector in Cyprus are positive.				
R&D (-), smart infrastructure (+), maritime clusters (-), access to finance (-), integrated local development (+)	Significant issue at basin level	Cruise activity represent the 16,5% of the total of GVA of the blue economy and the 11,6% of the total of blue employment	Main players are: Cyprus port authority, foreign cruise companies, national tourism offices that offer tourist package, many services and companies which operate in the sector. Louis cruises and Salamis Cruise Line are the two major national companies	Cruise tourism receives criticism due to its impacts generated to the environment. Despite this cruise tourism can contribute to the sustainability of destinations' areas given the fact that natural resources are part of the experience of the visitor, which must be protected
Offshore oil and gas				
There is currently no production of oil or natural gas, but natural gas resources have been discovered with additional exploration coming in the near future. In 2011, the U.S. company Noble Energy discovered the so-called Aphrodite field and estimates indicate that the field contains 7 Tcf of recoverable natural gas resources. An appraisal well has been drilled in Aphrodite field in 2013 and the early estimations indicate 5 Tcf natural gas resources. Through the 2nd Licensing Round, which was announced in 2012, five additional exploration licenses have been awarded (three to Eni/Kogas and two to Total). Moreover, the development of the national sector activity is expected to substitute the use of oil with locally produced gas and thus to have a positive impact on lowering greenhouse gas emissions and make the economy greener by replacing other fossil-fuels while improving its energy security.				
R&D (+), smart infrastructure (+), maritime clusters (+), maritime spatial planning (-), integrated local development (+)	Promising and innovative activity, still at research stage	It is not possible to identify and describe socio economic aspects, since the activity is still at a nascent stage	The companies which are operating at the current stage offshore Cyprus are Noble Energy International Ltd, Delek, Avner, ENI, KOGAS, Total	Cyprus has aligned its energy policy with the EU laws and transposed all relevant EU Directives into national law and adopted the Offshore Protocol for exploitation of the mineral resources in the Mediterranean Sea

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Deep-sea shipping

The new Cyprus' tonnage tax system (approved by the EU in 2010) extends the favourable benefits previously applicable only to owners of Cyprus flag vessels and ship managers, to owners of foreign flag vessels and charterers. This favourable regime is expected to attract new ships in the Cyprus registry, affecting the size of the shipping cluster, increasing demand for specialized ship management services and consequently the number of employees in the sector.

The new regime is therefore the pre-condition for fulfilling the growth potential of the sector. On the other hand, in order to keep this advantage competitive and sustainable under an environmental point of view, the assessment of policies put into evidence the need at national level to **coordinate infrastructural interventions with other environmental interventions**. The purpose of this "coordinate scale of interventions" is to support a sustainable development of deep-sea shipping.

The new regime could represent the key tool for strengthening the position of Cyprus in deep-sea shipping, taking also advantage from its well-developed infrastructures. However, in order to strengthen the position of deep-sea shipping, the development of other ancillary activities should be supported at national level. For instance, the development of the ship repair sector – currently limited to few companies – could represent a further element to increase the competitive advantage of Cypriot deep-sea shipping, increasing employment and attracting new ships in national registers.

This type of measures should be included in a wider national strategy whose purpose would be to **extend the value chain of deep-sea shipping and provide extensive services to registered vessels.**

Possible financial sources

No specific financial sources are needed for coordinating infrastructural and environmental interventions.

Financial sources for developing "ancillary activities" are the ERDF and the Cohesion Fund. However, the development of an integrated strategic planning is recommended for defining a holistic picture of the sector value chain and identifying possible stages to be strengthened.

Securing fresh water supply (desalination)

The activity is of key importance for the water supply in the country. It has therefore a relevance at national level only. New plants have been inaugurated recently and the Government planned the construction of new plants in the near future. No recommendations at national level are therefore needed.

On the other hand, reduction of greenhouse gas emissions and reduction of marine impact are two key aspects which need to be achieved in developing new plants and/or updating the old ones. Hence, main recommendation concerns the **adoption of alternative sources of energy for feeding desalination plants and through the development/adoption of alternative desalination methods** (solar desalination). At national level, research for achieving a more sustainable desalination is currently on going but with limited financial funds. To cope with this limit, research activities should be supported also by making use of EU funding resources (ERDF and Cohesion Fund) and launching international cooperation projects. Also in this case, EU sources (Horizon 2020) could feed this type of projects.

Despite environmental impacts are carried out in case new plants are built, no MSP still exists in Cyprus. Within the overall context of an harmonised development of maritime economy in the country, the development of **MSP** is pivotal for an adequate management of maritime spaces and for the optimised development of the country blue economy.

Possible financial sources

As mentioned above, Horizon 2020 could finance research activities at international level, while the ERDF is a potential source for funding local research activities.

Marine aquaculture

As resulted from the Country fiche, the sector receives significant political support for the purpose of improving business environment and ensuring the sustainable development of the activity. High importance is given to the sustainability of the sector and thus environmental assessment is required. National political effort has set the condition for fulfilling the marine aquaculture growth potential.

Main drivers identified concern the **qualification of the workforce**, highly specialised and with consolidated tradition. However, life-long learning programmes and possible exchanges with neighbouring countries (e.g. Greece) are recommended for increasing the level of expertise of farmers. This type of measures could be funded by the EMFF.

On the other hand, given the consolidated research in new species cultivation, fish biology, etc., it is also recommended to **strengthen the R&D** in the sector for the purpose of developing open sea farms, increase qualitative standards of the production and introduce new species for diversifying the production. International cooperation projects could be a valid tool for boosting research activities. Also in this case the EMFF and the ETC could be useful tools for this purpose.

One of the main objectives to reach is to **increase the profitability of the sector** which is currently hindered by the economic crises and the reduced competitiveness of production. Therefore, by the support of the new programming period, the following actions are recommended:

- Support the formation of **sector associations** and producer organisation (and possible maritime clusters for fish farming) to increase coordination among producers in terms of promotional activities;
- Increase **technological development** of farms (especially small farms) and support diversification of production and/or of the activity;
- Support the **development of port and land facilities** for streamlining landing operations;

Finally, one of the main barriers which limit the development of the sector is the **high costs of transport** which hamper the benefit of being an EU country and accessing to this wide market. In order to widen the Cypriot market of farmed products, access to foreign/EU countries should be improved. In this sense, specific measures are proposed to be implemented at national level to enhance the competitiveness of enterprises, such as fiscal support and targeted incentives to SMEs for exporting their productions. Also in this case, the EMFF could be the potential source of funding.

Possible financial sources

The EMFF is the main financial source for funding all proposed actions. On the other hand, formation and education initiatives can be also funded by the ESF, while infrastructural facilities can be encompassed by the ERDF.

International research projects could be funded by the ETC and especially by Horizon 2020.

Coastal tourism

A strategic plan for the tourism sector has been drafted aiming at the development of new touristic products, emphasizing the importance of nautical and maritime tourism, and the diversification of the current image of the destination, as precondition for improving its competitiveness. Furthermore, a number of projects mostly related to transport infrastructures have been developed. Therefore, the activity receives a remarkable political support.

Despite these efforts have achieved good results (increased attractiveness of the areas, new tourism products, modernization of hospitality image, etc.) more targeted promotional actions are recommended to increase the **visibility of the island in the international market**. These campaigns should be addressed to attract new flows from emerging economies (Russia, Easter Asia, etc.).

The overall national strategy for the development of tourism should be more focused on **strengthening the links between coastal tourism and other activities, both maritime and non-maritime**. Integration with cruise tourism is a key objective to achieve in order to increase the attractiveness of island and incentivise tourists and ships for longer stays. Furthermore, it should be taken into account that coastal tourism depends on the availability of connections – air or ferry – with international markets. More frequent connections and for wider periods during the year – not concentrated in the summer period – are two pivotal measures for achieving the growth potential of the activity.

The country fiche put into evidence that the lack of financial resources is one of the main barriers to fulfil the growth potential of the activity. This lack mainly affects: (i) innovation of services; (ii) infrastructural facilities; (iii) research in the sector for monitoring impacts (environment, economic, etc.). in order to fill these gaps, it is recommended to increase financial support to coastal tourism development through the ESIF funds, with special focus on supporting SMEs for innovating the services provided.

Obviously investments could derive from private investors. To this regard, fund-raising activities could be also activated by a **national-based structure (e.g. tourism cluster) that could facilitate the convergence between supply and demand** (of credit), by involving private companies, and private investors (venture capitalists, business angels, private equity).

Under an environmental point of view, it is recommended to implement **MSP and ICZM practices** which will help to regulate the overconcentration of economic activities in coastal areas and trigger a sustainable development of the sector.

Possible financial sources

Visibility of the island in the international market could be supported by the ERDF and could be included as a specific measure in the next programming period, while the improvements of links between coastal tourism and other activities is a strategic action to be planned in a possible revision of the Strategic Plan for Tourism.

Cruise tourism

Cyprus is one of the most important cruise destinations in the Mediterranean. The National strategy for tourism supports the development of the sector, but a more important role is expected to be covered by cruise tourism because of the importance of the sector in the blue economy of the country. Therefore, a dedicated strategy at national level is expected to be developed in order to:

- Provide a comprehensive strategic framework to the sector;
- Enhance liaisons with other activities (maritime and non maritime).

As emerged in the Country fiche, despite infrastructures have been recently updated, at present there is only a combined cargo and passenger facility. Therefore the construction of an **equipped docks exclusively dedicated to cruise tourism** should be planned.

As mentioned in coastal tourism, it is recommended to strengthen **links with other activities** (maritime and non-maritime). As regards links with Coastal tourism, please refer to the previous activity.

It has to be pointed out that the strategic development of the activity could also aspire to transform **Cyprus as a possible cruise home-port** of the Eastern Mediterranean. In such a perspective, empowerment of international connections and internal intermodal connections, especially airports and related international connections, represent two necessary strategic steps.

In brief, a the development of cruise tourism in Cyprus should encompass a strategic effort at national level aimed at:

- increase infrastructural facilities, creating specialised terminals;
- strengthening links with coastal tourism;
- improving international connections with main potential market;
- developing intermodal connection (airports to ports).

As a last step, the strategic development of cruise tourism should adopt **specific measures in order to prevent possible impact of big cruise ships to the environment** and the coast and reducing pollution.

Possible financial sources

Recommendations provided concern a strategic vision for the future development of the sector in general. However, specific financial sources for funding the proposed actions could be found in the ERDF and the Cohesion fund. On the other hand, given the significant role covered by private actors in the sector, PPP (with international subjects) could represent a useful tool for attracting investments and building e.g. new terminals exclusively dedicated to cruise passengers.

Offshore oil and gas

Oil and gas in Cyprus is a promising sector since it can contribute not only to tackle the energy problem of the island but also to settle as one of the leading export sectors. Cyprus has prioritized the development of the activity and a several policy actions have been developed. Currently the activity does not exist and given the fact that it is still at a nascent stage, it should be handled carefully, also taking into account the critic importance of the energy supply.

From an environmental point of view, all needed prevention measures have been taken (also taking into account that Cyprus has ratified the Offshore protocol). Furthermore, in order to attract foreign investments, a low corporate tax is currently in force and PPP are supported, which could be a useful tool for financing the sector.

Therefore, all pre-conditions for the proper development of the sector have been set. On the other hand, as emerged in the Country fiche, two main elements are recommended to be tackled:

- Strengthening the development of **complementary activities** (shipping, but also shipbuilding and ship repair, and repair of platforms), in order to maximise the growth potential of new extractive activities and provide all needed support;
- **Increase skills and competences of local people** not only in the extractive sector, but also in other ancillary activities, in order to generate the potential impact of the activity on employment, also through exchange of know-how with neighbouring countries;
- In order to reduce potential conflicts with already established offshore activities (e.g. aquaculture and tourism), **MSP** could help to optimise spaces and mitigate competition with activities already located in the area.

Possible financial sources

Complementary activities can be developed only by supporting SMEs currently established or incentivising the entrepreneurship for developing these activities. Possible financial source for this purpose is the ERDF and the Cohesion Fund.

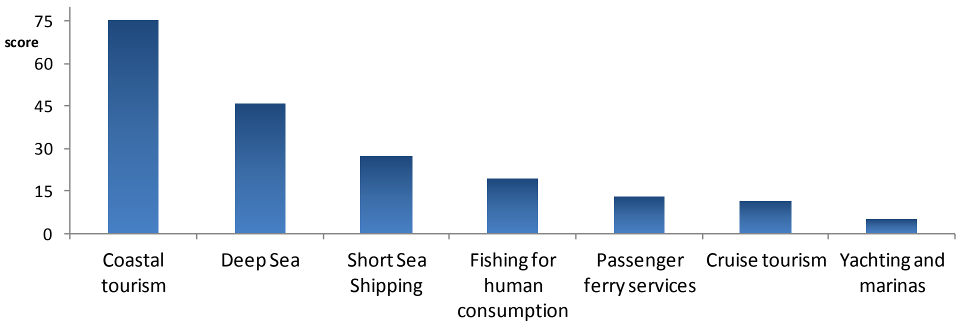
In order to increase the competence of people, the ESF is the relevant source of funding, while know-how exchanges can be funded also by the ETC programmes.

MSP is a plan which should be developed at national level and no specific funds are required.

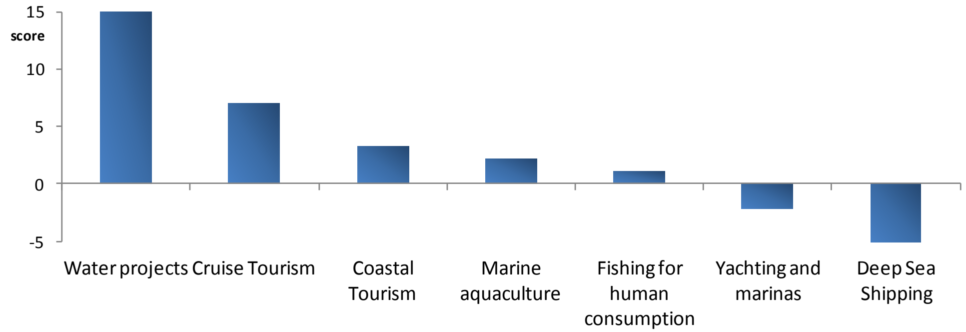
2.6 Greece

Greece's coastal region lies in the Aegean Sea, the Ionian Sea the Libyan Sea and the Levantine Sea. The Greek coastal zone (within a range of 10 km from the coast) covers 49.442 km2 (13,3% of the corresponding EUs coastal are) and is the second largest in the EU. This morphological structure results in the presence of an extensive coastline of 15.021km representing 11% of the total EU-22 coastline. Greece is characterized by high degree of insularity, composed of an estimated number of more than 6.000 islands and islets.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising marine and maritime activities in Greece: **Marine aquaculture, Deep-sea shipping, Cruise tourism, Coastal tourism, Short sea shipping (Incl. Ro-Ro) and Yachting and marinas.**

Scores assigned for Blue Growth indicators for future potential:

Marine and Maritime Activity	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Marine aquaculture	+	+	+	+	+	+	++++++
Deep-sea shipping	+	+	+	+	+	+	++++++
Cruise tourism	0	+	+	+	+	+	+++++
Coastal tourism	0	+	+	+	+	+	+++++
Short-sea shipping (Incl. Ro-Ro)	0	+	+	0	+	+	++++
Yachting and marinas	0	+	+	0	+	+	++++
Offshore Wind	0	+	+	0	+	+	++++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Marine aquaculture				
In 2011, the total production amounted to almost 121.000 tonnes corresponding to 523 million EUR. Marine aquaculture is the leading segment of the sector, representing approximately 95% of total production. The sector ranks first in the EU as regards seabass and seabream productions (80% of the production is exported), while it has achieved lower production costs compared to its competitors. The strong export orientation of the industry has lead to the establishment of qualitative standards and certifications for the production. There is an evolution at legislative level regarding the establishment of MSP for expanding current activity while specific efforts are in place regarding the research for the differentiation of local production and the cultivation of new species. The introduction of a MSP is also expected to boost the development of the sector and resolve current conflicts of uses. It is estimated that the sector can triple its GVA from 0,4 to 1,4 billion euro and generate more than 20.000 new job positions.				
R&D (+), access to finance (-), maritime spatial planning (+), integrated local development (+), public engagement (-)	Development supported by national strategies	The number of persons directly employed in the sector is almost 3.800, while total employment is estimated to 10.000 persons. Greece is the first producer of sea bass and sea bream.	106 companies operate in the sector. Major companies are Nireus, Selonda Aquaculture, Interfish, Hellenic Fish Farming,etc. National responsible bodies and associations such as the Federation of Greek Maricultures	Legislation ensures the preservation of the marine environment, the quality of the products and human health
Deep-sea shipping				
Greek deep-sea shipping fleet represents 15,56% of world's deadweight and is the largest fleet in European level. The sector is characterized by high degree of innovation and competitiveness since there are (i) investments related to new ships order, (ii) adoption of new green efficient technologies, (iii) high degree of adaptation to demand trends and (iv) a clear orientation to new market segments. Policy interventions related to the facilitation of vessel registration under the Greek flag aims at generating a more efficient and attractive environment. Greek shipping is also investing in ships with advance technologies for enhancing their energy efficiency, use cleaner fuels and participate to voluntary environmental programs.				
R&D (+), access to finance (-), smart infrastructure (-), education, training and skills (+)	Environmental and safety issues very important for the EU	Important sector for economy (29,1% of overall blue GVA) Total impact on employment is estimated to 192 thousand people	There are more than 850 Greek shipping companies, University active in maritime research and relevant associations such as the Union of Greek Ship owners and the Hellenic Chamber of Shipping.	Greek shipping is fully applying all the international and EU environmental regulations and the majority of ship-owners move beyond compliance standards
Cruise tourism				
Cruise industry covers an important role in the national economy due to the direct and indirect economic impact, mostly generated by cruise visitors (passenger that visited Greece in the context of a cruise itinerary, these reached 4,7million passengers (+7%) and ranks third after Italy and Spain) and crew members' expenditures. Favoring predictions regarding future demand for cruise suggests that the international and European market will experience positive growth rates. As Greece is ranked among the top European destinations, further growth of the sector is expected. Recent legislative reform aims at creating a more environmental-friendly business, investing for home-port facilities and supporting future expansion.				
Access to finance (-), smart infrastructure (+), education, training and skills (-) Integrated local development (+)	Significant issue at basin level	The cruise tourism sector represent the 6,9% of total blue GVA.6.5 thousands of people are employed in the sector.	The Port of Piraeus is the major cruise port. Maritime agents, municipalities, associations, tour operators and other suppliers connected to the cruise activity are located in Piraeus. Major player is Louis Cruises.	The sector is operating in sustainable way. In general, major cruise ports develop specific activities for the protection of the environment regarding waste management, water quality and noise and air quality
Coastal tourism				
Coastal tourism in Greece has received the negative impacts of economic recessions, noticing a downward trend (reversed during 2013, estimating to reach more than 17 million arrivals). In 2012 Greece was ranked 17th in international arrivals. National policies promote new forms of tourism products focusing on niche markets, with green orientation enhancing the competitiveness of the sector and its sustainability. Positive growth rates are expected to prevail in the sector, also supported by the proactive legislative framework currently settled, aimed at attracting new investments in the sector and strengthen its growth.				

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
R&D (+), access to finance (-), education, training and skills (+), integrated local development (+),	Development supported by national strategies and relevant for EU market	Important sector for economy (30% of overall blue GVA and 26,3% of blue employment). More than 95% of the total tourism activities are taking place in coastal regions.	The existence of multiple destinations with natural and cultural diversity bring several social, economic actors and Public authorities involved in the coastal tourism management. Local authorities are responsible for draw up and implement relevant programs	The protection of the environment is among the priorities stated in national tourism policy. Additionally, environmental-friendly practices are promoted through legislation, such as eco-friendly standards and green management systems
Short-sea shipping (incl. Ro-Ro)				
Most of the cargo transported in national ports is conducted through short-sea shipping. The activity secures the constant supply and connectivity of the Greek territory. Moreover, the development of Piraeus as transshipment hub and current investments on port infrastructures are expected to increase port capacity and consequently to generate additional demand for short sea transport.				
R&D (+), access to finance (+), integrated local development (+), maritime spatial planning (-)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping	The Short sea shipping represent the 15,8% of the total of GVA of the blue economy.	Port Authorities and approximately 100 companies. Short Sea Promotion Center is the major association for the promotion of the activity.	The market follows all relevant regulations to maintain high safety, security and environmental protection standards
Yachting and marinas				
Greece is an established tourist destination with an extensive coastline which favours the yachting activity. There are several companies offering competitive yachting services. The extensive investments planned on tourist ports and marinas are expected to considerably increase berth capacity and attract international demand. Legislative regime allows concessions for the management of existing marinas. It is estimated that total employment generated by marina and yachting accounts almost 30.000 positions. The value of the marina market reached 30 million euro (2008) growing by 4% from 2005.				
R&D (+), access to finance (-), education, training and skills (+), integrated local development (+),	National Port Strategies to support the sector until 2018	There are almost 20 organized marinas in the Greek territory for hosting yachts with some 6.600 berth capacity.	100 companies represent 1/3 of the market, more than 800 companies are active in yachting sector. Apart from the relevant authorities, key players are sectoral associations such as the Greek Marinas Association, the Hellenic Professional Yacht Owners Association, etc.	The sector is considered as sustainable mostly due to the non-massive character as well to the dispersion of the activity to the different islands, minimizing congestion phenomenon

Recommendations

fulfilling the growth potential, removing barriers and strengthening drivers

Marine aquaculture

The activity is one of the most important in Greece and for some specific species (seabass and seabream), the Greek production is most competitive in the EU (quality/costs ratio). The growth potential of the sector is represented by the fact that it is mainly an "export-oriented" activity and by the strong political commitment to cultivate new species, boost biological aquaculture, re-locate farms and promoting the production.

Further efforts should be needed at national level for fulfilling the growth potential of the activity. First of all, promotional actions which have been perceived as "weak" in the Country fiche, needs to be strengthened especially for the purpose of consolidating the export vocation of the sector. The **active involvement of producers in promotional actions** is of paramount importance, especially if these actions are organised by consortia/POs/associations. Within the new EMFF, such a type of actions could be supported.

This type of actions is also supported at sea-basin level (Ionian Greece), within the forthcoming EUSAIR.

At national level, it is recommended to **simplify procedures for licensing** which at present appears as too heavy in terms of administrative burdens. Especially for small operators, red tape has also been identified in accessing to EU funds, which should be reduced in the next programming period.

Always at national level, a clearer line regarding the **integration of aquaculture in maritime spatial planning** is recommended to be defined, given the pivotal importance of marine aquaculture in the Greek blue economy.

The Country fiche has also identified a strong research activity in the sector, carried out by universities and research institutes, but also by many sector's players, involved in research programmes and international projects. Indeed, this represents a key driver for increasing the competitiveness of the sector, developing new products and new farming techniques. It is recommended to **strengthen the liaisons between the dense research activity and the industry**, in order to getting the best from innovations in the sector, favouring the **technology transfers** and launching **life-long learning programmes** for increasing the expertise of the well-trained Greek farmers. These measures could be encompassed within the EMFF.

Possible financial sources

The natural source of funding for marine aquaculture is the EMFF, which could encompass all actions mentioned above. On the other hand, research activities can be funded by Horizon 2020, while educational programmes could be financed also by the ESF.

Deep-sea shipping

The activity is characterized by high degree of innovation and competitiveness since there are (i) investments related to new ships order, (ii) adoption of new green efficient technologies, (iii) high degree of adaptation to demand and (iv) a clear orientation to new market segments. In the light of this no specific recommendations are provided as regards the activity per se, given that it is highly dynamic.

On the other hand, specific recommendations are formulated as concerns the other stages of the value chain which are affected by deep-sea shipping. The country fiche put into evidence the fact that a maritime cluster does not exist in Greece. This lack does not allow the maritime sector in Greece to take advantage of the potential (and the current powerful position) of the Greek deep-sea-shipping companies. More weak maritime activities (e.g. shipbuilding and ship repair yards, which are currently tackling the economic crisis) could take advantage from the strong position of deep-sea shipping and receiving economic benefits. The **development of a maritime cluster** is indeed one of the key priorities in the Greek blue economy [see the Determination of the Strategic Objectives of the Ministry of Shipping and Aegean, 2013 (Minister's Decision no 5511.1/01/13)]. This action could be implemented within the overall strategic framework for maritime transport (Strategic Objectives of the Ministry) and could receive a financial support by the ERDF.

The country fiche put into evidence the difficulty of the sector (especially for new companies) to access to credit and to renew the fleet. Specific measures could be envisaged in the next programming period in order to introduce specific **guarantee schemes** (which enable banks and other lenders to lend to SMEs that do not have the proven track record to be offered for a commercial loan).

Possible financial sources

As mentioned above, the ERDF is the main source of funding for developing a maritime cluster. The activity per se benefits from financial resources of shipping companies and from their easy access to bank loans.

Guarantee schemes should be introduced at national level (e.g. in the "Strategic Objectives of the Ministry") and funded by the ERDF.

Cruise tourism

Favouring predictions regarding future demand for cruise suggests that the international and European market will experience positive growth rates. As Greece is ranked among the top European destinations, further growth of the sector is expected. Recent legislative reform aims at creating a more environmental-friendly business, investing for home-port facilities and supporting future expansion (e.g. Piraeus port is building a dedicated pier). The main obstacle for fulfilling the growth potential of the sector and improve the role of Greece as home port is the lack of **international connections and internal intermodal** links between different nodes (airports/stations/ports). It has to be taken into account that improvement of intermodal connections for passenger is not only linked to home-porting activities, but also to ensure mobility of cruise tourists during their stays (which could obviously stay longer if the access is easier).

The development of cruise tourism in Greece should encompass a **long-term strategic effort at national level** aimed at:

- increasing infrastructural facilities, creating specialised terminals;
- strengthening links with coastal tourism and other form of tourism;
- improving international connections with main potential market;
- developing intermodal connection (airports to ports);
- limiting the over-congestion of cities of destination and saturation of spaces.

As a second step, the role of the **cluster of cruise ports** (operating within the Hellenic ports Association) should be strengthened for the purpose of

(i) coordinating actions among major stakeholders for the developing common activities, (ii) promoting cruise sector in Greece and (iii) incentivising clustering of non-maritime players directly/indirectly connected with cruise (airports, ports, potential tourist attractors as museums, archaeological sites, cities in general etc.).

Finally, specialised **education and vocational** schools should be also envisaged in order to increase the level of expertise of workforce in the sector.

Possible financial sources

A strategic effort is recommended at national level for defining a holistic development plan of cruise tourism. The complexity of value chain, the high number of actors and activities interacting and surrounding the core activity and the socio-economic role of the sector are key indicators of the need of a long-term planning for the development of the sector. Financial sources which could be used are the ERDF and the Cohesion fund for improving intermodal connections and infrastructures.

Education and vocational schools could be funded by the ESF.

Coastal tourism

The costal tourism growth potential is represented by the exceptional endowment of attractors (sea, islands, archaeological sites, cultural heritages, internal sites, etc.) and by the significant political effort for developing the sector and enhancing the offer quality standards. The potential of the sector is estimated to have a huge impact on the employment. Therefore, **an integrated coastal tourism strategy** needs to be adopted for the purpose of combining relevant measures to be undertaken: incentivise SMEs initiatives, develop an integrated touristic offer (also combined with cruise and yachting and marinas), safeguard environmental attractions and promote “insularity” as a main attractor.

Links between coastal tourism and other leisure activities (yachting and cruise) is a key aspect to strengthen (also taking into account that it could contribute to reduce seasonality).

At national level, specific **infrastructural investments** need to be done in order to improve road connections in specific tourism areas and improve the overall mobility of tourists. The ERDF could support these infrastructural developments.

At international level, following the EUSAIR proposal (only as regards the Ionian part of Greece), the **development common strategies for attracting “new tourists’ flows” by offering an integrated tourism product “at sea-basin level”** could represent a key approach for increasing the visibility of coastal tourism offer and ensuring common quality standards. This could also lead to reduce competition between neighbouring countries and producing integrated tourism offer.

Possible financial sources

Given the importance of coastal tourism in Greece, it is recommended to adopt a specific strategy at national level, in order to have a define framework of needed actions to be undertaken and how the coastal tourism interacts with other activities. The synergic development of coastal tourism and other correlated activities will have a practical execution within the EUSAIR, which of course does not envisage any additional sources, but will entail a needed alignment of funding possibilities to the EUSAIR objectives.

As a main action to be undertaken, infrastructures improvements could be funded by the ERDF investments.

Short-sea shipping (incl. Ro-Ro)

The activity has a key importance in Greece since it secures the constant supply and connectivity within the Greek territory. Its future potential is directly connected to the national transport system and particularly to the port, road and railway network.

In order to achieve the growth potential of the activity, main recommendations look to the **improvement of intermodal connections** between port and road, but also with railway. Not all Greek ports could rise to be an intermodal hub. For this reason, as first step, intermodal connections should be improved in the main hubs (Piraeus, Heraklion, Thessaloniki).

Also for short sea-shipping, there could be direct benefits from the creation of a **maritime cluster**, taking advantage of the strong position of deep-sea shipping companies. See deep-sea shipping for more details.

The creation of a maritime transport cluster could encourage **research activities,** which are of particular relevance for short-sea shipping. Private actors’ resources (especially deep-sea shipping companies) could support the research costs.

The creation of a maritime cluster could be launched through a specific policy intervention at national level.

Finally, a significant barrier for the growth of the sector is the increasing **flag out from the national register** (862 from March 2012 to March 2013) caused by the stifling bureaucracy (and probably fiscal pressures) that has driven away many ship owners. It is therefore recommended to reduce bureaucracy burdens and align to “more competitive” registers (Panama, Marshall, Malta, etc.). The recent introduction of the e-register is expecting to reduce this phenomenon.

Possible financial sources

Intermodal connections, maritime cluster (see deep-sea shipping) and simplification of vessel register can be funded by the ERDF and the Cohesion fund. In general, it has to be taken into account that the growth potential of the sector can benefit from the significant resources of deep-sea companies and within this context, the development of a maritime cluster could represent the key tool for reaching this objective.

Yachting and marinas

Greece is an established tourist destination with an extensive coastline which favours the yachting activity. There are several companies offering competitive yachting services. The extensive investments planned on tourist ports and marinas are expected to considerably increase berth capacity and attract international demand. Legislative regime allows concessions for the management of existing marinas. Hence the overall environment is expected to boost the sector in the coming future.

In order to achieve the growth potential of the activity it is recommended (also in line with coastal and cruise tourism) to integrate the activity in a wider strategic view, linking it with other tourism activities and other maritime sectors. **Strategic planning at national level** should therefore encompass also specific measures aimed at enhancing the activity and at **increasing the infrastructural facilities** for handling yachting and sailing tourism. **Construction of new marinas**, modernisation of those already existing and building new berth places are structural priorities for the development of the activity and for attracting new flows. The ERDF could be used as potential source of funding for reaching the purpose.

Within the overall development framework of the activity, it is recommended to support the development of an **integrated network of marinas** for the purpose of providing the same standardised services in all networked ports. This could contribute to create specific packages and increasing the quality and then the attractiveness of yachting and sailing tourism.

As part of the value chain, construction of **leisure boats** represent an important maritime activity in Greece, especially taking into account the high specialisation, skills ad long tradition in shipbuilding and ship repair. The activity is currently meeting a decreasing trend due to the economic crisis. Specific **guarantee schemes** for financing these activities should be adopted at national level for allowing access to loans by operators.

Possible financial sources

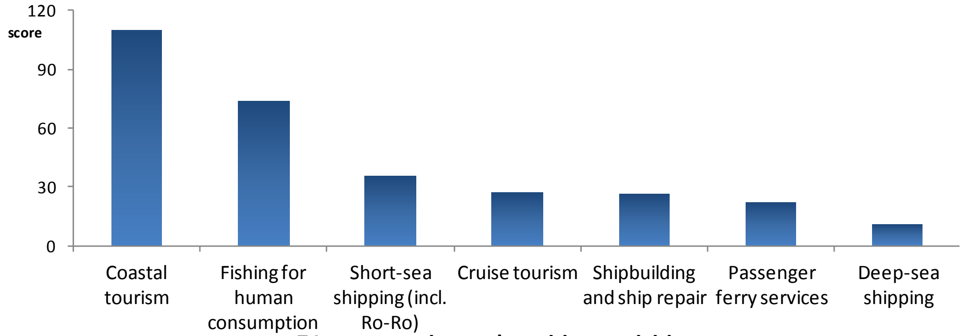
Also in this case, policy effort is recommended to be addressed to a wider organisation of the activity, adopting a comprehensive strategy at national level and strengthening links with other maritime activities (especially with tourism).

Infrastructures improvement, networking activities and guarantee schemes for leisure boats can be funded by the ERDF.

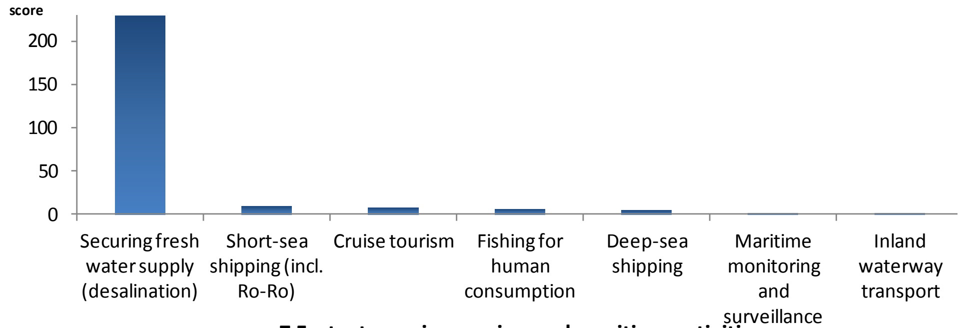
2.7 Italy

Italy has a coastline of 9.136 km, with a coastal region (according to EUROSTAT definition) of 181.289 km^2 , which is approximately 10% of the EU total and approximately 60% of the national territory. Besides the two major islands (Sardinia and Sicily), several others islands and archipelagos are scattered along Italian coasts, which can be grouped in 15 main archipelagos. In 2010, GDP per capita in coastal NUTS 3 amounted to more than EUR 21.000, lower than national total (EUR 25.000). More than 48 % of the National GDP originated from coastal NUTS 3.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising marine and maritime activities in Italy are: **Short sea shipping (Incl. Ro-Ro), Passenger ferry services, Marine aquaculture, Protection of habitats, Coastal tourism and Cruise tourism.**

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Short-sea shipping (incl. Ro-Ro)	0	0	+	+	+	+	++++
Passenger ferry services	0	0	+	+	+	+	++++
Marine aquaculture	+	0	0	+	+	+	++++
Protection of habitats	+	0	0	+	+	+	++++
Coastal tourism	0	+	+	+	+	0	++++
Cruise tourism	+	+	+	0	+	0	++++
Protection against flooding and erosion	+	?	-	+	+	+	+++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Short-sea shipping (Incl. Ro-Ro)				
Short sea shipping is the third largest maritime sector in Italy while within the EU Italy is the country with the highest volumes of transported goods by SSS and plays a pivotal role within the network "Motorways of the Sea", especially in relation with Balkan and Northern African countries. Ro-Ro traffic covers also an important role, taking into account the weight of connection between the continent and Italian islands. Despite the importance, this activity registered decreasing performance in 2011 (-4%) in terms of volumes. Declining trends were also registered in terms of occupied persons. On the contrary, in terms of GVA, CAGR reporting increasing value (+18%).Thanks to the economic growth of Mediterranean and Balkan countries and to development of Pan-European transport corridors, short-sea shipping should register a remarkable growth in the next years. The national framework related to SSS therefore shows a high number of ports that will remain devoted to this type of traffic, also due to the hub-and-spoke network currently developed in the Mediterranean Sea for types of cargos. But the high number of nodes, in the mean time, could represent a potential weakness for the overall maritime economic activity because of the lack of operational coordination among ports.				
R&D (+), access to finance (-), smart infrastructure (+), maritime spatial planning (-)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping	This sector provide the 13,1% of blue GVA and the 7,1% of overall blue employment	The main players of sector are: ports, national and international companies, policy makers, maritime cluster, etc.	By definition the sector is sustainable. National measures were addressed to move cargo flows from road to SSS
Passenger ferry services				
In general, Italian ferry fleet is very old: around 40% of ships is 25 or more years old. However, the activity covers an important role in terms of occupation and many maritime activities (especially shipbuilding and coastal tourism) benefit from it. In the latest three years available CAGR is -1,6% for GVA and -4,3% for employment. On the other hand, "passenger ferry services" have a significant growth potential in Italy mainly because of their close link with other maritime activities which could benefit from them. Besides activities linked to transport (e.g. shipbuilding) and construction of water projects, passenger ferry services represents one of the activities supporting coastal tourism especially in relation to passenger flows towards/from main islands. Both activities are mutually connected and both can benefit from the development and the strengthening of the other.				
R&D (+), access to finance (-), smart infrastructure (+), maritime spatial planning (-), integrated local development (+), public engagement (+)	Very important sector at local level National Strategies are focused on the improvement of the maritime and transport sector in general	This sector gives the 6,4% of overall blue GVA and the 5,2% of overall blue employment	Main stakeholders of the sector are companies as Fincantieri group, Grimaldi lines group, Tirrenia company, maritime cluster, etc.	Even if ferry services transport has less impact on environment than others, 65% of Italian ferries are more than 25 years old with negative effects on the environment
Marine aquaculture				
The Italian marine aquaculture sector produced 114.800 tonnes in 2010 (of which 101.000 of shell fish) for a value of EUR 228 million. The sector is constituted by small size enterprises, dominated by family-run business with no more than 5 - 10 employees. The 'legal status' firms in the shellfish segment are mostly cooperative organisations, where every worker is also a member of the organization. The potential for shellfish mariculture is almost unlimited and product differentiation should be favoured but polluting effects must be considered carefully. On the other hand, extensive aquaculture in brackish lagoons has been receiving increasing consideration for its traditional aspects and for the conservation of the habitat and the ecosystem services. The most interesting challenge for Italian aquaculture is probably tuna farming: if research activity on tuna reproduction succeeded, a new phase of aquaculture could rise, presumably with high GVA and employment growth potentials. On the other hand, availability and cost of tuna industrial feeding remains a major bottleneck for developing this activity.				
R&D (-), smart infrastructure (-), access to finance (-), education and skills (+)	Important issue at National level	Limited economic importance (0,6% of Blue GVA and 0,7% of blue employment)	Mostly family run SMEs, cooperative organizations and consortiums	The marine aquaculture environmental impact is limited and lower than fishing activities
Protection of habitat				
This activity should not be considered as "economic", given that the public sector is in general the only subject involved in it, as regards both regulatory and financial aspects. On the other hand, protection of habitats plays a pivotal role in the Italian Blue economy, considering the direct and indirect effects in other activities. It is indeed a main attractor for coastal tourism (and tourism in general), while it indirectly impacts on other activities. Passenger ferry services and Ro-Ro, for example are indirectly affected because of their links with coastal tourism, while for cruise tourism "protection of habitats" generate positive and negative externalities, given it is as an attractor for tourists, but could impact on cruise traffic is specific areas. In Italy marine protected environments play an important role in the regions where they are located. There are about 30 marine protected areas (more than 2.200 sq. km) and 165 Natura 2000 marine sites (about 4.886 sq. km, June 2011). It has been considered as most promising due to the huge potential benefits to other activities, given that a clean environment is an asset for increasing the attractiveness of a given area				
R&D (+), smart infrastructure (+),	Important issue at national and	The weight of the sector is 3,3% of	The main players of this activity are	The activity is to be considered

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
public engagement (+), maritime spatial planning (-), integrated local development (-)	EU level	blue GVA and 1,3% of blue employment	Regional authorities, Research institutes, universities, national and international organizations	intrinsically sustainable, in that it aims to preserve the natural environment and its fauna
Coastal tourism				
Coastal tourism, because of the multiple links with other blue activities and its socio-economic impact, is the most important maritime activity in Italy. In the 2011 ranking of the most popular tourist destinations in the world, Italy is in the 5th place, both for international arrivals, 46 million, and receipts, almost 32.066 million of Euros. Seaside and beach resorts continue to represent the main tourism attractions in Italy for the domestic market and the second type of destination for the international market. The Italian accommodation sector (33.911 unit, more than 2 million bed places in 2011) is the second biggest in the world, nevertheless it appears extremely fragmented with over 93% of hotels being independently owned and relatively low quality (almost 50% of the 34.000 hotels 1 or 2 stars). Independent hotels are traditionally located on the coast, operating only in the summer period. Despite the economic crisis, in 2011 coastal tourism registered a remarkable increase of around 3 million tourists more compared with 2010. This increase was almost entirely due to international tourism and only marginally to internal flows. The activity is deemed to be one of the most promising in Italy because of its huge potential not only in socio-economic terms but also as regards environmental sustainability. The enhancement of coastal tourism offer is directly linked with the conservation and protection of landscapes and environment, as well as the safeguard of the sea and coastal areas.				
R&D (+), access to finance (-), education, training and skills (+), Smart infrastructures (-), public engagement (+)	National Strategies planned a set of specific objectives to be achieved within 2020	Most important Italian maritime sector with the 23% of GVA and the 28,8% of overall employment	Many stakeholders as SMEs (53.000), policy makers, etc.	According to EU directives, the national authorities set requirements for coastal tourism activities , incl. responsibilities for environmental damages, protection of habitats etc.
Cruise tourism				
Italy is the 5th country in the world for tourism presences and the country with the highest passengers movement in their ports. As specifically regards the cruise sector, Italy increased its importance in this activity: in terms of destination, Italy is the first-ranked not only in Europe but also in the world. Its 5,4 million passenger visits represented 21% of the world total. Italy is very important as “departure hub”: Venice, but also Genoa and Civitavecchia are the three main home ports. Despite it is owned by the US company “Carnival”, Costa Crociere is the leading company in Italy and one of the important in Europe. Direct expenditures of this activity amounted to EUR 4,5 billion (+5% compared to 2009), while employed persons grew by 3%. The cruise lines directly employed an estimated 13.583 Italian residents as crew and administrative staff. In terms of infrastructural facilities, significant investments in the main “departure hubs” (especially in Civitavecchia) are reinforcing the role of Italy in this activity, confirming its leading role in Europe.				
R&D (+), Access to finance (-), smart infrastructure (+), education, training and skills (+) Integrated local development (+)	Significant issue at basin level (Adriatic) National Plan are provided in order to ensure an eco-sustainability of cruise activity	The cruise sector provides in Italy the 7,7% of blue GVA and the 6,3% of overall blue employment.	Companies operating in the sector are estimated to be more than 200	Several initiatives aimed at improving sustainability and security in the sector have been carried out by National Strategies

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Short-sea shipping (incl. Ro-Ro)

For many reasons, as reported in the Country fiche, short-sea shipping has a remarkable growth potential in Italy but on the other hand, the same also significant barriers could hamper the fulfilment of this potential. The EU has identified 39 ports deemed strategic for the internal market but on the other hand a high number of nodes could bias the proper functioning of the port system in a country, generating competition among them. To this regard, the planning of a "**port specialisation roadmap**" would be useful to optimise the strategic development of port system in Italy.

As specifically regards short-sea shipping and Ro-Ro, infrastructural interventions are focused to the overall **improve intermodal connections** between ports and roads (but also with railways), given that this lack emerged as a constant in almost all the Italian short-sea nodes and in all transhipment hubs. These interventions should be obviously implemented at national level, and the ERDF funds could represent a valid financial source for this purpose.

The final objective of a policy intervention in the sector is to create specialised nodes with dedicated terminals exclusively reserved to specific types of cargos (e.g. Ro-Ro).

On the other hand, specific intervention at national and EU level would be needed in order to further **incentivise the transfer of cargo flows from road to ships**, taking advantage from the Motorways of the Seas. The successful experience of the "ecobonus" is recommended to be re-financed. As an alternative, interventions could be addressed to increase road transport costs in order to make ship transport more cost-effective.

In order to reinforce the sector, the **development of maritime technologies** should be supported, also by strengthening international research projects and cooperation (also at sea-basin level, see the EUSAIR) for the purpose of increasing the security, sustainability and efficiency of the sector.

Finally, **lighter bureaucratic procedures in handling goods** at sea ports should be developed. Exchange of expertise and know-how with EU best practices (the Netherlands) should be supported.

Possible financial sources

Infrastructural improvements, incentives for moving flows from road to the sea and research activities could be financed by the ERDF. Research activities and international research projects could be also financed by Horizon 2020 and by ETC programmes.

Passenger ferry services

Passenger ferry services have a significant growth potential in Italy mainly because of their close links with other maritime activities which benefit from them. Besides activities linked with the transport function (e.g. shipbuilding) and to construction of water projects, passenger ferry services represent one of the activities supporting coastal tourism especially in relation with passenger flows towards/from main islands.

The key element recommended to be strengthened at national level is the **linkage between passenger ferry services and other maritime activities**. The growth potential of the activity can be fulfilled only if a holistic approach has been adopted in the national transport strategy in which interactions between activities should be put into evidence.

The first link to prioritise is those with coastal tourism for the purpose of streamlining passenger flows among different logistic nodes (airports-railways stations-roads-ports). As a matter of fact, despite the development of terminals dedicated to passenger movements, from an infrastructural point of view an overall dearth of connections between different modes of transports have been surveyed in the whole country. Therefore **intermodal links** are recommended to be strengthened.

As a second strategic element to prioritise at national level, **basic connections with major and minor islands** should be guaranteed by establishing specific agreements between private operators and the State.

The third strategic element is the definition of a list of "**intervention priorities**" in order to identify which port/facility/intermodal link/etc. should be prioritise within the overall framework of the European corridors and especially within Motorways of the seas (see also short sea shipping).

Possible financial sources

The sector has been perceived to need a strategic planning in order to define intervention priorities at national level. However, the overall need to develop intermodal connections emerged in all passenger ferry nodes. This type of interventions can be funded by the ERDF but also project financing should be considered as a potential source of funding, as also stressed by the Ministry of transport in the National logistics Plan.

Marine aquaculture

Several factors led to consider marine aquaculture as a most promising activity (increased quality of aquaculture products, certifications all along the production process, policy relevance, overexploitation of fishery stocks). On the other hand, the fulfilment of its potential depends on the achievement of two main objectives: (i) increase the market share and (ii) diversification of production.

Both objectives are strictly interconnected each other and could be achieved by adopting a **long-term strategy** by:

- adopting **promotional actions** aimed at increasing the consumption of farmed production in the internal market;
- **strengthening links between the research and businesses** in order to facilitate technology transfer. Research could also support the diversification of production;
- **diversifying production** also for the purpose of extending the share of Italian farmed products in international and EU markets. In this sense, the Italian plants still produce species typically consumed in the internal market, not exploiting the potential of the national farming industry and the know-how of farmers;
- **increasing exports shares:** although costs of farmed products are not competitive, a real added value is represented by the quality and high certifications standards of products, which could generate a competitive advantage of Italian products in the international market.

Specific support should be given to **tuna farming**. Research activities for allowing the reproduction of tuna in captivity have achieved exceptional results and need to be supported also by international projects.

Finally, as emerged in the Country fiche, due to decentralization, each region has different approaches, more or less developed, to **MSP and ICZM**. It is believed that the development of these plans should be centralised or at least coordinated at national level in order to optimise spaces under a national perspective, which could better address specialisations of different areas and identify "hotspots" where marine aquaculture potential could be better fulfilled.

The **EUSAIR** (at least as regards the Adriatic and Ionian parts) supports many of this actions and could represent a good tool for getting needed financial resources (through alignment of ESIF funds to the EUSAIR objectives)

Possible financial sources

The EMFF is the natural source o funding for financing all possible actions in the sector. However, international research projects can be also funded by Horizon 2020 and by the ETC programmes.

Strategic effort in this sector is also recommended for coordinating MSP and ICZM.

Protection of habitats

Despite the activity is considered "non-economic" given that it is mainly funded by the public sector, in Italian coastal regions sustainable development projects have been realized by private stakeholders within EU programmes. Habitats protection is seen as a pivotal precondition to ensure the correct development of important maritime economic activities such as, for instance, coastal tourism.

The growth potential of the activity can be simply fulfilled by (i) keeping on funding protected areas, currently recognised by national legislation and in the Natura 2000 network, (ii) maximise the usability of the sites, strengthening links with other activities (coastal tourism) and (iii) identifying new possible areas to be included in this network.

As regards the first two points, they are strictly linked. Funding of existing areas should derive not only from national funds, but also from **self-financing capability of the different sites**. In the light of this, the liaison of protection of habitats with other activities should be reinforced by e.g. including visits to areas in tourism packages.

The identification of new areas, which should be pursued at national and international level, needs careful assessment. Specific research cooperation projects (carried out by universities, research institutes and other stakeholders) could help to identify transnational marine areas while at national level, promoter of new areas are local actors.

Possible financial sources

Funding possibilities could derive from EU funds (LIFE +) or from ETC programmes in case of cooperation projects. At national level, the ERDF can be a potential source for funding the identification of new sites.

Coastal tourism

The traditional assets that make Italy an attractive tourist destination are still there (cultural heritage, archaeological sites, historical cities, sea tourism, etc.), and this is why coastal tourism, albeit being a mature activity, has great future potential for growth.

In order to fulfil the growth potential, it is recommended to **maximise the attractiveness of Southern destinations** by:

- filling the gap with respect to Northern destinations in terms of infrastructures (connections of tourism sites with passenger nodes, as airports and bigger cities);
- increasing international liner connections with main country of origin of tourist flows;
- developing targeted promotional actions.

These gaps can be filled also by supporting a **macro-regional approach** (see the EUSAIR, only for Adriatic and Ionian regions), through which common needs in a given area have been identified for the purpose of organising a common offer with shared standards, mitigating competition between closer destinations and maximising the potential of the area.

Under a strategic point of view, coastal tourism lacks of **coordination with other activities** in order to achieve the most from the internal potential available. It is recommended therefore to strengthen this aspect at national level within the National Tourism development Plan. Liaisons between **coastal and cruise tourism** should be detected, in order to stimulate cruise passengers to longer stays in cities of call.

Also for coastal tourism, it is recommended to develop centralise (or coordinate) MSP and ICZM. See marine aquaculture.

Possible financial sources

Possible financial sources for maximising the attractiveness of southern regions are mainly represented by the ERDF funds. On the other hand, a strategic planning is recommended to be developed at national level specifically dedicated to coastal tourism in order to give the due emphasis to the sector and reinforce potential links with other maritime activities. As a possible alternative, a strategic plan dedicated to coastal tourism and encompassing also other activities (cruise, yachting, marine environment) could be developed.

The main funding source for the development of the sector is identified in the ERDF.

Cruise tourism

As mentioned for coastal tourism, the possibility to develop an **integrated strategic planning encompassing all possible forms of maritime tourism** should be explored given the paramount importance of these activities (coastal tourism, cruise, yachting, etc.) in the Italian blue economy. This could allow to have a wider perspective for developing the sector in general and achieving the best from the potential of Italy as a tourist destination.

Specifically as regards cruise activity, increasing traffic trends and significant infrastructural developments may lead to think that the sector has received the due support and will keep on growing at the same trend for the coming years. On the other hand, several barriers have been identified which could bias the predominant position of Italian cruise sector in the Mediterranean and in Europe.

The most alarming barrier concerns the environmental sustainability of the activity, basically generated by the massive flows of giant vessels in Venice. In our opinion, the issue needs to be carefully tackled at national level, despite recently specific measures have been taken for reducing the impact of vessels transits to Piazza san Marco. The possibility to **move cruise traffic out of Venice** (considered too fragile for absorbing the impact of large vessels) should be taken into account (e.g. Marghera port).

Also in the case of cruise sector, the **MSP and ICZM** should be developed for all the Italian maritime space. See marine aquaculture for more details.

Finally, another barrier identified concern the lack of **specialised schools for training cruise personnel and staff**. Given the importance of the sector, a specific education programme in this field should be incentivised, also by including it as specific measure in the next programming period.

Possible financial sources

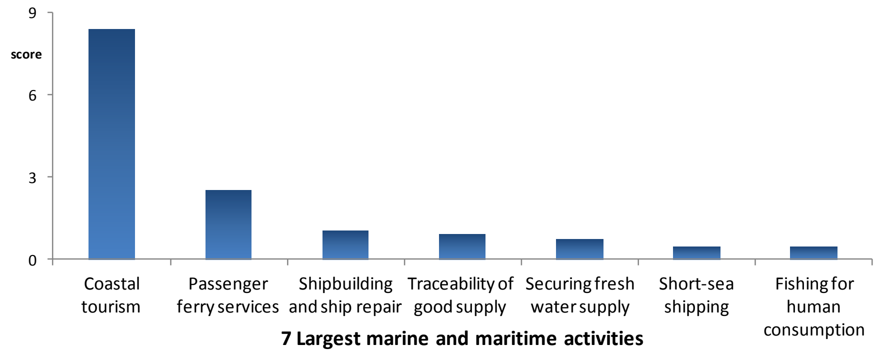
The development of strategic plan is recommended to be developed at national level for cruise tourism (or at least, including it in a strategy for maritime tourism), owing the total lack of a strategic vision for cruise in Italy.

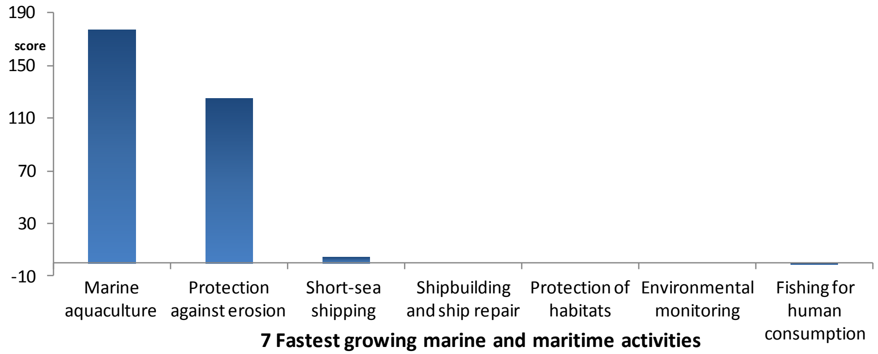
The creation of specialised schools could be funded by the ESF. A specific measures dedicated to the formation/education/life-long learning programme of maritime employees could be envisage in all ESF of those regions with a maritime dimension.

2.8 Malta

Malta is essentially a pure maritime nation. It has a total land area of only 315,6 km^2, with a total coastline length of 259 km. There are three main landmasses, Malta (248,6 km² and 196,8 km of coastline), Gozo (67 km² and 56 km of coastline) and Comino (3,5 km²). Malta and Gozo & Comino make up the two NUTS 3 level areas. For the purpose of this study the Maltese archipelago (hereafter called Malta) is considered entirely coastal. Malta's territorial seas extend to 12 nautical miles (nm) offshore, and their exclusive fishing zone 25 nm. This fishing zone has an area of 2.384 km².

7 largest and 7 fastest growing marine and maritime activities





4 Most Promising Marine and Maritime Activities

The 4 most promising marine and maritime activities in Malta: **Marine aquaculture, Offshore wind, Coastal tourism and Maritime monitoring and surveillance**. Only 4 activities have been identified as "most promising" because: (i) the chosen activities showed the most existing and potential growth; (ii) others are mainly public sector activities; (iii) Others appeared to be reaching capacity or more limited growth; (iv) biotechnology has been nested with marine aquaculture (non-human aquatic products have been considered to be of key growth potential in Malta).

Scores[13] assigned for Blue Growth indicators for future potential:

Marine and Maritime Activity	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Marine aquaculture	+	0	+	+	+	+	+++++
Blue biotechnology	+	0	+	+	+	+	+++++
Construction of water projects	+	0	+	+	0	+	++++
Fishing for human consumption	0	+	0	+	+	+	++++
Offshore wind	+	+	0	+	0	+	++++
Ocean renewable energy	+	+	0	+	0	+	++++
Coastal tourism	0	+	+	+	+	0	++++
Protection of habitats	+	0	0	+	+	+	++++
Protect against illegal movements of people & goods	+	+	0	+	+	0	++++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Marine aquaculture				
In 2010 Malta produced around 3.490 t of bluefin tuna worth some €46 million. Production of sea bream has increased steadily over the last five years and at 955 t in 2010 (worth around €3.8 million) is the mainstay of Maltese farmed fish production. Other species such as sea bass (72 t), amberjack (20 t) and meagre (48 t) are also produced. Maltese aquaculture produce is almost entirely exported to European and Asian markets One potential area of aquaculture development is algal culture for high value pharmaceutical products which could feed into a potential 'blue biotechnology' industry in Malta. However, this sector is dominated by major industries in Greece, Turkey and Spain and is highly cyclical in nature and prone to overproduction. According to a recent strategy document. Various potential production capacity forecasts were made, with the most ambitious considering the production of 19.500 t of tuna and 15.000 t of closed cycle species being potentially possible by 2025.				
R&D (-), access to finance (-), maritime spatial planning (-), integrated local development (+), public engagement (+)	The marine aquaculture sector is directly supported by a National Strategy (Stirling University, 2012)	Marine aquaculture is the fastest growing activities in Malta even if the economic importance is steel very small (1,7% of blue GVA and 0,7% of blue employment)	There are 12 farm sites producing fish in Malta	MEPA have required more stringent environmental impact assessments and follow-up monitoring since the mid 2000's. Aquaculture has a number of potential environmental benefits, when compared to traditional wild fisheries
Offshore wind				
At present there are no large scale wind farms in Malta, onshore or offshore. However, the Maltese Government has planned the development of two small onshore wind farms in the 2013-2015 period: the Wied Rini project (10.2 MW) and the Hal Far project (4.2 MW). A large offshore floating wind farm at Sikkal-Bajda, 1.5 km off the coast from L-Ahrax tal-Mellieha (95 MW) has also been proposed which is expected to generate 40% of the Maltese 2020 renewable energy share. According to the national plan, gross electricity generation derived from offshore wind power will increase to 0,3 TWh or 22 ktoe (thousand tonnes oil equivalent) by 2020, with an installed capacity of 95 MW. Parts of the value chain are missing, such as local expertise in offshore wind farm design and construction, local manufacturing capability and the inter-connector infrastructure.				
R&D (+), smart infrastructure (+), maritime clusters (+), maritime spatial planning (-), integrated local development (+)	Issue very important for EU A National strategy as been defined to support this sector: The National Renewable Energy Action Plan	According to the national plan, gross electricity generation derived from offshore wind power will increase to 0,3 TWh	The main players are the Enemalta Corporation, the Maltese Resources Authority (MRA), several offshore companies as Is-Sikka l-Bajda, Ras il-Griebe, Il-Ponta tal-Qawra, etc.,	Offshore wind power has considerable 'green credentials', given that (i) it will reduce the consumption of fuel oils on which Malta currently relies, (ii) it will lower

[13] The reason there are selected 9 rather than the standard 7 economic activities with the most future potential is that 2 marine and maritime activities were ranked 1= and a further 7 Marine and Maritime activities 3=. On this basis, we felt we should include all 1st and 3rd ranked activities in this final analysis.

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
	(NREAP) 2010		Banks and Government departments	CO2 emissions per kilowatt generated
Coastal tourism				
Coastal tourism is the largest blue activity in Malta. The current policy for tourism development focuses on the Maltese islands' potential for diving, marine recreation, cruise tourism and inter-island and inter-harbour ferry links. In particular, beach management and the presence of Blue Flag beaches in Malta and Gozo, diving, marine protected areas, yachting, excellent bathing water quality in Malta, the attractiveness of the Grand Harbour all add to the attractiveness of Malta and will allow for country's blue growth in tourism. The emerging economies of the so called BRIC countries (Brazil, Russia. India and China) also present a challenging opportunity for growth. Malta has direct connections with Russia, and the market share of Russian tourists is relatively low and the potential exists for establishing Russia as a secondary market. Other key areas for growth include cruise tourism (Malta has just added a second cruise terminal) and eco-tourism opportunities, especially on Gozo.				
R&D (+), access to finance (-), education, training and skills (+), integrated local development (+),	A strategy for tourism has been defined at national level	Coastal tourism sector is the most important sector of Malta's blue economy with 38,6% of GVA, 55,5% of Employment and a N° of 2.484 enterprises	Malta Tourism Authority (MTA) is the main body involved	The future focus on higher-end, smaller-footprint tourism also provides opportunities for eco-friendly coastal tourism
Maritime monitoring and surveillance				
This sector include following maritime activities: Traceability and security of goods supply chains (most important activity), Prevent and protect against illegal movement of people and goods and Environmental monitoring. Malta is the southernmost country in the EU and is a strategic barrier against immigration from Africa. Without security, marine growth in Malta is vulnerable to external factors. Malta is a key participant in a 'European border surveillance system' EUROSUR, a pan-European border surveillance system with three main objectives: (i) to reduce the number of irregular migrants entering the EU undetected;(ii) to reduce the number of deaths of irregular migrants by saving more lives at sea, and (iii) to increase the internal security of the EU as a whole by contributing to the prevention of cross-border crime. However, given the deteriorating security situation in much of northern Africa and the Middle East, it is likely that maritime surveillance needs will increase substantially over the foreseeable period.				
R&D (+), access to finance (+), maritime spatial planning (-), maritime cluster (-); public engagement (+)	Relevant issue at National and EU level	Complexly the maritime monitoring sector have an economic importance of 3,5% GVA and 8,9% Employment of total blue economy	The Armed Forces of Malta (AFM) is responsible for maritime surveillance, then Malta Customs Department and the Malta Environment and Planning Authority (MEPA).	Maritime surveillance has the potential to improve both environmental monitoring as well as maritime risk management

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Marine aquaculture

Despite being an island, the main limiting factor for marine aquaculture in Malta is the availability of sites, which does not allow to reach economies of scale for this activity and to generate significant impact on the national economy. Two solutions are envisaged for coping with this barrier. The first one, more pragmatic, is to **incentivise the movement of plants to deeper-water offshore sites**. Of course, the adoption of MSP at national level represents a useful tool for planning the use of spaces mitigating possible conflicts among maritime activities. The second solution is a long-term strategy, to be adopted at national level, aimed at **producing high value products** (e.g. algae culture) which could be addressed to exports. On the other hand, the diversification of aquaculture production could incentivise the development of blue biotech activities.

Both solutions entail a strategic effort at national level, but in the meantime, **research activities and exchange with neighbouring countries** are recommended to be implemented (the Malta Aquaculture Research Centre could be the player to involve) in order to explore the feasibility of developing high value farming in Malta. The Horizon 2020 could be the natural environment in which research activities should be developed, but also multilateral cooperation programmes (e.g. MED programme, priority axis 1 - innovation).

Looking at barriers to growth, the main barrier identifying for fulfilling the potential of marine aquaculture is the limited specialised training. A double scale of interventions is recommended:

- **at national level**: improvement of the quality and efficiency of education and upgrading courses. Special attention should be paid to the enhancement of skills and competences of the workforce, through specific training and life-long learning programmes. This action could be encompassed within the forthcoming EMFF;
- **at international level**: international cooperation projects aimed at transferring know-how and expertise with farming plants in neighbouring countries should be supported through the EMFF and ETC programmes.

Possible financial sources

As mentioned above, the EMFF is the source for funding all possible actions in marine aquaculture at national level. At international level, cooperation projects and exchanges of expertises could be funded by the ETC programmes. Specific research projects could be funded by Horizon 2020.

Offshore wind

The activity currently does not exist in Malta but has the ideal basic factors for wind power e.g., a rapidly increasing energy demand and limitations on traditional hydrocarbon (limited on-land space). In order to fulfil the growth potential of the activity, a double scale of interventions is recommended to follow, at national and international level.

At national level, since marine spaces are limited and “overcrowded” by many activities (farming, coastal tourism, fishing, etc.), **MSP** should be developed for optimising space uses and mitigating possible conflicts between stakeholders.

At international level, a wider set of actions are recommended to be implemented. First of all, the sector suffers from a lack of expertise and know-how. Obviously, specialised workforce could be imported but, in order to broaden the socio-economic impact of the activity, it would be necessary to **increase the level of specialisation of internal workforce**. For this purpose and taking into account the Maltese context, exchange with foreign universities and/or research institutes could be included in cooperation programmes, but also within the ESF. Special measures (i.e. financial support) for supporting training programmes in foreign countries could be envisaged, both for students and for professional workforce.

Given the innovative character of the activity, international research projects is recommended to be encouraged by the public administration for the purpose of **increasing the level of expertise of internal researchers** in the sector and increase the visibility of the Maltese offshore wind potential and **attract FDI**.

The activity needs therefore a **strong commitment by the national public sector** and a concrete action plan for developing the sector. The construction of the offshore site identified should be boosted.

Possible financial sources

The cooperation element seems to be the basic pre-condition for fulfilling the growth potential of offshore wind in Malta. Within this context and given the innovative element of this activity, Horizon 2020 could be the financial resource for funding research activities and cooperation projects.

As regards the workforce training, special courses and exchanges with foreign universities can be funded by the ESF and by the ETC programmes.

Finally, in order to attract private investors, fund-raising activities could be also activated by a national-based structure that could facilitate the convergence between supply and demand (of credit), by involving private companies, and private investors (venture capitalists, business angels, private equity).

Coastal tourism

Tourism received an appropriate support in Malta in terms of both strategic development of the sector and financial support. On the other hand, structural barriers have been identified which hinder the development of the activity and basically all of them are linked to the lack of spaces both on land and on shore. In the light of this, there are not basic conditions for developing mass tourism but development strategies should be more focused on **selective and exclusive tourism**, raising the quality of services offered.

Selective tourism could be developed by undertaking a strategic effort aimed also at **identifying synergies with other leisure activities** (yachting and cruise). A holistic framework should be therefore adopted for developing inter-sector coordination. Indeed, this type of coordination could represent a key tool for optimising the use of resources available for coastal tourism.

The limited dimension of the island(s) could also be an advantage for tourists’ mobility but on the other hand the Country fiche put into evidence the greater congestion characterising Maltese roads, especially in the summer period. **Primary road connecting main islands nodes** – airports to ports to main tourist destinations – should be improved. The ERDF funds could be used for the purpose.

Possible financial sources

The strategic effort for developing an inter-sector approach and develop selective tourism would not entail specific financial provisions. Infrastructural improvements require specific financial effort which could be supported by the ERDF funds.

Maritime monitoring and surveillance

No growth scenarios for maritime surveillance needs in Malta have been made available to the consultants. However, given the deteriorating security situation in much of northern Africa and the Middle East, it is likely that maritime surveillance needs will increase substantially over the foreseeable period.

It is preferable to avoid to talk about “growth potential” for an activity which is not “economic”. The country fiche highlighted the difficult transfer of scientific results to operational use, despite Maltese IT personnel is highly skilled. **Capabilities of applying scientific results to operations** should be reinforced, as well as the capabilities of elaborating data and complex IT processes. For this purpose, specific formation and training session could be organised in foreign countries (Spain and Italy) in order to exchange expertise and know-how related to maritime surveillance.

Therefore, these actions can be developed both **at national** – the ESF could support the launching of specific training courses – and **international** level – through research cooperation programmes as Horizon 2020 or ETC programmes.

Besides that, maritime surveillance has the potential to improve both **environmental monitoring** as well as maritime risk management. Remote sensing tools and other manned and unmanned surveillance techniques can be deployed for water quality monitoring and pollution detection. Similarly, maritime surveillance can be used to reduce risk as sea, including vessel collisions, vessel damage from fixed structures and other maritime risks.

For this specific purpose, international research projects could be launched - and financed by Horizon 2020 – in order to explore the **feasibility of transferring technologies consolidated in people movements monitoring to other environmental monitoring** activities.

Possible financial sources

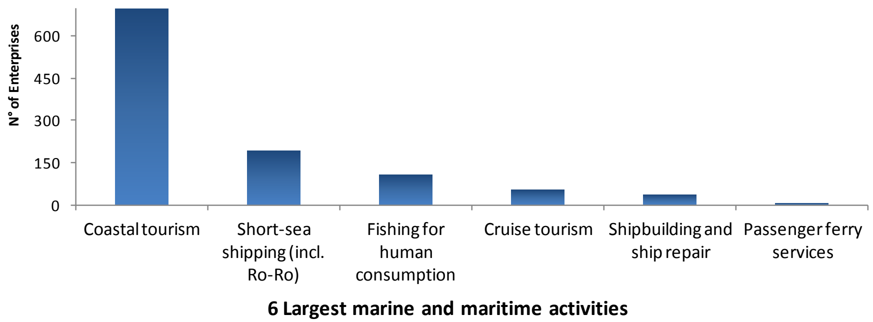
Horizon 2020 and ETC programmes are the two possible financial sources for funding research activities with a trans-national character. The ESF can be used as source of funding for increasing the level of expertise of Maltese Army personnel involved in maritime monitoring operations. The possibility of using Twinning resources should also be explored for possible cooperation between Public Administrations of EU Member States.

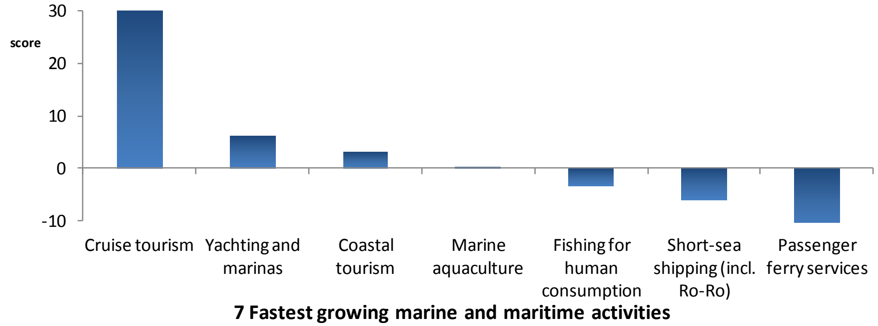
2.9 Montenegro

Montenegro Coastline is 293 km long. The Coastal Region (Primorski region) consists of the 6 municipalities with access to Adriatic Sea. The 24% (148.600) of total population lives in the coastal region. Employment rate was 40% in Montenegro in 2012, 44,8% in the coastal region and the contribution of tourism to GDP is at the level of 15% (and growing), with the predominant share of tourism in the coastal area.

For Montenegro there are no data reported or available, consequently the ranking order of the largest marine and maritime activities as been made considering the total number of enterprises established in each maritime sector. Furthermore, since data on GVA and employment are generally not available, estimations are based on other indicators to evaluate the ranking order of the 7 fastest growing marine and maritime activities.

6 Largest and 7 Fastest growing Marine and Maritime Activities





6 most promising marine and maritime activities

The 6 most promising marine and maritime activities in Montenegro are: **Coastal tourism, Yachting and marinas (Incl. Water projects), Passenger ferry services, Marine aquaculture, Shipbuilding and ship repair and Short sea shipping (Incl. Ro-Ro).**

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Coastal tourism	0	+	+	+	+	+	+++++
Water projects	+	+	0	+	+	+	+++++
Yachting and marinas	+	+	+	+	+	0	+++++
Passenger ferry services	0	0	+	+	+	+	++++
Shipbuilding and ship repair	0	+	0	+	+	0	+++
Short-sea shipping (incl. Ro-Ro)	0	0	+	+	+	0	+++
Marine aquaculture	-	+	0	+	0	+	++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Coastal tourism				
Coastal tourism is by large (considering the number of enterprises) the largest marine and maritime activity. It must also be included as one of the fastest growing, if we consider the growth rate of arrivals in the last years. Travel and tourism has played a central role in Montenegro's growth and transformation. It is expected that its economic impact is going to grow further, considering that one of the commitments of the Government is to ensure sustainable development of coastal tourism. Tourist arrivals increased by 3% yearly from 2008 to 2012. As stated in WTTC forecasts and according to data showing a direct contribution of travel and tourism to GDP, Montenegro will have one of the strongest growth rates in the world the next years. Despite the rich cultural and historical heritage the coastal tourism in Montenegro is mainly based on swimming tourism thanks to its natural resources and clean bathing water. The entire coastal area offer tourist services and is still in phase of development. Intensive construction activities have been focused on residential and commercial buildings for tourism.				
R&D (+), access to finance (-), smart infrastructure (+), maritime spatial planning (-)	High Public engagement at MS level Important issue at Local level	Coastal tourism activity contributes to 15% of the GDP of Montenegro and it employs 27% of people of the country	Important public role given by the Public Enterprise for Coastal Zone (PECZM-"Morsko dobro") Many small accommodations (696 hotels).	The Public Enterprise for Coastal Zone (PECZM-"Morsko dobro") of Montenegro has a central role in order to balance economic and environmental aspects, and its importance in the future is expected to increase
Yachting and marinas (incl. water projects)				
This activity has been selected as the second largest marine and maritime activity. Yachting and marinas has a growing reputation in Montenegro. Available data make difficult to estimate the economic impact of this sector but in 2012, the total of 2.987 foreign vessels for entertainment, sport or recreation entered the internal sea waters of Montenegro which indicates an increase of 0,8% compared to 2011, and in the last years there has been a 6% CAGR in marina arrivals. One of the goals of Montenegrin Government and Public Company for Montenegrin Coastal Zone Management is to develop this kind of tourism. Suggested nautical development activities are to design and equip the existing nautical places and the construction of new modern equipped marinas The development of nautical tourism in Montenegro, among other things entails the modernization of existing and underway new marinas, as well as new promenades, realized under the control and planning of the Public Enterprise for Coastal Zone (PECZM-"Morsko dobro") of Montenegro, established in 1992 (under the jurisdiction of the Ministry of Sustainable Development and Tourism) with the aim to manage the coastal zone in order to provide the protection of the area and to ensure its proper arrangement and sustainable development. The Government has announced several more projects for marina development along the coast.				
R&D (+), access to finance (+), smart infrastructure (+), maritime spatial planning (-), integrated local development (+), public engagement (+)	High Public engagement at MS level Important issue at Local level	In 2012, the total of leisure foreign vessels increased by 0,8% compared to 2011	Important public role given by the Public Enterprise for Coastal Zone (PECZM-"Morsko dobro"). The sector is considered strategic by the Government	The Public Enterprise for Coastal Zone (PECZM-"Morsko dobro") of Montenegro has a central role in order to balance economic and environmental aspects.
Passenger ferry services				
Passenger ferry services at local level are very developed, offering small cruises along the coast and transporting tourists to the near islands. A very large number of enterprises are registered as passenger ferry services, positioning this activity at the third place in this specific ranking. There are 109 enterprises registered for passenger maritime services that mainly operate as "taxi boats" during the summer season, next to one big enterprise that operates on international level connecting, with two ships, Bar to Bari and Ancona. "BARSKA PLOVIDBA AD" (Montenegro Lines) is a joint stock company with the head office in Bar. The Company is established with the objective of performing the maritime traffic, the marina activities, international freight forwarding, maritime agency, and catering businesses, etc. Even though the company had to face a decrease of passengers in the latest years, still it is managing to cover all of its costs and is planning to purchase two more ships in order to enlarge its cargo fleet.				
R&D (+), access to finance (-), smart infrastructure (+), maritime spatial planning (-), public engagement (+)	The Ministry of Transport, Maritime Affairs and Telecommunications is engaged to achieve the goals of Transport Development Strategy in Montenegro Important issue at local level	In the ferry service, transported people decreased by 12% yearly from 2008 to 2010	The main players of this sector are Government, Ministry of Maritime Affairs. 109 small enterprises work as "taxi boats" and one company "Barska plovidba" that operates on international level	The sector managed to remain sustainable and this is probable to continue in the future. No specific threats for a sustainable growth of this activity have been identified

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Marine aquaculture				
Production of both finfish and shellfish is increasing the last years, but productivity is still considered to be low. Mariculture sector in Montenegro is at the moment not developed to its full capacity, on the other hand it has a very great potential for development. Mariculture activities are currently carried out exclusively in the Bay of Kotor (87 km ²), which is sheltered and suitable space primarily for the cage fish farming and bivalve farming on floating plants. Environmental sustainability in the Bay of Kotor is probably guaranteed, thanks to a careful planning of the most suitable zones for aquaculture. Further growth in the bay does not appear possible, but mariculture can find new forms of development in open waters.				
R&D (+), smart infrastructure (-), public engagement (+), integrated local development (-), education and skills (-)	A National Strategy for Fisheries Development is provided	It is estimated that the mariculture sector employs about 40 people	Main players of the sector are 2 marine fish farms, 16 mussel farms and policy makers	One of the main focus areas of the Fisheries Development Strategy prepared by the Ministry of Agriculture is protection and sustainable use of marine and freshwater fisheries resources
Shipbuilding and ship repair				
Montenegro has the biggest ship repair yard in the Southern Adriatic and is located in Bijela, in Boka Kotorska bay, one of the safest natural harbours in the world. The only shipbuilding company that used to build ships up to seventies now mainly occupies about repairing of boats and hires 518 employees in 2011; it had a revenue of EUR 16,5 million, while in 2012 decreased down to EUR 13 million. Its competitive advantage is provided by its location, availability of cheap labour, prices and free visa regime which already positioned this shipyard on the world market. Now the shipyard is trying to realize the project of forming a joint venture with Porto Montenegro, which would deal with the repair of yachts and mega yachts. Privatization of the company is planned. The ship repairing yard Bijela, in the past five years was the largest exporter of production services in Montenegro. Next to this large enterprise, a very high number of enterprises are found under the ship repair group, making this maritime activity the fourth one of the most promising in Montenegro. One of development goals of Montenegro Government is planning incentives for the development of the Shipyard Bijela along with efforts to find foreign investments.				
R&D (-), smart infrastructure (+), access to finance (-), maritime spatial planning (-), public engagement (+)	National Transport Development Strategy is provided	In this sector we find the biggest ship repair yard in the Southern Adriatic	Next to giant ship repair yard Bijela there are 55 enterprises related to this sector.	Public Enterprise for Coastal Zone has a central role in order to balance economic and environmental aspects. However, shipbuilding and ship repair sector needs more incentives and governments aids in order to achieve its sustainability
Short sea shipping (Incl. Ro-Ro)				
The National Strategy of Sustainable Development of Montenegro is oriented to support the Short Sea Shipping sector. One of the measures to improve transport is the creation of logistic cluster with activities of combined transport. Only two enterprises are registered as shipping societies. Furthermore, due to economic crisis, transport of goods has decreased in the latest years. In spite of these figure, we believe that this activity can have a moderate future potential. The 100% state-owned stock company “Crnogorska plovidba A.D. Kotor” has recently (2012) bought 2 bulk carriers (35.000 DWT each). The aim of the company seems to develop further in the bulk sector. Furthermore, in Trans-European Transport Network, the Port of Bar is included in the list of ports of regional importance, through which, the Adriatic Corridors – Motorways of the sea will be developed.				
R&D (+), access to finance (+), smart infrastructure (+), public engagement (+)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping Important issue at National level	Transported goods decreased by 6% yearly in the last period (from 2009 to 2012	Main stakeholders are: ports (Bar, Kotor, Zelenika, Budva, Risan and Tivat), National Authorities, Public and Private Companies, and Adriatic Ionian Project	Long-term sustainable development of the Port, in a very competitive transport market.

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Coastal tourism

At a first glance, the overall position of the country in the coastal tourism sector appeared weak: it lacks the financial potential, no differentiated tourist products with sufficient accommodation capacities, lack of qualified staff and lack of well-functioning public utility infrastructure characterise the Montenegrin offer. Furthermore, foreign tourists flows are weak and concentrated in the summer period which generate "peak loads".

Peaks have adverse economic, ecological and quality impacts. They overstretch the infrastructure and beach capacity, impair job attractiveness and sometimes convey an impression of "mass tourism" in the high season.

In order to remove these weaknesses, the first objective to achieve is the reduction of seasonality effects. Possible actions to be developed in this sense are:

- **Diversification of the tourism offer**: given the limited potential of Montenegro in terms of winter tourism or linkages with other inland attractors, it is recommended to strengthen linkages with other leisure activities (yachting, sailing, etc.) and to include maritime tourism in a wider strategic planning, also encompassing other activities (e.g. transport, in order to reduce seasonality of international connections). This task can be pursued at national level.
- **Environment sustainability**: adoption of legislative measures aimed at limiting environmental impact of overbuilding in coastal areas. Specific rules need to be adopted at national level.
- **Infrastructural updates:** port facilities and rail/road connections should be submitted to radical modernisation, in order to make tourists mobility easier.
- At international level, gaps identified can be filled also by supporting the adoption of a **macro-regional approach** (the EUSAIR). This type of approach can help to reduce competitions between littoral states, identifying common needs and explore the feasibility of organising a common offer with shared standards.

Finally, another relevant barrier to growth is represented by the lack of educated employees in management roles. This issue can be tackled both at national - creating **specialised schools and courses in tourism management** - and international level – launching **international exchange and cooperation projects** with "more experienced" neighbouring countries (e.g. Italy).

Possible financial sources

IPA fund should be the proper tool for funding infrastructures updates and could also give a significant support increasing the level of expertise of tourism managers. ETC programmes could finance cooperation projects and workers mobility, which could be grasp useful hints from neighbouring countries for developing Montenegrin tourism.

The forthcoming EUSAIR, despite it is not a financial source, will be a useful tool for making funds aligned to specific needs of the area, which is actually the case of Montenegro.

Yachting and marinas (incl. water projects)

The activity represents a branch of coastal tourism but in the meantime has also a significant growth potential in Montenegro, also considering possible benefits that the activity could generate on other sectors.

The strategic development of the activity has received remarkable efforts from public authorities in order to increase the infrastructural facilities and aligning them to common Med standards.

However, specific **links with other activities** have been perceived to be missing in this strategic view. Links with **coastal tourism** for instance need to be reinforced by increasing the attractiveness of coastal areas and incentivise yachts to spend more time in Montenegro. Infrastructural facilities should also take into account the remarkable expertise of Montenegro's shipyards – specialised in yachts repair. In this view, the country could play the role of the Mediterranean yachting hub as main tourism and logistic destination. To achieve this objective, specialised facilities should be developed in order to streamline the transport of ships from the sea to the yard.

In general, a strategic integrated planning for this activity is recommended to be adopted at national level, in order to create synergies between different activities.

Possible financial sources

IPA fund should be the proper tool for funding infrastructures updates. A strategic planning is however recommended to be adopted at national level, in order to give emphasis to potential links between different maritime activities.

Passenger ferry services

The activity should be considered as most promising as directly linked to coastal tourism. In order to fulfil its growth potential, two main recommendations are provided:

- **Improve infrastructural facilities** dedicated to passengers. Specific terminals should be built in order to streamline operation and avoid conflicts with other ships operating in ports (mainly Bar);
- **Strengthening links with costal tourism** ensuring liner connections all along the year.

As in the blue economy of all countries, also for Montenegro the development of a maritime activity cannot be seen as an action to be developed without taking into account links with other activities. This is the case of passenger ferry services, whose potential is linked to the development of coastal tourism.

Possible financial sources

IPA fund should be the proper tool for funding infrastructures updates. A strategic planning is however recommended to be adopted at national level, in order to give emphasis to potential links between different maritime activities.

Marine aquaculture

Aquatic environment have remarkable conditions for cultivation of mussels and oysters in Montenegro, and new forms of aquaculture can be developed in open waters. On the other hand, the Country fiche put into evidence there are several limits hindering the fulfillment of the growth potential of the activity, such as out-of-date production techniques, weak representative organizations, high prices due to low production and conflicts for the management of spaces (originated by the limited Montenegrin coastline).

A political effort is recommended at national level in order to:

- **Balance divergent interests between stakeholders** (tourism vs. transport vs. fish farmers). In the light of this, political efforts could focus on the development of a maritime cluster with the purpose of putting together divergent interests and adopt a common and shared development plan for coastal development; MSP could represent the proper tool for coping with such an issue. Furthermore, offshore installations need to be explored, in order to limit the aquaculture impact on coastal space;
- **Support the organization of stakeholders in sector associations/POs/etc.,** which could better represent interest of producers.

At international level, marine aquaculture should represent an important field of cooperation in order to share expertise and support the compliance of production to EU requirements. **Exchanges of experiences between European fish farmers or in the Adriatic Ionian** should be supported, in order to share know-how, technologies adopted, etc.

Possible financial sources

An initial political effort at national level is recommended to boost the sector and increase the production levels. On the other hand, cooperation in the sector (exchange of expertise with more powerful producers in the sea-basin) could be financed by ETC programmes. It has to be taken into account that the EUSAIR could be used as a tool for aligning funding priorities of ESIF funds to concrete needs of the area.

Shipbuilding and ship repair

As mentioned above, the potential of this activity can be fulfilled only in close relation with Yachting and marinas and other transport activities. Most of shipbuilding sector in Montenegro is constituted by ship repair businesses, which have a high level of expertise and consolidated know-how in leisure boats. As regards shipbuilding activity, there is only one yard in Bijela, one of the most important in the Adriatic. Its competitive advantages are the location, availability of cheap labour, prices and free visa regime which already positioned this shipyard on the world market. Now the shipyard is trying to realize the project of forming a joint venture with Porto Montenegro, which would deal with the repair of yachts and mega yachts.

As regards shipbuilding, the only recommendation provided regards the possibility to implement **cooperation synergies with other yards in the Adriatic sea-basin**, in order to boost innovation in the sector benefiting from expertise and research already existing in the area (e.g. Italian yards).

As regards ship repair, as emerged from the Country fiche, the economic crisis is affecting the activity in general and yards are increasingly loosing competitiveness. In order to support the sector to tackle this challenge, an overall strategic framework should be developed at national level to **identify and reinforce liaisons with Yachting and marinas** activity in order to take advantage of the increasing flows of yachts and sailboats in Montenegro. Infrastructural interventions are pre-conditions for re-launching ship repair activities in order to facilitate access from ports to yards and vice versa.

Possible financial sources

The EUSAIR supports research and innovation also in the shipbuilding sector, although no specific funds are allocated by it. A strategic effort is recommended at national level for developing potential synergies between shipbuilding and ship repair and yachting and marinas.

Short sea shipping (Incl. Ro-Ro)

More than its fleet, Montenegrin short-sea shipping has been considered most promising activity because of the geographical position of the Country within the Adriatic and in the general context of the Motorways of Seas project (Bar is a port of “regional importance”).

Actually Bar is yet not competitive on international market due to insufficient investment in infrastructure development and equipment, delays in structural reforms and privatization, despite several investments in this sense have been planned. Furthermore, the reconstruction of existing terminals for combined transport at railroad stations Bar, Podgorica and Bijelo Polje is planned. Potential inland connections to Bar are also associated to the development of a new Pan European Corridor, connecting Timisoara – Vršac – Belgrade – Čačak, possibly Ivanjica – Boljare – Bar – Bari; actually, this corridor is not included in the list of ten Pan-European transport corridors defined at the second Pan-European transport Conference in Crete (March 1994), but is considered of strategic importance by Serbian authorities for which is sometime indicated as the Corridor 11.

This context puts Bar in the middle of a regional logistic map considered highly strategic for the entire Balkan area.

Because of its pivotal role, **investments in infrastructures** should be concretely implemented especially for the purpose of increasing intermodal connections (road and rail). IPA funds could be the financial source for funding these investments but a strategic vision under the EUSAIR umbrella is recommended to be followed in order to develop a **sea-basin approach for optimizing the use of funds** available and implement projects with a regional relevance.

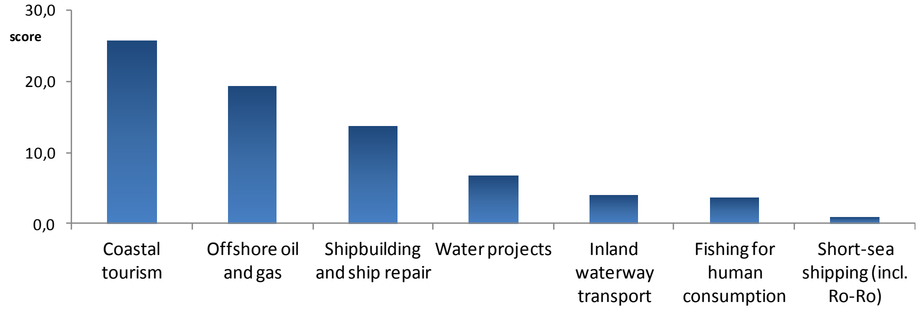
Possible financial sources

Possible financial sources for infrastructural development are represented by the IPA funds, whose use could be optimised within the EUSAIR framework. PPP also represent another potential source for infrastructural investments, which could involve foreign investors (as already happens in the Bijela shipyard).

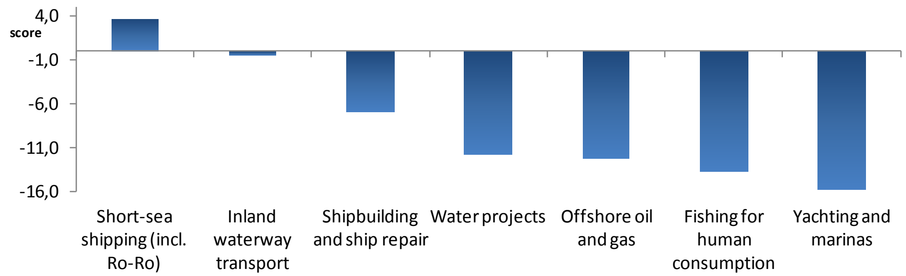
2.10 Romania

Romania's coastline is 256 km long, representing 0,19% of the total coastline of EU-22 coastal Member States. The coastline is entirely on the Black Sea, stretching from the Musura Gulf (at the Ukrainian border) to VamaVeche (at the Bulgarian border). The country's coastal zone (within a range of 10 km from the coast) covers 2.323 km^2, which amounts to 0,56% of the corresponding EU-22 Member States coastal area. In 2010, the gross domestic product (GDP) per capita in Romania's two coastal regions, Constanţa and Tulcea, was EUR 6.277. The GDP of both regions was 108,35%, compared with the national GDP per capita of EUR 5.793. Romania's NUTS-3 coastal regions were responsible for EUR 5,41 billion of gross value added (GVA), which is 4,89% of the nation's EUR 110,73 billion GVA and responsible for employing 468,2 thousand people, which is 5,11% of the national total employment.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising Marine and Maritime activities in Romania are: **Inland waterway transport, Short-sea shipping (incl. Ro-Ro), Offshore oil and gas, Coastal tourism, Shipbuilding and ship repair and Water projects.**

Scores assigned for Blue Growth indicators for future potential:

Marine and Maritime Activity	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Inland waterway transport	+	+	+	+	+	+	++++++
Offshore oil and gas	+	+	+	+	+	0	+++++
Coastal tourism	0	+	+	+	+	+	+++++
Shipbuilding and ship repair	+	+	+	0	+	+	+++++
Water projects	+	+	+	0	+	+	+++++
Offshore wind	+	0	+	+	+	+	+++++
Short-sea shipping (incl. Ro-Ro)	+	+	+	-	+	+	++++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environment sustainability
Inland waterway transport				
Two essential elements favour inland waterway transport: the Danube River and the Black Sea. The maritime port of Constanţa is the largest port on the Black Sea and the fourth largest in Europe. Inland waterway transport is considered to be a horizontal growth promoter with links to short-sea shipping, shipbuilding, the TEN-T network and multimodal transport. This sector plays an important role in the national economy in terms of its size and the positive tendencies observed despite the economic crisis. The existing infrastructure and interest to valorise the Danube transport axis make it one of the most promising in terms of its growth potential and importance. Despite support for developing intermodal approach are provided by governmental policies in the short term, intermodality still represent a key weakness for the development of this activity in Romania. The development of the infrastructural scenario for this activity relies therefore on the improvement of intermodal transport capacity through the development of fluvial ports - and their links to other mode of transports (for both goods and passengers) -, and maritime-fluvial ports, as well as on the further development of the Constanţa maritime hub. There is a strong relationship between inland waterway transport, water projects, shipbuilding and ship repair, and short-sea shipping sectors.				
R&D (+), access to finance (-), smart infrastructure (+), training and skills (+), integrated local development (+), maritime cluster (+)	Support for the intermodality approach of transport are provided by governmental policies in the short terms	This sector provides 8,6% of all blue GVA and the 2,1% of all blue employment	The main players include Navrom, North Star Shipping, Romnav, Veka Logistics, and public authorities	National strategies, according to EU regulations and directives, set the regulatory environment for habitat and birds protection and add sustainability requirements to economic activities
Short-sea Shipping (Incl. Ro-Ro)				
Short-sea shipping is the fastest growing maritime activity in Romania. It is concentrated in the Port of Constanţa, one of the largest ports in Europe, and the largest on the Black Sea, located at the crossroads of trade routes linking the markets of the landlocked countries from Central and Eastern Europe with the Trans-Caucasus, Central Asia, and the Far East. The favourable geographical position, the multimodal transport facilities on inland waterway or on roads, and the importance of the port of Constanţa is emphasised by the connection with two Pan-European Transport Corridors: Corridor VII–Danube (inland waterway) and Corridor IV (railroad). The development of the infrastructural scenario for short-sea shipping relies on the further development of Constanţa port infrastructure as the main port on the Black Sea and as the gateway for goods and passengers to and from Europe. In this perspective, the development of intermodal connections (from ports to road-rail-waterways) still remains a key weakness to be fixed. The recent discovery of new gas fields in the Black Sea will strengthen the role of this sector, increasing employment possibilities in all segments of the value chain.				
R&D (+), smart infrastructure (+), public engagement (+), maritime spatial planning (-), integrated local development (+)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping	Short-sea shipping represents 1,7% of blue GVA and only 0,5% of all blue employment..	The main players of the sector are: various shipping lines and terminal operators	Due to the unique structure of the shipping industry, requirements are applied to all ships, incl. EU environmental directives transposed into the national legislative acts
Offshore oil and gas				
The offshore oil and gas sector represents the second largest maritime activity and it is the third largest employer in the coastal economy (especially in oil and gas exploitation in the Black Sea and in the Midia gas and oil port and refinery). Oil and gas reserves in the Black Sea (recently estimated at around 84 billion cubic meters) as well as the associated offshore and Midia port infrastructure are strong arguments for the development potential of this sector. In 2010, the largest LPG terminal with a stocking capacity of 4.000 cubic meters was opened. It connects with railway, road, and inland waterway transport. Offshore oil and gas remains one of the most important activities because new stocks (mainly gas) were found recently in the Romanian waters of the Black Sea. Gas and oil activities are very important issues for energy independence. Because Romania has a substantial degree of energy independence compared with Central European countries, and this could allow the construction of a pipeline connection from the Black Sea to an Austrian gas terminal.				
R&D (+), access to finance (+), smart infrastructure (+), maritime spatial planning (-), integrated local development (+), public engagement (+)	Development supported by National strategies and strongly supported by economic actors Strategic sector at EU level in the overall security of the Union's energy supply	This sector registers 5,3% of overall blue GVA and 12,7% of blue employment	The gas and oil resources in the Black Sea are exploited by national and/or international companies- OMV Petrom, ROMGAZ, Rompetrol, ExxonMobil, and Lukoil	Environmental restrictions and obligations are difficult to be implemented. However, technological innovation permit a better exploitation of the reserves as well as an ecosystem-based approach are still

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environment sustainability
				valid arguments for considering offshore oil and gas
Coastal tourism				
Coastal tourism is one of the most important and most promising economic activities in Romania, both in terms of GVA and employment, and because of the coastal area's potential for a wide range of tourism activities, including ecosystem-based tourism in the Danube Delta. The coastal area's tourism potential stems from natural resources area (Danube Delta, Black Sea, natural freshwater or seawater lakes, natural parks, health-care resorts) and on cultural resources (historical sites, religious sites, etc.). These are the basis for diversification of the tourism industry and provide a chance to expand the active period beyond the summer season, thus increasing employment and income. Compared with Bulgarian coastal tourism, which is a direct competitor, Romanian coastal tourism has limited service diversification. However, according to governmental strategic vision, the sector will diversify and restore the foreign tourist influx, which is closely linked with the further development of touristic services and transport infrastructure.				
R&D (+), smart infrastructure (-), education and skills (-), access to finance (-),public engagement (+)	Master Plan for the Development of National Tourism (2007–2026)	Important sector on both economic (23,9% of overall blue GVA) and social (15,97% of blue employment) levels	About 5.000 enterprises operating in the tourism sector	According to EU directives, the national authorities set requirements for coastal tourism activities , incl. responsibilities for environmental damages, protection of habitats etc.
Shipbuilding and ship repair				
Shipbuilding activity (including maintenance and the dismantling of wrecks) is the third largest blue sector and it is very well represented in Romania, mainly in the maritime and river-maritime ports. Shipbuilding and ship repair has a long tradition and a good infrastructure for both maritime and river ships. 98% of the ships built in Romania are exported. The main activity is the manufacture of commercial transport vessels. It remains one of the most important activities with an important increase of value added despite the crisis and has a good reputation. Facing serious competition from the Asian market, the Romanian shipbuilding industry is improving its competitiveness by investing in green technologies and innovation capacity. Another important element for the further development of this activity is an increase in the operating capacity of Constanţa port and the need for cheaper and cleaner transport from the Black Sea to Central Europe.				
R&D (+), smart infrastructure (+),access to finance (-), maritime spatial planning (-), public engagement (+)	Important issue at National level Relevant sector at EU level	Relevant sector on both economic (21,5% of overall blue GVA) and social (7,9% of blue employment) levels	Two major shipyards in Constanţa and Mangalia, four other important shipyards located on the Danube (Sulina, Tulcea, Galaţi, Brăila). Constanţa Shipyard and Daewoo Mangalia Heavy Industry are among the top European players	EU environmental directives are applied
Water projects				
Water projects sector is the fourth largest maritime activity. Major water projects are public projects as part or different water basin management plans. The development of the marine and fluvial port infrastructures and the growing interest in the Danube transport axis are considered the key elements for development of the MEA Water Projects, even if the economic crisis reduced the GVA 28% in 2009, compared with 2008. There was a symbolic recovery of 2,8% in 2010, justified by ongoing European-funded projects.				
R&D (+), smart infrastructure (+), access to finance (-), integrated local development (+)	This sector represents a strategic priority of the government and an important issue at the EU level	This sector has a direct impact on contributes to employment in maritime area (or 4,0% of blue employment) and economic development (or 10,1% of blue GVA)	Main players are public bodies such as national or local administrations or companies. Some of the water projects are implemented by private companies	The regulatory environment follows the European legislative framework in terms of directives and regulations

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Inland waterway transport

The activity potential is basically linked to (i) the availability of the Danube as an important waterway and (ii) to the role of Constanţa port. The Romanian port and Bucharest as main junction represent concrete competitive advantages to raise the Danube to the role of main communication channel between the Black Sea and Central-eastern Europe. In order to fulfil the growth potential of the activity, the role of inland water transport within the TEN-T network (projects 18 – 22 - 7) and Pan-European corridors (VII and IV) needs to be strengthened at national and international level.

- **At national level**, the Government effort to **improve infrastructural facilities** of the Danube ports has been implemented through the intermodal transport strategy and the Transport Operational programme. Investments for improving the **Constanţa port infrastructures** have been allocated for increasing its overall capacity. It is recommended to pursue the path of rehabilitating and modernising ports infrastructure (fluvial, maritime and intermodal) also for the next programming period. Given the high amount of fluvial ports, it is also recommended to **prior identify ports and terminals which are considered strategic for the overall development of the activity**. The adoption of an Intermodal action Plan could help for the purpose.
- At **international level**, actions for developing an efficient system of multimodal terminals at river ports along the Danube has been undertaken under the umbrella of the EUSDR (Pillar 1). Several projects have been identified for Romania aimed at improving navigation conditions but also at building new channels (Danube-Bucharest canal). On the other hand, at international level, specific **synergies among Danubian countries need to be achieved in order to develop common strategies for the sustainable exploitation of the Danube as a water highway** in Eastern Europe. This should encompass (i) development of common administrative rules; (ii) increasing the visibility of this mode of transport; (iii) development of integrated strategies for solving conflicts with other activities and especially with environmental issues.

The EUSDR is the natural environment for coping with these issues.

At national level, the Romanian Maritime Cluster could have an active role within the overall development of the sector, but could also have an actor for developing international cooperation projects. Financial resources should therefore be assured to the cluster, which could derive from the ERDF. Obviously investments for supporting the cluster could derive from private investors. It is therefore recommended to **facilitate the convergence between supply and demand** (of credit), by involving private companies, and private investors (venture capitalists, business angels, private equity).

Always at national level, specialised education the **transfer of expertise from universities/specialised schools to businesses** should be incentivised. Policy intervention at national level should support these transfers and the ESF and the ERDF could be useful tool for the purpose.

Possible financial sources

Obviously, the involvement of private financial investors for financing infrastructural improvements could take place only creating the basic conditions for attracting these investments (fiscal benefits, PPP, etc.). Inclusion of PPP as possible financing tool should be encompassed in the next financial period.

Possible financial sources for the proposed recommendations:

- The ERDF/ Cohesion fund (also under the umbrella of the EUSDR) could finance the development of infrastructures;

- the ESF (but also the ERDF) could finance the transfers of expertises from schools to businesses;

The common strategy for the sustainable exploitation of the Danube as waterway need to be drafted at international level and the EUSDR could represent the environment in which this cooperation could be pursued.

Short-sea Shipping (Incl. Ro-Ro)

Short-sea shipping grew in employment as a result of the extension and modernisation of port infrastructure and capacity and because of the strategic importance of the Constanţa port. The favourable geographical position, the multimodal transport facilities on inland waterway or on roads, and the importance of the port of Constanţa is emphasised by the connection with two Pan-European Transport Corridors: Corridor VII–Danube (inland waterway) and Corridor IV (railroad).

On the other hand, for fulfilling its growth potential, **complementarities with other modes of transport**, despite they currently exist, should be strengthened and **intermodal connections** should be further enhanced especially inland waterway, but also deep-sea shipping and liquid bulk transport. **Intermodal connections** should be enhanced within the overall framework of the EUSDR, and, as a matter of fact, Pillar 1 (Priority Area 1) encompasses this possibility. It has to be taken into account that funding possibilities (ESIF) should be aligned to the EUSDR priorities and this could optimise accesses to EU funds.

At national level, the role of the Romanian Maritime Cluster should be enhanced. See inland waterway transport above.

In general, the activity emerged to be missing of financial resources for the **maintenance and innovation of port infrastructures**. In order to fill this lack, the ERDF should contribute to provide financial resources for maintaining and further modernising infrastructures.

Possible financial sources

See Inland waterway transport.

Offshore oil and gas

The potential of offshore oil and gas is practically represented by the unexploited reserves in the continental platform of Romania. The key importance of the sector for the national energy supply put it into the top priorities of the Country. Therefore, no policy recommendations will be formulated to this regard.

On the other hand, under an environmental perspective, it is recommended to pursue stringent safety measures to limit the environmental impact of exploration and exploitation activities. These rules could be adopted at national level but it is recommended to explore the feasibility of adopting common rules at sea-basin level. In order to check the environmental impact of these activities and safeguard the marine environment, it is recommended to adopt **specific environment monitoring rules and tools**, as for example the establishment of a permanent information system for collecting information on the Black sea ecosystem.

Given the potential of the activity, in order to increase the impact in terms of employment and generate jobs, it is recommended to adopt specific measures aimed at **strengthening education and research specifically devoted to extraction of oil & gas**. This should be adopted at two different levels:

- **at national level**, by introducing education programmes for extractive engineering devoted to oil and gases. Furthermore, linkages between the industry and specialised schools should be strengthened in order to increase employment in the sector;
- **at international levels**, by developing research and cooperation initiatives (both at institutional and industry level) in the sector. Research priorities could be directly linked to extractive activities but also to environmental aspects/impacts/monitoring tools generated by this activity.

Possible financial sources

Environmental monitoring tools and other international research activities can be developed by using funds from the Horizon 2020, since it can be intended as research activity.

The introduction of dedicated educational programmes at country level can be funded by the ESF, but also by the ERDS and the Cohesion fund.

Coastal tourism

Romanian coastal tourism has received significant political support by national authorities through different plans and strategies. It is recommended therefore to keep on following this path, adopting a **more holistic approach for developing the sector**, by strengthening integrations with other forms of tourism. Linkages with other "ancillary" marine and maritime activities – cruise, yachting and marinas, protection of habitats – need to be strengthened in this approach, also by supporting the reinforcement of existing maritime clusters or creating new ones. Potential competition with other maritime activities (short-sea shipping, inland waterway transport, extraction of gas, etc.) should be mitigated in order to balance infrastructural needs with protection and conservation of tourism attractors. To this regard, sustainable planning approaches should be followed.

The main barrier emerged in the study regards the limited "access to credit" for SMEs. This issue should be addressed at national level. It is recommended to introduce specific **guarantee schemes** (which enable banks and other lenders to lend to SMEs that do not have the proven track record to be offered for a commercial loan) can be adopted in order to grant access to loans.

No EU funds have been identified for funding these schemes.

Always at national level, in order to strengthen the Coastal tourism potential, **formation and education in vocational schools** specialised in accommodation service should be improved, increasing quality standards of tourism offer.

Possible financial sources

The ERDF source and the Cohesion fund are the two main funding for developing infrastructural intervention in the sector.

Financial sources for education could be the ERDF and the ESF.

Under a wider perspective, and for the purpose of promoting and developing it, coastal tourism could be also inserted within a sea-basin cooperation framework, for the purpose of (i) a better exploitation of the Romania tourism potential within the Black sea and (ii) an increase of the quality standards of the tourism offer.

Shipbuilding and ship repair

As pointed out in the Country fiche, the Romanian shipbuilding industry is seeking its share of competitiveness in green technologies and innovation. The strong link between shipbuilding and the development of short-sea shipping and inland waterway transport, could be a catalyst for ensuring the future growth of the industry. Furthermore, Shipbuilding is an economic activity incorporating several other horizontal economic activities (electronics, steel, paints, and navigation systems), so its development goes hand in hand with research and development, education, and training. Therefore, in order to fulfil the growth potential of the sector, **product innovation** should be developed, building new and innovative ships (e.g. LNG-fuelled ships). To this regard, **cooperation with universities and research centres** should be strengthen in order to support this innovation process. The Romania maritime cluster could streamline the research of product innovations.

However, the potential of the sector can be fulfilled not only by adopting an overall national strategy, but also – as suggested by stakeholders – by launching a coherent European strategy for shipbuilding sector, in close synergy with other shipping sectors (inland waterway and short-sea).

R&D and technological transfer should be supported in order to facilitate the introduction of product innovation in the shipping sector, also incentivising exchange of experience with other European centres.

Other expanding activities – offshore oil and gas – could generate externalities to the shipbuilding sector. It is recommended to explore **possible synergies** between the two activities in order to meet the increasing demand of facilities (on land infrastructures, platforms, etc.) of extractive activities.

Possible financial sources

Product innovation could be achieved by developing international cooperation project and Horizon 2020 represents a future source of funding for the purpose. Under a wider perspective, these type of projects could be also inserted within a sea-basin cooperation framework, for the purpose of exploiting the Romania potential in developing new products.

Cooperation with universities and research centres, as well as the technology transfer could be funded mainly within the ESF but also by the ERDF.

Water projects

Given the economic structure of the coastal economy and the potential demonstrated by inland waterway transport, short-sea shipping and coastal tourism, Water Projects has been considered a relevant tool to assist their development and therefore it has been considered as most promising in Romania. Its growth is basically linked to the development of other maritime activities.

The future potential of the activity can be indirectly fulfilled by keeping infrastructural investments of other activities, but specifically as regards water projects, the **PPP possibilities** should be better explored, given the public support for developing this type of investments (law no. 178 of the 1st October 2010). PPPs should be taken into account for the next financial period.

Given the possible investments which could be allocated in the forthcoming future, and assuming that modernisation and maintenance of infrastructure facilities will be needed for keeping competitive the different maritime activities, it is recommended to launch **specific life-long learning programmes** for enhancing the specialisation of Romanian engineers. Furthermore, **university education and research specifically devoted to civil engineering** (water projects) should be also improved and contacts with foreign universities for exchanging best practices should be also taken into consideration for increasing the quality of education.

Possible financial sources

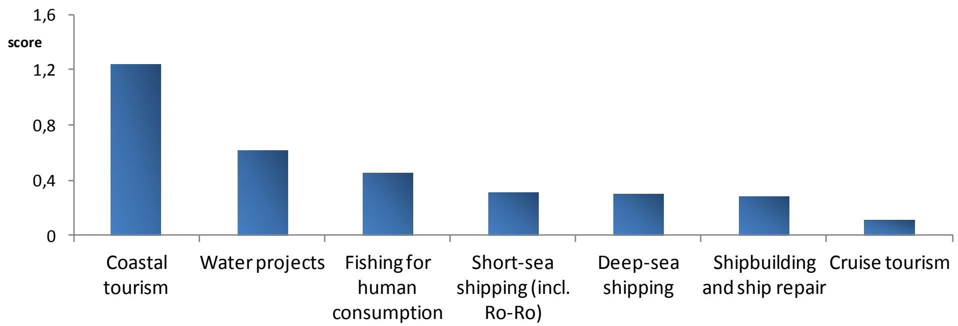
Obviously, the involvement of private financial investors for financing infrastructural improvements could take place only by creating the basic conditions for attracting these investments (fiscal benefits, PPP, etc.). Inclusion of PPP as possible financing tool should be encompassed in the next financial period.

Educational programmes could be funded by the ESF. Exchanges with other universities could be funded by the ESF and the ETC.

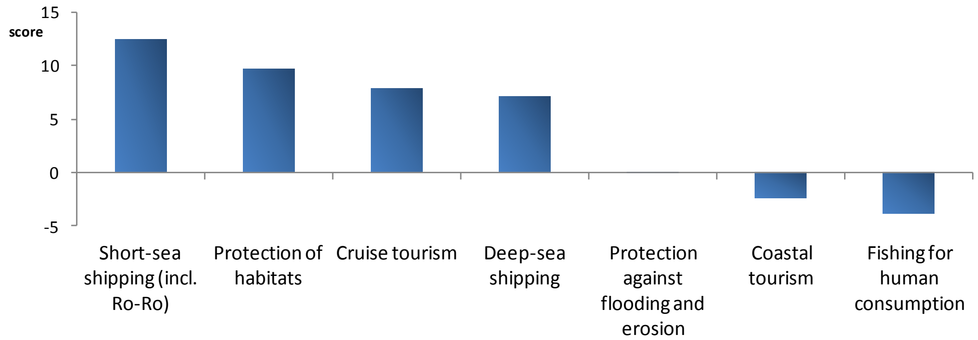
2.11 Slovenia

Slovenia with its 48 km coastline is one of the smallest among EU Member States, and the same can be said for the coastal area (within a range of 10 km from the coast), which spreads over approximately 409 km^2 (0,1% of total EU coastal areas). There is only one coastal NUTS 3 region in Slovenia: the Obalno-Kraška ("Coastal-Karst" in English) with an extension area of 1.044 km^2 and a population 111.423 (5,4% of total Slovenia), of whom almost half live in the coastal city of Koper, which also happens to be the one of the largest north Adriatic ports in terms of transport.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising marine and maritime activities in Slovenia are: **Blue biotechnology, Short Sea Shipping, Coastal tourism, Deep-sea shipping, Cruise tourism and Marine aquaculture.**

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Blue biotechnology	+	+	0	+	+	+	+++++
Short-sea shipping (incl. Ro-Ro)	+	+	+	+	+	-	++++
Coastal tourism	+	+	+	+	+	-	++++
Deep-sea shipping	0	+	+	+	+	-	+++
Cruise tourism	+	0	+	0	+	-	++
Protection against flood and erosion	?	?	?	+	?	+	++
Protection of habitats	?	?	0	+	?	+	++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Blue biotechnology				
The Blue biotechnology sector in Slovenia is still at a nascent stage, and thus it is very complicated to make forecasts. However, the existence of a series of preconditions can constitute a favourable environment to the further development of the sector. Indeed, the presence of a few public research institutions and a private company that operate in the field, and the preparation of two strategies that will address the main issues related to the development of biotechnology are signals that blue biotechnology offers great potential in Slovenia.				
R&D (+), smart infrastructure (+), integrated local development (-), access to finance (-), maritime clusters (+)	Issue important at MS level National Strategies for develop of biotechnology under construction	The sector is still too small to be gauged in terms of socio-economic impact	Main players in the sector are: few biotechnology Industries, research institutes , and several SMEs working primarily in the field of pharmaceutical, environmental and food biotechnology	The Research and Innovation Strategy of Slovenia (RISS) is the key strategic and political document of the Slovenian policy on research and innovation in the field of the Green Economy.
Short-sea shipping (incl. Ro-Ro)				
The sector has experienced considerable growth in the last few years and has performed very well despite the economic crisis. Total cargo throughput is expected to increase in the future. The port of Koper is among the most important ports in the Adriatic and in the whole Mediterranean and this is remarkable for a country with such a small coastline as Slovenia. The port area consists of 270 hectares of land, with 48,4 hectares of covered storage and 109,6 hectares of open storage space. 28 moorings located on 3.282 metres of shoreline along 179 hectares of sea. Transport represents the basis for the economic development of Slovenia, given the comparable advantage constituted by its geographic position, defined as "the Mediterranean Sea protruding into the heart of Europe". National political efforts are intended to reinforce the role of maritime transport in Slovenia by enhancing the necessary infrastructure that could favour intermodality, especially with reference to rail transport, which is considered comparably less competitive than road transport.				
R&D (+), smart infrastructure (+), maritime clusters (-), access to finance (+), maritime spatial planning (-)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping Development supported by National strategies	Important sector in terms of GVA (14,2% of overall blue GVA) and employment (8% of blue employment)	The Luka Koper Group is a public company (51% owned by the State) that manages the port of Koper	Slovenia is taking into account the guidelines and policies of the EU in the maritime sector, such as the White Paper on European Transport Policy, Action Plan of the IMP, Strategic Goals and Recommendations for EU's Maritime Transport until 2018
Coastal tourism				
Coastal tourism is the first largest and the sixth fastest-growing maritime activity. The sector seems to have suffered more than others from the economic crisis, but remains by far the most important maritime economic activity in the country. This, along with the first signals of recovery and with the considerable political relevance given to the sector in Slovenia, have led us to include it among the most promising and relevant maritime activities. In Coastal Karst, there is a concentration of tourism and related employment opportunities and economic development in the narrow coastal belt and in the summer months. But the focus of Slovenian coastal tourism is also placed on conferences, health and casino tourism throughout the whole year. In the last few years, eco-tourism and cultural tourism have become increasingly important.				

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
R&D (+), smart infrastructure (+), maritime clusters (+), access to finance (-), integrated local development (+)	There is a high level of political engagement in the whole sector (not only maritime), because of its economic importance. Tourist Boards and Agencies support the development of tourism in the country	Important sector in terms of GVA 33,8%% of overall blue GVA) and employment (39,2% of blue employment) Tourist activities account for nearly 10% of the GDP, and the coastal areas are estimated to host around 26% of all tourists in the country	High number of small companies with local significance	The Tourist Board is manages the National Tourism brand "I feel Slovenia", supporting creativity and innovation in new products and services, promoting internationa-lisation and diversification of the guest and visitors structure, R&D, etc.
Deep-sea shipping				
Deep-sea shipping is the fifth largest and the third fastest growing maritime activity in Slovenia. It is also believed to be the fourth activity with the most future potential. Albeit a different activity, its development shares many a similarity with short-sea shipping, given that the port of Koper focuses its business on both. The reasons why it was included among the most promising and relevant activities are therefore the same, with deep-see shipping having slightly less potential because it is not benefitting from Motorways of the Sea.				
R&D (+), smart infrastructure (+), maritime clusters (-), access to finance (-), maritime spatial planning (-)	Environmental and safety issues very important for the EU Development supported by national strategies	Relevant Economic and social indicators refers to 16,2 % of blue GVA and 7% of blue jobs)	The Luka Koper Group is a public company (51% owned by the State) that manages the port of Koper	Slovenia is taking into account the guidelines and policies of the EU in the maritime sector, such as the White Paper on European Transport Policy, Action Plan of the IMP, Strategic Goals and Recommendations for EU's Maritime Transport until 2018
Cruise tourism				
Cruise tourism is a relatively recent activity in Slovenia, and has not yet reached an appreciable size. Nevertheless, it is the second fastest growing, showing impressive growth and good potential for the future. Cruise tourism is believed to be a promising maritime activity for two main reasons. First of all, there is an increasing trend in the number of ships visiting Koper as a port of call. In addition, the development of the sector seems linked with the development of maritime transport in general and the port of Koper in particular. As this port is becoming increasingly important in terms of traffic of goods and passenger, and is constantly improving its facilities, it is believed that cruise tourism will be benefitting from this.				
R&D (-), smart infrastructure (+), maritime clusters (+), access to finance (-), integrated local development (-)	National strategies support the cruise tourism sector	Economic and social importance limited (2,7% GVA and 3,6% Employment)	The main players of this sector are the Port of Koper, and the Slovenian Tourist Board (STB).	No clear differences can be detected with respect to the descriptions provided in "Short-sea and deep-sea shipping" and "Coastal tourism".
Marine aquaculture				
Besides these activities, it is also proposed to take into account marine aquaculture. Due to limited space, marine aquaculture is not an important activity in the Slovenian economy, either in terms of value added or employment. The sector has a short history, starting at the end of the twentieth century. Its production mainly consists of Mediterranean mussel and European seabass. However, a few signals may suggest that there is some potential for marine aquaculture in Slovenia. First of all, marine farms are reported to operate only at about 50% of their maximum capacity. The sector experienced a strong trend for growth (especially as regards marine finfish production) during 2006-2010 (+24%).				
R&D (-), maritime clusters (-), public engagement (+), access to finance (+), smart infrastructure (-)	National programmes to develop the sector are provide	Small importance of the sector, just 0,6% of blue employments	Only a limited number family-run small companies	Not specific environmental policy are apply at this sector

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Blue biotechnology

Blue-biotechnology is a pioneering sector and not only in Slovenia. On the other hand, the country presents a series of preconditions that can constitute a favourable environment to the further development of the sector. It emerged that there is a general need to increase the **awareness of the sector's potential in the country**, and this should be achieved by mentioning blue biotechnology in the national strategies and polices under preparation (e.g. International Challenges 2013 - Partnership to promote international cooperation).

It could be useful also to involve the Mediterranean Science Commission (CIESM) to launch **sea-basin level projects**. The international scale of initiatives, as well as the authoritativeness of the Commission, could indeed support the fulfilment of the sector potential.

For this purpose, a **double-scale of policy interventions** is recommended:

- At **national level**: blue-biotechnology should to be inserted in national strategies and polices in order to recognize the key role of the activity in the national context; the activity should also to be included in national research programmes.

  Cooperation between public and private sector should be improved and the key tool for achieving this objective could be the Ljubljana's Technology Park, which should act as an intermediate point between the public and the private sector.
- At **international level**: cooperation with other EU countries should be supported (especially with Germany, given its primary position in the activity), in order to increase the level of know-how and exchange practices. The development of international cooperation projects (also potentially funded by EU sources, as the future Horizon 2020) could well represent the key tool for achieving this objective.

Besides the need to include blue biotechnology in national policies, the main barrier to remove is represented by the **lack of financial resources for an adequate funding of public research institutes**, specialised university and post-graduate training. In order to fill this gap, the **use of EU funding possibilities** could represent a key tool for meeting the activity needs.

Obviously, investments in this sector could derive from private investors. To this regard, fund-raising activities could be also activated by a **national-based structure that could facilitate the convergence between supply and demand** (of credit), by involving private companies and private investors (venture capitalists, business angels, private equity).

Possible financial sources

Horizon 2020 could represent a possible financial source for supporting the development of cooperation project in order not only to exchange expertise but also to launch concrete international research projects.

The inclusion of Blue biotechnology in the forthcoming **EUSAIR** could lead to a wider development of the activity at sea-basin level (Adriatic-Ionian). Therefore, despite "no new funds" are envisaged by a macro-regional strategy, needed funds could derive from the alignment of existing Structural funds to the Strategy objectives.

Short-sea shipping (incl. Ro-Ro)

The growth potential of the activity is linked to the key role covered by the port of Koper. Different documents at national level identified the port as strategic for the growth of the blue economy in the country and many infrastructural interventions are planned for strengthening this role. However, within a wider context, the role of Koper in the Trans-European Network (TEN-T) and especially within Motorways of the Seas, needs to be strengthen further by **improving intermodal connections from the port to rail and road**.

Intermodality is indeed needed for quicker exchanges between ships and road of wheeled vehicles and for extending the market of reference of the activity – which cannot be limited only to Slovenia. Therefore, the development of short-sea shipping requires a double approach:

- **at national level**: the enhancement of infrastructural facilities and links to other modes of transport need to be performed with internal measures. Funding possibilities could derive from the ERDF and the Cohesion fund;
- **at international level**: the role of Koper as a short-sea shipping node could be reinforced within the TEN-T corridors, especially attracting and reinforcing the role of short-sea liner services. At present there are 4 weekly short-sea connections mainly concentrated on the East part of the Mediterranean. Connections with France, Spain and western Italy should be reinforced.

The main issue for short-sea shipping in Slovenia regards the improvements of the port of Koper infrastructure and the **financial capability** to sustain this updating. EU sources could represent a feasible opportunity for investing in this sector but also private investments should be considered.

Possible financial sources

The **ERDF** is the most relevant source for financing the infrastructural enhancement. Again, the EUSAIR - and the fact that short-sea shipping has been included as one of the most important activities in the area – could support the alignment of funds for supporting the sector development.

It is clear that investments could derive from private investors. The involvement of private companies (also foreign companies), and **private investors** (venture capitalists, business angels, private equity) that are currently operating in Slovenia could represent a useful source of funding. Administrative constraints need to be reduced, establishing favouring conditions (de-taxation and other "preferential treatment") for attracting these investments (also FDI).

Deep-sea shipping

Deep-sea shipping is a top priority for the port of Koper. Infrastructural improvements have been planned and the sector covers an important role in the overall blue economy of the country.

In terms of infrastructures, policy recommendations suggested for short-sea shipping are valid also for deep-sea shipping.

Only from a strategic point of view, deep-sea shipping is obviously not included in the TEN-T corridor but on the other hand, the strong competition with other ports biases the development of Koper within the sea-basin. For this purpose, it is suggested to develop a strategy for an overall "**coordination of deep-sea shipping activities and specialisations**" **in the sea basin**, in order to avoid duplication of functions between neighbouring ports.

This objective could be achieved under the umbrella of the EUSAIR, which could represent a key tool not only for reaching closer cooperation among countries, but also for identifying possible funding sources. However, the ERDF and the ETC funds could represent potential resources for financing the coordination of deep-sea shipping specialisation in the area.

See also Short-sea shipping above.

Possible financial sources

ETC and ERDF could finance cooperation initiatives. For infrastructural investments, see Short-sea shipping above.

Coastal tourism

Coastal tourism is by far the most important maritime activity in Slovenia. The Government strongly supports the development of the activity and significant political efforts have been registered. However, the country has been promoting tourism in general and this is probably due to the fact that Slovenia's coastal areas are only a small fraction of the whole country's territory, and many different activities are competing for the same space. However, the adoption of MSP and ICZM by the Government could represent a valid solution for the problem.

From the analysis of Country fiche findings, it emerges that a coastal tourism vision is missing in the national planning. It would be desirable to create a **local agency to elaborate a vision of tourism** in Coastal Karst, and enhance cooperation between the public and the private sector. In this way, it would be possible, inter alia, to remedy any possible unbalance between the coast and internal areas. Alternatively, it is suggested to elaborate a single tourism strategy at national level (as it is now) with basic common principles, and then envisage specific sub-sections according to each area/type of tourism in the country. This effort needs to be done at **national level**.

At **international level,** visibility of Slovenia coastal tourism needs to be enhanced. This could be done at sea-basin level, increasing cooperation between littoral countries of the Adriatic and developing common strategies for the development and the promotion of coastal tourism. The purpose is to attract "new tourists' flows" by offering an integrated tourism product. This could lead also to a possible mitigation of current competition between countries in the area.

As resulted from the fiche, there is a driver to be reinforced, namely the linkages to other activities. The passenger terminal of the port of Koper, with the consequent attraction of cruise ships, could be a great opportunity to promote also coastal tourism, and improve recognisability of Slovenia as a tourist destination. Therefore, in order to enrich the recommendation above, the policy effort for developing coastal tourism should have a wider extent and **an integrated planning at national level** should be developed for defining and optimising **synergies between different tourism activities.**

Possible financial sources

Despite it is not a financial source, the EUSAIR could be a tool for pursuing cooperation needed for the development of coastal tourism in the Adriatic Ionian.

More than funding, coastal tourism in Slovenia needs a dedicate planning, which actually seems missing.

Cruise tourism

As a port of call, Koper is registering increasing demand. The growth potential of this activity should be fulfil by consolidating this trend through a double level of intervention:

- **at national level**: passenger terminals should be continuously updated in order to offer adequate facilities to meet demand evolutions (larger ships and therefore bigger tourists flows). Private-public partnerships could represent the tool for attracting investments and also in this case, policy intervention at national level is needed.

  On the other hand, political intervention at national level is recommended for increasing the attractiveness of Slovenia tourism offer and incentivising cruise tourists transits to longer stays. Synergies with coastal and internal tourism need to be strengthened by widening the scope of the tourism strategy and planning an integrated tourism offer.
- **At international level**: within the overall context of the Adriatic Sea and taking advantage from the pivotal role of Venice, an integrated cruise strategy should be developed at sea-basin level, strengthening cooperation between littoral countries and mitigating competition for the purpose of creating transnational itineraries within the Adriatic. The EUSAIR is the key context in which cooperation should be strengthened.

Once again, it is paramount to complete the **construction of the passenger terminal in the port of Koper**, in such a way as to take advantage of the growing trend of the cruise sector in the Mediterranean.

Possible financial sources

The ERDF and the Cohesion fund for the 2014-2020 period represent the resources for funding infrastructure investments.

Again, the EUSAIR umbrella seems to be the most adequate environment for developing cooperation in the area and incentivising the drafting of integrated development plans for cruise tourism.

Marine aquaculture

Due to reduced maritime space, maritime aquaculture seems to have limited growth potential, but on the other hand, the Government efforts to develop this activity in co-location with other maritime activities are representative of the willingness of developing the activity. Indeed, co-location is the only feasible solution for overcoming conflicts with other activities.

At national level, as mentioned, the EMFF seems to address the issue in this way. On the other hand, at international level, it is recommended to **strengthen cooperation efforts at sea-basin level**. As a matter of fact, considering also that co-location practices are still at a nascent stage Slovenia's limited expertise in this field needs to be compensated by exchanging best practices and expertise and encouraging multilateral research projects. From a strategic point of view, the EUSAIR supports the development of co-locations and could be the proper tool for addressing the issue.

Possible financial sources

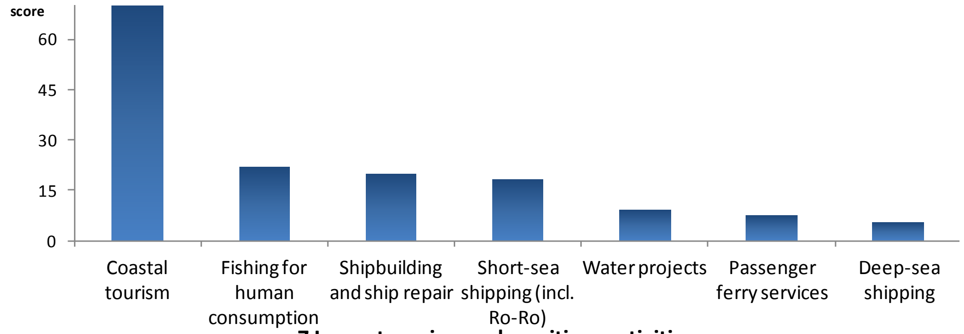
The EMFF is the main tool for funding the development of the sector.

Co-location solutions could be also financed by other main ESIF funds (ERDF, cohesion funds).

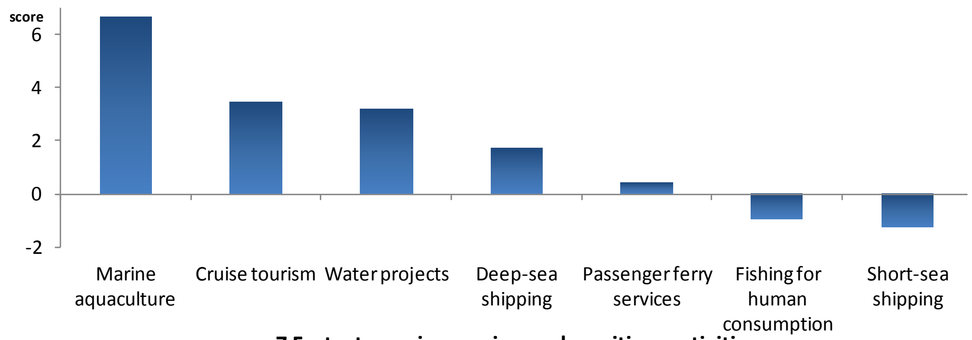
2.12 Turkey

Turkey's total coastline is 8.483 km. Its distribution is 20,3% on the Black Sea and 79,7% on the Mediterranean Sea. A little more than half of the population (50,8%) lives in coastal areas in 2011. Maritime economic activities form a strong sector in Turkey offering 280 000 jobs and reaching a total GVA of more than 4,39 billion EUR, with four activities (coastal tourism, short-sea shipping, shipbuilding, fisheries) representing 82% of the jobs and 74% of the total GVA generated by the blue economy. Istanbul is the main maritime hub.

7 largest and 7 fastest growing marine and maritime activities



7 Largest marine and maritime activities



7 Fastest growing marine and maritime activities

6 most promising marine and maritime activities

The 6 most promising marine and maritime activities in Turkey are: **Coastal tourism, Marine aquaculture, Shipbuilding and ship repair, Cruise tourism, Short-sea shipping and Yachting and marinas.**

Scores assigned for Blue Growth indicators for future potential:

Marine and maritime activities	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
Marine aquaculture	0	+	+	+	+	+	+++++
Shipbuilding and ship repair	+	+	-	+	+	+	++++
Coastal tourism	0	+	+	+	+	0	++++
Yachting and marinas	+	+	+	0	+	0	++++
Cruise tourism	+	+	+	0	+	0	++++
Water projects	0	+	+	+	+	0	++++
Offshore oil and gas	0	0	+	+	+	-	++

Analysis of Blue Growth potential

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
Coastal tourism				
Coastal tourism has been selected as the largest maritime activity in Turkey. Turkey cumulates a long tradition of beach-based mass tourism and the assets of coastal cities with huge cultural heritage. This double attraction has made coastal tourism the largest maritime activity especially in the Mediterranean sea basin (93%). According to forecasts made by Business Monitor International arrivals of foreign tourists should rise from 31,5 million in 2011 to 39,5 million in 2017, with tourist expenditures rising from 29,5 billion USD in 2011 to 38,6 billion USD in 2017.				
R&D (+), access to finance (-), smart infrastructure (-), education, training and skills (+), public engagement (+)	Engagement of the government through Tourism Strategy 2023	Coastal tourism sector is the most important sector of Turkey's blue economy with 36,4% of GVA, 44,8% of nmployment and 8.830 enterprises	The main players of the sector are: National authorities as the Ministry of Culture, trade associations as the Turkish Tourism Investors Association (TYD), the Development bank of Turkey and a large number of SMEs	Turkey is making significant efforts to making tourism sustainable and environment-friendly, as evidenced by the increasing number of beaches displaying the Blue Flag and by the political will to develop ecotourism zones
Marine aquaculture				
Marine aquaculture is ranked first in the two categories of the fastest growing and of the most future potential activities. Turkey has 25% market share in seabass and seabream trade in Europe. The Aegean coastline houses more than 96% of Turkish farming. Marine aquaculture production is 88.344 t and the main species are: seabass 47.000 t, seabream 32.200 t, trout 7.700 t.. Marine fish farming increased a lot during the reference period (+25% in value). However, along with rapid growth of farmed fish production, the national seafood processing industry is still not fully formed, allowing many prospects for innovative product development and branding. Ambitious targets have been set: according to the Ministry of Development the aquaculture production of Turkey is planned to reach 600.000 t in 2023. The Turkish government gives active support to the aquaculture industry, e.g. through export subsidies. The National Marine Aquaculture Development Plan provides stable ground for future growth of the sector.				
R&D (+), smart infrastructure (-), public engagement (+), integrated local development (-), education and skills (+)	Strongly supported by National Plans	The total number of persons employed is 8.000 (2,9% of the national Blue economy) and the GVA of marine aquaculture is 126 million EUR (2,9% of the national Blue economy).	The main players are Kilic, Fjord Marin, Gumusdoga, Sursan and Policy makers	Environmental monitoring of fish farms is advancing, even if not fully completed. Existing conflicts of users should find a solution with the implementation of coastal zone management
Shipbuilding and ship repair				
Mostly focused on the Mediterranean sea basin (82% of total GVA) the shipbuilding and ship repair sector is the third largest maritime activity and is one of the most future potential activities. Even if it is not among the 7 fastest growing because of a very negative score linked to the strong impact of the world crisis on the sector. The sector is of strategic importance for the government and considered as a pillar of the regional development. The government has planned the construction of a "technology and R&D centre for the shipping industry" in order to increase the competitiveness of the sector. The shipbuilding and repair industry is reacting well to the crisis and is considered to be one of the most promising industrial sectors in Turkey, especially for chemical tankers, mega-yachts and offshore infrastructures. Between 2008 and 2012 the number of shipyards increased from 58 to 71. The shipbuilding sector also generates a lot of jobs in the sub-industry. In recent years the emerging Black Sea and Mediterranean Regions have increasingly attracted shipyard investments.				
R&D (-), smart infrastructure (+), access to finance (-), maritime spatial planning (-), public engagement (+)	Important issue at National level Relevant sector at EU level	The shipbuilding sector has an economic importance of 11,2% GVA and 12,3% Employment of total blue economy	Main players: Sedef Kalkavan, UM, Altintas, Tuzla Shipbuilding Industry and Besiktas Shipyard	The development of the sector is in line with international rules (sustainability)
Cruise tourism				
The cruise sector has been selected as the second fastest growing activity and ranked in the most future potential marine and maritime activities. As it is a young activity cruise tourism is not among the 7 largest activities. But it shows good potential for the future and investments under way, notably in Istanbul, perfectly address the growing demand. The national strategy ("Tourism Strategy 2023") will entail further strengthening of cruise port infrastructures. According to the Tourism Master Plan issued in 2011, 7 new cruise ports (out of which 3 home ports) will be built by 2023.				
R&D (-), maritime cluster (+), education and skills (+), integrated	Tourism Strategy 2023	The weight of the sector is 2% of blue GVA and 0,9% of blue employment	The main ports receiving cruise ships are Istanbul, Kuşadası, Izmir,	Efforts are constantly being made on the boats and in the ports of call to

Drivers/Strengths (+) and Barriers/Weaknesses (-)	Importance of the issue at political level (local/national/EU political pressure)	Social/economic importance of the sector	Number, geographic coverage and economic importance of stakeholders	Environmental sustainability
local development (+), public engagement (+)	Significant issue at basin level		Marmaris and Antalya	reduce the environmental impact but the sector cannot be considered as sustainable yet
Short Sea Shipping (Incl. Ro-Ro)				
Short-sea shipping is the 4th largest and 7th fastest growing activity but is not among the 7 most future potential marine and maritime activities. Nevertheless Turkey has launched several large projects to increase port capacity and meet the needs of a rapidly increasing freight transportation, especially in the Black Sea. Turkey holds a strategic position at the intersection of East-West and North-South international transport corridors. These elements have led us to include this sector among the most promising and relevant activities.				
R&D (+), access to finance (-), smart infrastructure (-), maritime clusters (+), access to finance (-), maritime spatial planning (-)	Environmental and safety issues very important for the EU Active EU policy to promote short-sea shipping Development supported by National strategies	The sector provides 13,2% of blue GVA and the 11% of overall blue employment 363,3 million t of cargo were handled in 2011	Most relevant ports of this sector are Izmit and Ambarli. Other relevant players are:Turkish Chamber of Shipping (TCS), Turkish Maritime Administration and main Turkish shipping lines (ARKAS/EMES and TURKON)	50% of the Turkish ports open to international traffic are planned to have a “Green Port” certificate in 2023
Yachting and marinas				
Turkey has gained wide recognition for its expertise in mega-yacht building, for which it occupies the third rank in the world with a market share of 12%. Turkey has 42 marinas with 13.847 mooring places (2012). The leading company is SETUR MARINAS with a capacity of nearly 5.000 places. Other major actors are D-MARIN Marina Group (2.410 places in Turkey and 2.480 in Croatia) and MARINTÜRK (1.345 places). Marinas and berthing facilities are mostly located in the Aegean and Mediterranean regions. There are no marinas or related facilities in operation in the Eastern Mediterranean and Black Sea coasts. The Ministry of Transport and Maritime Affairs plans important investments to develop and modernize the marina network (60.000 mooring places by 2023). This development will be accompanied by the creation of jobs.				
R&D (+), access to finance (-), smart infrastructures (+), education, training and skills (+), integrated local development (+),	National support is provided by the Tourism Strategy 2023	42 marinas registered by the Ministry of Tourism and most marinas are located on the Aegean and Mediterranean coasts	The main yacht manufacturers are CMB Yachts, Cobra Yachts, Dunya Yachts, Peri Yachts, Proteksan Turquoise and Su Marine	Some marinas need modernisation of structures and services

Recommendations

for fulfilling the growth potential, removing barriers and strengthening drivers

Coastal tourism

The outstanding Turkish endowment in terms of tourism resources and especially on coastal regions has been perceived to be not fully exploited. The first barrier hindering the growth potential of the sector is an overall infrastructural gap in densely populated and fast growing tourism centres, limiting the accessibility of these sites to wider flows. Furthermore, it emerged also that national airports with international connections are limited.

The overall problem of **accessibility of tourism sites**, despite already included in the Tourism Strategy 2023, should be further tackled at national level and should be appropriately coordinated by the central government, identifying strategic priorities to be developed first (i.e. more critical areas) and strengthening international connections with main country of origin of tourism flows.

It emerged also how almost the entire activity is concentrated on the Mediterranean side. In order to exploit the potential of the **Black sea coast**, two main approaches are recommended:

- **At national level**: a strategic planning should be adopted with the main purpose of **increasing the visibility of these sites**. Two main actions should be undertaken: strengthening connections with main nodes (airports) and integrating these destinations in national tourist packages;
- **At international level**: the adoption of a **sea-basin approach** for developing the Black sea tourism could be envisaged in close cooperation with littoral countries. As possible measures, specific **tourists packages** or links with other leisure maritime activities (cruise and yachting) could represent two possible bases for fostering sea-basin cooperation between Black sea littoral countries. This type of actions could be developed through cross-border cooperation programmes.

Finally, a **holistic legal framework** for ICZM and MSP should be adopted in Turkey, in order to optimize the use of spaces in coastal areas in a sustainable way.

Possible financial sources

IPA fund is a possible financial source for supporting the improvement of transport specifically targeted to rail and ports facilities, but also airports. Turkey is already involved in numerous cooperation projects (despite few of them are focused on coastal tourism) within cross-border cooperation programmes (ENPI, CBC, etc.). Therefore, the ETC programmes represent important financial tools for cooperation initiatives in this sector.

Within a wider framework, Coastal tourism is a potential field of cooperation for the Black sea at a macro-regional level.

Marine aquaculture

Despite the remarkable role of marine aquaculture in Turkey and its predominant position as EU commercial partner (for farmed products), Turkish marine aquaculture sector still presents a wide margin of improvement. First of all, the national **seafood processing industry** is still not fully formed, allowing many prospects for innovative product development and branding. For instance, new product variants, improved packaging, product differentiation and the adaption of quality management systems are some of the ways for the Turkish industry to **add value to production**.

Significant barriers identified in the country fiche needed to be addressed for fulfilling the activity potential. The availability of consolidated research in the sector and the contemporaneously lack of connections with businesses do not allow to transfer technologies and research findings to the sector. For example, the need to **diversify production** could be filled by **strengthening links with research activities**, introducing product and process innovation.

Another barrier which limits the potential attractiveness of Turkish products in the EU market is the uncompleted compliance to EU rules in terms of traceability, water quality measures and other quality EU requirements. In order to remove this limit, it is recommended to adopt specific measures (e.g. in the IPA) for **accomplishing internal rules to EU standards.**

It is also recommended to support the **development of MSP and ICZM** in order to mitigate diverging insterests between farmers and other players (tourism operators, small-scale fishermen), especially in the Aegean and Mediterranean coasts.

Possible financial sources

IPA fund is a possible financial source for supporting the creation of added value to the production and for optimising links between research and business environment. Turkey is already involved in numerous cooperation projects within cross-border cooperation programmes (ENPI, CBC, etc.). Therefore, the ETC programmes could represent important financial tools for cooperation initiatives in this sector.

Shipbuilding and ship repair

The sector has received support from the public in order to attract FDI and to develop research in shipping. Furthermore, Turkey is one of the most important sites in the world for ship scrapping and recycling (representing therefore a potential raw material supplier for shipbuilding).

Political efforts for achieving the growth potential of the sectors are recommended to be addressed to:

- **Support the development of clusters**. The Tuzla cluster practice (strong integration between shipyards, ship equipment manufacturers, maritime university, shipbuilders' association) is a good example to replicate around the main Turkish shipyards. The identification of main "hotspots" to locate cluster should be done at national level, within an overall strategic planning for the shipping sector.
- **Reduce effects of financial crisis on innovation capabilities** of the sector in general: despite the sector is suffering the economic crisis and competition with Far-East countries, a possible strategic approach for funding the sector is to invest in innovation and the production of sustainable ships. Links between recycling activities and building should be strengthened. As a potential source, Horizon 2020 could fund international research projects for further innovating the sector.
- **Links with other maritime activities (short-sea shipping) should be reinforced at national level**, within the overall framework of a national transport strategy.

Possible financial sources

IPA fund is a possible financial source for supporting the creation of clusters. Financial needs of the sector should be tackled at national level and obviously investments could derive from private investors. To this regard, fund-raising activities could be also activated by a **national-based**

structure that could facilitate the convergence between supply and demand (of credit), by involving private companies, and private investors (venture capitalists, business angels, private equity).

Synergies with short-sea shipping should be explored also for funding the sector.

Cruise tourism

According to the Tourism Master Plan issued in 2011, 7 new cruise ports (out of which 3 home ports) will be built by 2023. This plan, jointly with the contextual potential of Turkey cruise sector (infrastructures, coastline, attractiveness of sites, geographical position, implementation of the project Turkish Cruise Platform) make the sector significantly relevant in the Turkish blue economy. It is considered that all needed steps have been undertaken to duly develop the activity and make Turkey one of the most important cruise destination/home port in the world.

However few specific recommendations are suggested for overcoming most relevant barriers identified:

- Increase the **expertise and know how in the cruise sector** in general, from infrastructures management to vessels crew. It is recommended to create vocational schools for cruise shipping staff and life-long learning programmes;
- Development of **MSP and ICZM** for optimising spaces uses and avoiding conflicts with other activities;
- Strengthening **links between cruise and coastal tourism**, in order to increase benefits (i.e. expenditures) to local economies derived from higher tourists flows. In order to extend the area taking advantage from cruise flows, passenger transport should be improved, connecting port nodes with internal attractive destination;
- Improving **international flight connections to those** cities planned to cover the role of “home ports”, and improving intermodal connections from airports to ports.

Especially as regards the objective of developing home ports in Turkey, **international cooperation** in the area is recommended to be reinforced, both on the Med and on the Black sea, for jointly developing possible **cruising itineraries and creating common tourism offer**. The role of the Black sea within this sector should be promoted.

Possible financial sources

IPA fund could support the creation of educational schools and life-long learning programmes. Other suggested measures should be developed at national level and is recommended to be developed within an overall strategic plan for cruise tourism.

Cruise tourism could be encompassed as a main activity within a sea-basin cooperation framework.

Short-sea shipping

Turkey has launched several large projects to increase port capacity and meet the needs of a rapidly increasing freight transportation, especially in the Black Sea. Numerous projects have been launched (Filyos, the Aegean Gateway Terminal, etc.) in order to increase the capabilities of terminals and become the crossway between the East-West and North-South directional international transport corridors.

On the other hand, if port infrastructures are registering significant improvements and investments, intermodal links (especially ports/rail) have been perceived as insufficient and inefficient, and in some cases totally missing. The **development of intermodal connections** is of paramount importance for connecting ports to the huge demand-driven market. Efforts for developing intermodal connections should be implemented at national level.

Another important barrier to the growth of short-sea shipping is the **insufficient number of academicians with seafaring background** which generates an overall lack of officers. In order to fill this gap, **exchanges with neighbouring countries** should be supported at national level (also by using ETC programmes) in order to develop specific expertise in the sector and increasing the level of academician in this field.

For this purpose, the Black sea potential should be explored. As a matter of fact – and specifically as regards short-sea shipping – cooperation with Black sea countries should be enhanced in order not only to exchange expertise but also to explore the feasibility for developing an **integrated short-sea offer** within the area. This could encompass, for example, a “**specialisation map** of the Black sea ports”, in order to create synergies between them and to mitigate competition.

A **macro-regional strategy** could appear the natural environment in which cooperation should be developed.

Finally also for short-sea shipping, **MSP and ICZM** for optimising spaces uses and avoiding conflicts with other activities is recommended to be developed.

Possible financial sources

Intermodal connections could be funded by IPA programme, while exchanges with neighbouring countries should be encompassed with ETC programmes. Short-sea shipping could be encompassed as a main activity within a sea-basin cooperation framework.

Yachting and marinas

The sector covers a remarkable role in the Turkish blue economy, also considering the importance of building of leisure boats and investments in the same sector of Turkish companies in neighbouring countries. On the other hand, it has also a huge potential considering that the Government planned to double the number of marinas in the coming years.

The only suggested action for this activity is aimed at strengthening marinas in the **Black sea**. At present, the activity in that area appeared to be less exploited that on the Med side. Within the overall framework of developing coastal and cruise tourism, the **development of leisure activities should be encompassed in wider strategic perspective to be adopted at national level**, in order to trigger mutual benefits between different activities.

Cooperation at sea-basin level in the Black sea can include also the development of this sector as a branch of maritime tourism (see coastal tourism).

Possible financial sources
IPA fund could support the development of new marinas in the Black sea shore.